

Yearly Operational Plan

2022

FORE RIVER TRANSPORTATION CORPORATION

145 EAST HOWARD STREET
QUINCY, MA 02169

Prepared by:



FAIR DERMODY
CONSULTING ENGINEERS

19 OCEAN AVE SUITE #5, PORTLAND, ME 04103

ABSTRACT:

This Yearly Operational Plan (YOP) describes the vegetation management operations for the Railroad's rights-of-way (ROW) scheduled for vegetation maintenance during this calendar year in compliance with the Commonwealth of Massachusetts Rights-of-Way Management Regulations 333 CMR 11.00.

This YOP is a companion document to the Vegetation Management Plan (VMP) which has been approved by the Department of Agricultural Resources.

INTRODUCTION

Both Federal and State laws require railroads to manage vegetation to help insure the safe passage of people, material, and goods.

The Code of Federal Regulations mandates the safety of the railroad must be guaranteed by regular inspection and maintenance. Vegetation must be controlled so that it does not become a fire hazard, does not interfere with visibility, or impede direct visual inspections of the track structure. Vegetation must also be managed to allow for proper drainage of the track and ballast structure, to prevent tree and branch damage to cargo, and to provide safe footing and working conditions for trackside personnel. Vegetation growing along side the rails can prevent effective and adequate braking, especially in emergency situations.

The purpose of 333 CMR 11.00, Rights of Way Management, is to promote the implementation of Integrated Vegetation Management (IVM) 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 rights-of-way (ROW). These regulations establish procedures which guarantee ample opportunity for public and municipal agency review and input on rights-of-way maintenance plans.

A Yearly Operational Plan (YOP) must be submitted to the Massachusetts Department of Agricultural Resources (MDAR) every year herbicides are intended for use to maintain rights-of-way. The YOP provides a detailed program for vegetation management for the year. This YOP is a companion document to the Vegetation Management Plan (VMP) approved by MDAR. The VMP is the long-term management plan for the railroad which describes the intended program for vegetation control over a five-year period.

Upon receipt of this YOP, MDAR publishes a notice in the Environmental Monitor. The applicant has provided a copy of the YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and the chief elected municipal official for the city or town in which the herbicide treatment is proposed.

MDAR allows a 45-day comment period on the proposed YOP beginning with publication of the notice in the Environmental Monitor and receipt of the YOP and Environmental Monitor notice by each municipality.

Notification of herbicide applications to the ROW is made by certified mail under separate cover at least 21 days prior to treatment. Notice is made to MDAR; the Mayor, City Manager or chairman of the Board of Selectman, the Board of Health, and the Conservation Commission of each municipality where the ROW lies. Municipalities where treatment described in this YOP will be made are Braintree and Quincy.

Any comments on this YOP should be directed to:

Tim Dermody
Fair Dermody Consulting Engineers
19 Ocean Avenue #5
Portland, ME 04103
(207) 747-4651 ex. 4

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Maps of the individual municipalities affected by this Yearly Operational Plan can be found at:

FDCErailroadvegetation.com
 ➡ Fore River Transportation
 ➡ "YOUR MUNICIPALITY"
 ➡ Right-of-Way Maps

I. THE COMPANY WHICH WILL PERFORM ANY HERBICIDE TREATMENT

This company or contractor will perform the herbicide treatment. Applicators are certified by MDAR in the applicator category Right-of-Way Pest Control.

Company Name RWC, Inc.
Address Lockhouse Road
P.O. Box 876
Westfield, MA 01086
Telephone # (413) 562-5681
Contact Person(s) Brian Chateauvert

II. INDIVIDUAL REPRESENTING APPLICANT AND SUPERVISING THE YOP

Individual supervising execution of the YOP and representing the railroad.

Name & Title Todd Lyman, Operations Manager
Address Fore River Transportation Corp.
145 East Howard Street
Quincy, MA 02169
Telephone # (617) 773-7770

III. HERBICIDES PROPOSED INCLUDING APPLICATION RATES, CARRIERS, ADJUVANTS, AND APPLICATION TECHNIQUES

Weed Control Herbicide Program for the Roadbed

The post-emergent herbicide program is aimed primarily toward keeping the ballast section and shoulder, yards, switches, signals, and highway grade crossings weed free. Areas scheduled for weed control treatments have been inspected for density of target vegetation to determine appropriate control methods.

Location	Herbicide(s)	Carriers or Adjuvants	Application Technique	Application Rate
Sensitive area buffer zone	Glyphosate or Diquat SPC2L* Milestone or Opensight Oust Extra or Polaris AC Complete	Spreader Sticker	Foliar	1 qt/acre or 2 pints/acre
			Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	4 oz/acre
			Foliar	2 pts/acre
			Foliar	8-16 oz/acre
Non-sensitive areas	Glyphosate or Diquat SPC2L* Milestone or Opensight Oust Extra or Polaris AC Complete	Spreader Sticker	Foliar	1 qt/acre or 2 pints/acre
			Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	4 oz/acre
			Foliar	2 pts/acre
			Foliar	8-16 oz/acre
Touch-up applications	Glyphosate or Diquat SPC2L* Milestone or Opensight Oust Extra or Polaris AC Complete	Spreader Sticker	Foliar	1 qt/acre or 2 pints/acre
			Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	4 oz/acre
			Foliar	2 pts/acre
			Foliar	8-16 oz/acre

*Product is currently under review for the Rights of Way Sensitive Area Materials List and will not be applied in sensitive areas without approval from MDAR.

**The glyphosate product has not been determined yet, however it will be from the Rights of Way Sensitive Area Materials List.

OR

Location	Herbicide(s)	Carriers or Adjuvants	Application Technique	Application Rate
Sensitive area buffer zone	Milestone or Opensight or Method 240SL* Oust Extra Esplanade 200SC*	Spreader Sticker	Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	8 oz/acre
			Foliar	4 oz/acre
			Foliar	3.5 pts/acre
			Foliar	8-16 oz/acre
Non-sensitive areas	Milestone or Opensight or Method 240SL* Oust Extra Esplanade 200SC*	Spreader Sticker	Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	8 oz/acre
			Foliar	4 oz/acre
			Foliar	3.5 pts/acre
			Foliar	8-16 oz/acre
Touch-up applications	Milestone or Opensight or Method 240SL* Oust Extra Esplanade 200SC*	Spreader Sticker	Foliar	6 oz/acre or 3.0 oz/acre
			Foliar	8 oz/acre
			Foliar	4 oz/acre
			Foliar	3.5 pts/acre
			Foliar	8-16 oz/acre

*Product is currently under review for the Rights of Way Sensitive Area Materials list and will not be applied in sensitive areas without approval from MDAR

Brush Control Program for Areas Adjacent to the Roadbed

The brush control program is designed to prevent the re-growth of trees and other woody vegetation in areas adjacent to the roadbed. Areas scheduled for brush control treatments are limited to target vegetation which obscures visibility or interferes with railroad signs, signals, or communication wires. There will be no brush control program for areas adjacent to the roadbed this year.

Location	Herbicide(s)	Carriers or Adjuvants	Application Technique	Application Rate
Non-sensitive areas	None	N/A	N/A	N/A
Touch-up applications	None	N/A	N/A	N/A

IV. HERBICIDE APPLICATION TECHNIQUES AND ALTERNATIVE CONTROL PROCEDURES

Herbicide applications within the railroad ROW will be performed using low pressure application from a specialized hi-rail truck equipped with a spray boom. This method is suitable for application within the buffer zone, or restricted application zone of sensitive areas, as defined in 333 CMR 11.04. The spray vehicle is equipped with spray nozzles and controls to allow for treatment of the entire roadbed, or to selectively treat individual sections of the ballast and ballast shoulders. Within sensitive areas, a container will be used to catch any accidental dripping of herbicide. It is a trough-shaped apparatus mounted just behind and above the boom and will be hydraulically lowered to sit underneath the spray nozzles while the vehicle is traveling through areas where herbicide spraying is prohibited.

A railroad representative will accompany the applicator in order to assist in rapid identification of sensitive areas in the field. They will be equipped with a map of the ROW indicating the location of the sensitive area boundary markers.

ALTERNATIVE CONTROL PROCEDURES

No alternative vegetation control methods are feasible within the track areas of the ROW. No vegetation control is proposed in ballast areas where herbicide use is prohibited. Touch-up techniques controls any target vegetation within the ballast that may have been missed or not treated during the initial phase. Control of vegetation that might creep onto the ballast from roots growing outside the original treatment boundaries can be managed as a selective, foliage, or spot spray. No more than 10% of the initially identified target vegetation on the ROW in any municipality may be treated during a touch-up application and the total amount of herbicide applied in any one year shall not exceed the limits specified by the label or YOP [per 11.03(8)(c)].

V. IDENTIFICATION OF TARGET VEGETATION

An integrated approach to vegetation management will be implemented by encouraging plant communities that hinder the growth of target vegetation. Prior to herbicide application, a review will be made noting conditions of vegetation present. This information will be used to develop an herbicide application program that will be effective against target vegetation and minimize the amount of herbicide used.

In accordance with the Code of Federal Regulations, 49 Part 213 - Track Safety Standards, all vegetation growing in the ballast and ballast shoulder; in yards; and around switches, signals, signs and highway grade crossings is considered target vegetation and must be controlled so that it does not:

- a) become a fire hazard to track-carrying structures;
- b) obstruct visibility of railroad signs and signals;
- c) interfere with railroad employees performing normal trackside duties;
- d) prevent proper functioning of signal and communication lines; and
- e) prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

Woody vegetation growing in areas adjacent to the shoulder will be managed if needed. Targeted woody vegetation will be that which has the potential to block visibility or invade the roadbed and/or overhead utility lines.

VI. FLAGGING METHODS TO DESIGNATE SENSITIVE AREAS ON THE ROW

Sensitive areas are defined in the Rights-Of-Way Management Regulations (333 CMR 11.02) are as defined in 333 CMR 11.04, any areas within the ROW, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects. These include but are not limited to the following:

No Spray Area, any area that is both within a ROW 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;
- (g) 10 feet of any Wetlands or Water Over Wetlands;
- (h) 10 feet of the mean annual high-water line of any river; and
- (i) 10 feet of any Certified Vernal Pool.

Limited Spray Area, any area that is both within a ROW and within:

- (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 10 feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat; and
- (i) a distance of 100 feet of any Agricultural or Inhabited Area.

* Limited Spray Area(s) are those in which spraying is restricted to one annual application of a herbicide through low pressure foliar techniques.

Non-Sensitive Areas are upland areas and/or track not in proximity to sensitive areas and do not require specific precautions or herbicide restrictions.

Sensitive areas, no-spray areas, limited-spray areas, and non-sensitive areas will be marked at their boundaries with permanent color-coded markers. Sensitive areas considered to be readily identifiable in the field (i.e. agricultural and inhabited areas) will not be marked. The markers will be one or any combination of the following:

- color-coded signs attached to posts
- color-coded signs attached to the railroad ties
- color-coded painted rail sections

Sensitive and non-sensitive areas will be designated by the following color-codes:

- | | |
|-------------|--|
| white | non-sensitive areas |
| blue | sensitive area in which a minimum of 12 months shall elapse between herbicide applications |
| double blue | sensitive areas in which a minimum of 24 months shall elapse between herbicide applications. |
| yellow | no spray zone |

VII. PROCEDURES AND LOCATIONS FOR HANDLING, MIXING, AND LOADING OF HERBICIDE CONCENTRATES

The herbicide application crew will wear protective clothing and personal safety equipment when mixing, handling, loading, or applying herbicide, including standard work clothing or coveralls, work gloves, and work boots. Latex or nitrile rubber gloves, as well as eye goggles are recommended to be worn during mixing of herbicide concentrate as some herbicides may cause mild eye and skin irritations.

Mixing and use of herbicide shall be consistent with the labeling instructions included on the packaging. The herbicide mix will be prepared from herbicide concentrate and water. In compliance with the regulations, the handling, mixing and/or loading of this material will not occur within 100 feet of any sensitive area. Wherever and whenever possible, the herbicide applicator will prepare the herbicide mix on non-porous surfaces, such as pavement or concrete.

Sources of Water and Safeguards to Prevent Contamination

Water used for herbicide mix will be obtained from hydrants and freshwater sources. During the herbicide mix preparations and during herbicide application, strict adherence to the following safeguards will be maintained:

- 1) Water will be obtained using trucks equipped with anti-siphon devices to eliminate herbicide backflow.
 - a) Trucks used to extract water from water bodies will be equipped with two such devices: one will be found directly behind the mouth of the hose and another will be at the coupling, which joins the hose to the mix tank.
 - b) Hoses used to extract water from the hydrant will utilize the same setup as described above, except that a third anti-siphon device will be found within the coupling joining the hose to the hydrant.
- 2) The herbicide concentrate will not be added to the tank until the water has been obtained and the application apparatus is at least 100 feet outside a sensitive area.

Disposal of Herbicidal Wastes

Disposal of all herbicidal wastes will be the responsibility of the licensed applicator. It is the applicator's responsibility to ensure that such disposal will be carried out in an environmentally sensitive manner, in compliance with all Federal and State regulations and guidelines.

VIII. HERBICIDE FACT SHEETS, HERBICIDE LABELS, AND S.D.S. SHEETS

Below is a list of herbicides potentially in use by this YOP. For the exact products used in this year's program please refer to page 2 of this document.

MANUF.	PRODUCT NAME	ACTIVE INGREDIENT(S)	EPA REGISTRATION #
ALBAUGH, INC.	KRENITE S	AMMONIUM SALT OF FOSAMINE	42750-247
BASF	ARSENAL	ISOPROPYLAMINE SALT OF IMAZAPYR	241-346
BASF	ARSENAL POWERLINE	ISOPROPYLAMINE SALT OF IMAZAPYR	241-431
BASF	ARSENAL R.R. HERBICIDE	ISOPROPYLAMINE SALT OF IMAZAPYR	241-273

BAYER CROP SCIENCE	ESCORT XP	METSULFURON METHYL	432-1549
BAYER CROP SCIENCE	OUST EXTRA	SULFOMETURON METHYL & METSULFURON METHYL	432-1557
BAYER CROP SCIENCE	OUST XP	SULFOMETURON METHYL	432-1552
CORTEVA AGRISCIENCES	MILESTONE	AMINOPYRALID	62719-519
CORTEVA AGRISCIENCES	OPENSIGHT	AMINOPYRALID & METSULFURON METHYL	62719-597
CORTEVA AGRISCIENCES	GARLON 4	TRICLOPYR, BUTOXY ETHYL ESTER	62719-40
CORTEVA AGRISCIENCES	GARLON 4 ULTRA	TRICLOPYR, BUTOXY ETHYL ESTER	62719-527
CORTEVA AGRISCIENCES	GLYPRO-PLUS	GLYPHOSATE	62719-322
CORTEVA AGRISCIENCES	ACCORD CONCENTRATE OR RODEO	GLYPHOSATE	62719-324
MONSANTO	ROUND UP PRO	GLYPHOSATE	524-475
NU FARM AMERICAS	AQUANEAT AQUATIC	GLYPHOSATE	228-365
NU FARM AMERICAS	PATRIOT SELECTIVE	METSULFURON METHYL	228-391
NU FARM AMERICAS	POLARIS AC COMPLETE	IMAZAPYR	228-570
NU FARM AMERICAS	POLARIS HERBICIDE	IMAZAPYR	228-534
NU FARM AMERICAS	SPYDER SELECTIVE	SULFOMETURON METHYL	228-408
NU FARM AMERICAS	RAZOR	GLYPHOSATE	228-366
NU FARM AMERICAS	RAZOR PRO	GLYPHOSATE	228-366
RAINBOW TREE CARE	CAMBISTAT	PACLOBUTRAZOL	74779-3

LABELS & SAFETY DATA SHEETS (SDS):

The labels and SDS sheets for the above products can be found by:

1. Open your internet browser and enter the following address in the **Address bar**:
<http://www.cdms.net/Label-Database>
2. Select the **Manufacture** (as found above) you wish to be informed about from the side bar on the left side of the page.
3. A list of products will appear. Please be sure to reference the **Product Name** to locate the correct information.

HERBICIDE FACT SHEET:

Herbicide fact sheets for the above products can be found by:

1. Open your internet browser and enter the following address in the **Address bar**:
<http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-sensitive-area-materials-list.html>
2. Choose the link that corresponds to the **Active Ingredient** present in the product.

Hard copies of any of these documents may also be obtained by calling Fair Dermody Consulting Engineers at (207) 747-4651

IX. EMERGENCY CONTACTS

In the event of a spill or emergency, information on safety precautions and cleanup procedures may be gathered from the following sources:

Herbicide Label	
Herbicide Fact Sheet	
Herbicide Safety Data Sheet	
Herbicide Manufacturer	
BASF Ag Products	(800) 545-9525
Bayer Environmental Sciences	(866) 992-2937
Corteva Agri-Sciences	(800) 992-5994
Nufarm Turf & Specialty	(800) 345-3330
Rainbow Tree Care	(952) 922-3810
Massachusetts Pesticide Bureau	(617) 626-1784
Massachusetts DEP Emergency Response	(888) 304-1133
Chemtrec	(800) 262-8200
EPA National Pesticide Information Center	(800) 858-7378
Massachusetts Poison Control Center	(800) 222-1222
Braintree Police Department	(781) 794-8600
Quincy Police Department	(617) 479-1212