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2024-2028 Vegetation Management Plan

NextEra Energy Resources Right-of-Way: Bellingham 345kV Transmission Line

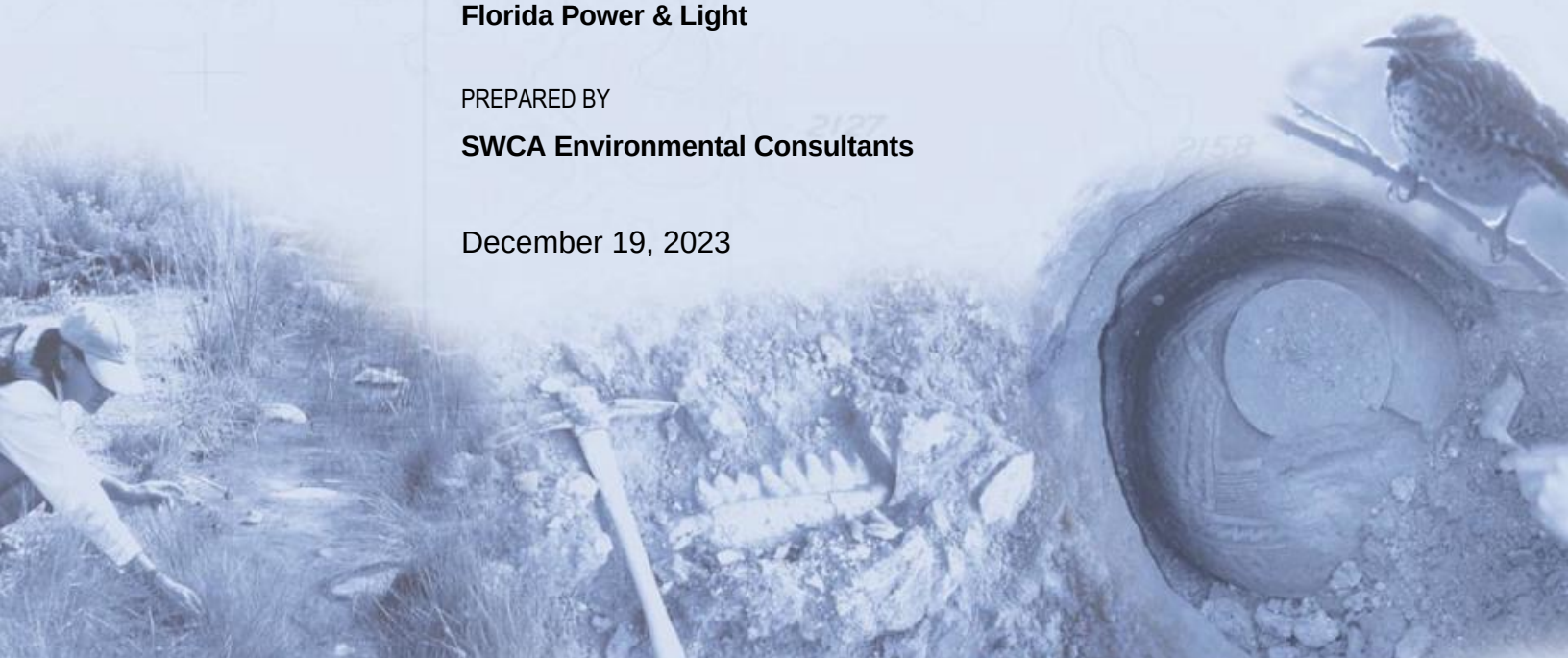
PREPARED FOR

Florida Power & Light

PREPARED BY

SWCA Environmental Consultants

December 19, 2023



VEGETATION MANAGEMENT PLAN
2024-2028
NEXTERA ENERGY RESOURCES RIGHTS-OF-WAY:
BELLINGHAM 345KV TRANSMISSION LINE

Prepared for

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1 INTRODUCTION

The purpose of this Vegetation Management Plan (VMP) is to establish a plan to manage vegetation within the NextEra Energy Resources (NEER) rights-of-way (ROW) for the Bellingham 345 kilovolt (kV) Transmission Line in the Town of Bellingham, Massachusetts (the ROW). All aspects of this management plan are in compliance with the ROW management regulations in 333 Code of Massachusetts Regulations (CMR) 11.00. This VMP is effective for a 5-year period from 2024 through 2028.

As required under the ROW management regulations (333 CMR 11.00, no person can use herbicides for the purpose of clearing or maintaining a ROW except in accordance with a VMP and Yearly Operational Plan (YOP). The YOP must be available at the work site at all times during herbicide application activities. The YOP must be made available to the Massachusetts Department of Agricultural Resources (MDAR) and to municipal officials including the Conservation Commission and the Board of Health upon request.

This VMP details NEER's plan for managing vegetation within a 0.5-mile-long transmission ROW in Bellingham, Massachusetts. The VMP includes an Integrated Vegetation Management (IVM) program that considers and uses all methods of vegetation control as appropriate. Herbicides will be used where safety concerns, effective target vegetation control, or environmental concerns indicate the appropriateness of the choice.

2 GENERAL STATEMENT OF GOALS AND OBJECTIVES

This VMP outlines and explains all target vegetation to be controlled and establishes the standard methods of vegetation control necessary to allow the ROW to be maintained and function as a safe and productive transmission line. The VMP provides a basic source of information for state and municipal officials and interested parties. It also provides technical guidance to the qualified, certified, and appropriately licensed individuals who will physically carry out the vegetation management program.

The goals of the VMP are to:

- Identify target vegetation
- Define intended vegetation management and rationale for use, including vegetation control techniques, equipment for proposed use, timing of applications, and alternative control procedures
- Justify proposed herbicide applications
- Identify the existing sensitive areas within the ROW and the control strategies proposed for those sensitive areas
- Provide a detailed description of the IVM program that will minimize the amount and frequency of herbicide application
- Define any potential or existing site-specific conditions that would minimize the need for herbicides
- Provide operational guidelines for appropriately qualified applicators relative to herbicide use
- Develop a remedial plan to address spills and related accidents
- Provide identification and qualifications of individuals developing and submitting the plan

- Ensure that all vegetation management operations are conducted in a safe, effective manner in accordance with federal and state laws, regulations, and permit conditions

2.1 Yearly Operational Plans

The VMP forms the basis for the YOPs but does not itself qualify as a YOP. A YOP will be prepared annually and be submitted at least 90 days prior to the proposed commencement of application. The YOP will provide a detailed description of the vegetation management activities to be completed within the given calendar year.

The YOP will contain the following:

- Identification of target vegetation
- Identify and mitigate hazard and danger trees adjacent to the ROW
- Description of methods used to flag or otherwise designate sensitive areas within the ROW
- Figures/maps locating the treatment areas and sensitive areas not readily identifiable in the field
- Proposed herbicides and associated Environmental Protection Agency (EPA) Registration Numbers, applications rates, and adjuvants
- Herbicide Fact Sheets as approved by MDAR
- Proposed herbicide application techniques and alternative control procedures
- Procedures and locations for handling, mixing, and loading of herbicide concentrates
- Contact information of the individual representing the YOP applicant, the company conducting herbicide treatment, and any other project-related contacts
- Addresses of identified abutters
- Current list of identified Private Wells within 100 feet of the ROW (identified by the Board of Health & MDAR Private Well Registry)

The YOP will be submitted to MDAR every year in which herbicides are intended to be used to maintain the ROW. Upon submittal of the YOP for approval, MDAR will publish a notice in the *Environmental Monitor*. MDAR allows a 45-day comment period on the proposed YOP, which begins with the publication of the notice and receipt of the YOP and *Environmental Monitor* notice. MDAR may approve, deny, or modify YOPs after the 45-day comment period has expired. Any comments related to the YOP will be made to the designated YOP contact.

2.2 Public Notification of Herbicide Treatments

Public notification of any proposed herbicide treatments related to the ROW and detailed in the YOP will need to occur at least 21 days prior to the proposed treatments. The notification is made to MDAR, Chief Elected Official, the Board of Health, and the Bellingham Conservation Commission along with the Municipal Public Water Supplier.

A local newspaper notice will also be published at least 48 hours in advance of the proposed treatments on the ROW. The published notice will include the following information:

- The location of the herbicide application

- The method of herbicide application
- The approximate dates when the herbicide applications will begin and end
    - Applications cannot begin or end more than ten days before or after the dates published.
- A list of potential herbicides to be used
- A description of the purpose of the application
- The contact information for the designated contact person for information related to the herbicide applications proposed

2.3 Location of Right-of-Way

NEER's Bellingham 345kV Transmission Line is located in Bellingham, Massachusetts, in southwestern Norfolk County. The area for which vegetation management is planned is an approximately 0.5-mile length of ROW following this line. It is bound to the north by the Bellingham Cogeneration Facility on Depot Street and heads southwest where it ends at another ROW off of Mendon Street. The majority of the ROW abuts forested lands. The closest residential community is located on Rose Avenue Extension, over 600 feet from the ROW boundary.

2.4 2.4 Previous VMP/YOPs

The YOPs for previous years have included invasive species management, hazard tree removal, edge trimming, brush mowing and brush removal by hand cutting. The brush was located within the right of way and under the wire (typically 1-4 inches in diameter). The mowing amounted to roughly 3 acres of managed area.

Invasive plant management consisted of the management of targeted vegetation (selective management) through three different management approaches.

Low Volume Foliar: This technique utilized 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 handpump 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.

3 IDENTIFICATION OF TARGET VEGETATION

To maintain an efficient, safe, and legal electrical transmission line, NEER requires the control and/or removal of all vegetation that obstructs the ROW corridor. This includes vegetation that grows tall enough to interfere with the transmission structures. Specifically, woody vegetation species (trees and shrubs) that are capable of exceeding 12 feet at mature height and vegetation that could impede access to

the ROW will need to be maintained, controlled, and/or removed. Additional vegetation management that may be necessary includes the removal of hazard trees and trimming branches with inadequate clearance to the overhead lines. Examples of these species are listed in Table 1 below.

Table 1. Target Woody Species

Common Name	Scientific Name
Alder	*Alnus sp.*
Ash	*Fraxinus sp.*
Aspen	*Populus sp.*
Beech	*Fagus sp.*
Birch	*Betula sp.*
Cherry	*Prunus sp.*
Elm	*Ulmus sp.*
Hemlock	*Tsuga sp.*
Locust	*Robinia sp.*
Maple	*Acer sp.*
Oak	*Quercus sp.*
Pine	*Pinus sp.*
Sumac	*Rhus sp.*
Willow	*Salix sp.*

Also included as target vegetation are poisonous and noxious plant species that pose environmental and safety concerns. Examples of poisonous and noxious species are listed in Table 2 below.

Table 2. Target Poisonous and Noxious Species

Common Name	Scientific Name
Giant hogweed	*Heracleum mantegazzianum*
Grape	*Vitus sp.*
Greenbrier	*Smilax rotundifolia*
Poison ivy	*Toxicodendron radicans*
Poison oak	*Toxicodendron pubescens*
Poison sumac	*Toxicodendron vernix*

Invasive plant species pose an environmental concern within the ROW. NEER intends to control invasive plant species within the ROW as an effort to encourage the spread of native plant species and provide a higher quality wildlife habitat. Invasive plant species identified by the Massachusetts Invasive Plants Advisory Group (MIPAG) will be controlled within the ROW. A full list of these invasive plant species can be found on the MIPAG website.

Examples of invasive species that may be targeted within the ROW are listed in Table 3 below.

Table 3. Target Invasive Plant Species

Common Name	Scientific Name
Autumn olive	*Elaeagnus umbellata*
Barberry	*Berberis thunbergii*
Black locust	*Robinia pseudoacacia*
Buckthorn	*Rhamnus sp.*
Common reed	*Phragmite australis*
Honeysuckle	*Lonicera tatarica*
Japanese knotweed	*Fallopia japonica*
Multiflora rose	*Rosa multiflora*
Oriental bittersweet	*Celastris orbiculatus*
Privet	*Ligustrum vulgare*
Purple loosestrife	*Lythrum salicaria*
Reed canary grass	*Phalaris arundinacea*
Swallowwort	*Cynanchum sp.*

4 INTEGRATED VEGETATION MANAGEMENT

Integrated Vegetation Management (IVM) practices incorporate a variety of plant management techniques to manage target species, including combinations of mechanical, cultural, and chemical methods, as opposed to the use of a single management technique. Professionals conducting these management practices within the ROW will evaluate the IVM alternatives for plant management that could be used in a specific situation on the ROW. Control measures are often combined for the management of specific plant species.

4.1 Mechanical Control Measures

Mechanical control measures include using tools or equipment to manage target species. Examples of mechanical control measures include cutting, mowing, hand-pulling, and trimming. Often this method of control is used in conjunction with chemical control measures.

4.1.1 Hand Cutting

Mechanical measures are often used to control tree species. This allows instant removal of the non-compatible target species and a more direct, targeted application of herbicides to the cut stump. This technique results in control of target species with limited use of chemicals. Application of chemicals to a cut surface rather than vegetation also reduces impacts resulting from off-target drift.

Sensitive areas may require targeted control of non-compatible species as an effort to minimize the impacts to the sensitive areas resulting from a less directed effort. Priority areas have not been identified within the ROW by the Massachusetts Department of Fish and Wildlife Natural Heritage & Endangered Species Program (NHESP); however, sensitive wetland resource areas do exist within the ROW. These locations might be appropriate sites in which to use mechanical measures within the ROW.

4.1.2 Mowing

Mowing includes the use of mowing equipment such as heavy-duty mowers or tractor-mounted brush mowers as well as the use of hand-held equipment such as weed-whackers or specialty hand-held equipment.

Heavy-duty mowing equipment should be used on sites where the tracked or tired equipment will not impact the terrain, cause erosion, or be a safety concern to the mower operator; it should not be used on steep slopes, rocky outcrops, or wet sites. Mowing can be used at a location where there is an overwhelming number of targeted species that have exceeded maximum control heights or where access is restricted due to a large, dense layer of vegetation.

Mowing can be used in conjunction with chemical control measures. If target non-compatible vegetation is extremely dense, repeated mowing would be very time consuming, and non-targeted chemical application would result in a high potential of non-target drift and/or heavy chemical use. A combination of mowing prior to the application of herbicides would both reduce the mowing frequency needs over time and would result in a more targeted herbicide management application.

4.2 Cultural Control Measures

The most cost-efficient, least environmentally impactful method of controlling incompatible or undesirable vegetation is through the implementation of cultural practices. These practices will encourage the development of native, desirable vegetation. When widely used, cultural control methods will result in a decreased need for mechanical and chemical maintenance measures.

Unfortunately, in the northeast region, it is unlikely that the maintenance activities along any ROW can be limited to cultural control practices, as invasive species are commonly found in a high percentage of the understory in New England. Invasive species colonize areas through multiple methods of distribution (seed and rhizome) at a much higher rate of development than native species. If left uncontrolled, invasive plant species will prevent the development of desirable species within the ROW. Discouraging the development of invasive plant species within the ROW through chemical control will result in the establishment of native, natural plant communities on the ROW, which will reduce the need for chemical control in the future. This can also be influenced by the installation of native seed mixes and plant material following chemical applications.

4.3 Chemical Control Measures

Chemical control measures within the ROW include the use of herbicide to either kill or stunt the growth of non-compatible or non-desirable vegetation. NEER intends to only use herbicides from the Sensitive Areas Materials list. Herbicide will be applied as needed, using the proper application technique and chemical for a given scenario within the ROW. The annually submitted YOP will detail the methods of chemical control to be used within the ROW in each given year. Chemical control will be considered as the last option for vegetation control within the ROW; however, it is very likely that chemical treatments will be necessary annually.

NEER will use EPA- and MDAR-approved herbicides whenever herbicide applications are performed. The labels associated with each chemical are regulated by the EPA and the directions for application and use rates will be strictly adhered to when chemicals are applied within the ROW. All applications will be performed by Massachusetts Licensed Pesticide Applicators.

Herbicides will be applied using one of three methods for chemical application: foliar, cut stump, or basal bark. The technique selected for the herbicide application is dependent on a number of variables: target species, target height, target density, access to target, location of target (i.e., sensitive areas), treatment timing, and any chemical restrictions. It is possible that more than one method will be used within the ROW in a given year, and multiple methods might be used to treat the same species of target vegetation within the ROW.

4.3.1 Foliar Applications

Foliar chemical applications involve the selective application of herbicides, which are diluted in water and then applied to foliage. These selective applications generally involve the use of two conveyance systems, a low-pressure backpack sprayer or a truck or skid-mounted motorized sprayer (low volume). Both apparatuses use low pressure systems to distribute chemicals to targeted locations. Backpack sprayers are often used where access to work areas is restricted to foot entry only or when there is light to medium density of target species. Motorized sprayers are used where access (>200 feet) is available, and the target species occupies a moderate-sized monoculture (<1,000 square feet).

Foliar applications will only be used to control target species that are less than 12 feet in height at the time of application. Foliar treatment of vegetation over this height would result in a higher likelihood of non-target impacts resulting from drift. Treatments over this height may also result in a safety hazard for applicators, exposing them to blow-back or drift resulting from the treatment. Foliar treatments must occur when target vegetation is in full leaf-out, and leaf change or senescence has not occurred. Foliar applications will not be used to control conifer species within the ROW.

Herbicides applied via foliar application are traditionally applied at very low concentrations (1–20%), per label requirements. An herbicide solution includes the herbicide and a non-ionic surfactant. Surfactants have qualities that help improve efficacy of chemical treatment by allowing the herbicide mixture to better adhere to vegetation, breaking down the outer cuticle of the target vegetation, and providing a level of drift control. Pesticide applicators often add marking dye to herbicide mixtures to help identify where treatments have occurred. The addition of marking dye also aids in the identification of non-target drift during treatment.

Foliar applications should not be conducted under adverse weather conditions. Applications should be avoided when rainfall is predicted. Herbicides should not be applied if rainfall is predicted before the drying time has elapsed for the selected herbicide. Treatments should not occur when wind speeds will result in off-target drift and impact. Foliar applications should not be made when temperatures exceed 90 degrees Fahrenheit as humidity can affect volatility. Herbicide labels provide details regarding adverse environmental conditions for applications.

4.3.2 Cut Stump Applications

Cut stump treatments involve mechanically cutting target vegetation using cutting implements and applying an herbicide to the cut stump directly. This method is not practical in moderate to heavy stem densities. Vegetation is cut as low to the ground as possible. Applications should be made when the stump is freshly cut (>1 hour). Cut stump treatments are more effective when conducted outside of high sap flow seasons (i.e., early spring). Herbicides are then applied with a hand-held applicator with a foam tip, known as a Buckthorn Blaster™. Herbicide concentrations are higher than those of foliar treatments, generally 50% of herbicide, or greater, diluted in water.

This application method can be effective year-round provided the ground is not frozen and snow depths are not considerable. Treatments can occur during light rain; however, treatments during heavy rain

should be avoided. Wind does not commonly affect cut stump treatments. This method of control can be used on all woody species, including conifers. Cut stump treatments are very selective, which is highly suitable for treatments in sensitive areas. This method is suitable for controlling vegetation over 12 feet in height. Cut material should be either chipped on-site or left in windrows or piles as animal habitat. If left on-site, care should be taken to place the material in a location that would not interfere with the maintenance of the ROW or alter resource areas.

4.3.3 Basal Bark Applications

Basal bark applications are similar in many ways to cut stump applications; however, cutting is not necessary for the conveyance of herbicides. Basal bark treatments involve the application of herbicides to the lower portion of a target plant's stem (12–18"). Herbicides are mixed in an oil solution that assists in adherence of the chemical on the stem while also breaking down the plant's bark, allowing translocation of herbicides to occur. Herbicides are applied to stems via low volume backpack sprayers.

Similar to cut stump treatments, basal bark applications minimize impacts to sensitive areas and extend the treatment season as they can be performed following senescence. This method is well suited for less dense treatment locations where the cutting of vegetation might not be suitable.

5 JUSTIFICATION OF HERBICIDE APPLICATIONS

Chemical control measures are key tools for the maintenance of the ROW and in the IVM model. An IVM program that combines mechanical and cultural controls with chemical controls is the most efficient and effective means to maintain the safety and operation of the ROW with the lowest environmental impact.

MDAR has published a *Sensitive Area Material List* that details herbicides that reduce the likelihood of negative impacts resulting from herbicide use in sensitive areas. 333 CMR 11.00 requires only that these herbicides be used in the limited spray areas within designated sensitive areas. It is the intent of NEER to use only herbicides included on this list for the entire ROW. The use of these herbicides will reduce the likelihood of adverse effects to environmental and human health when applied as directed by the herbicide label.

Herbicides can be applied at almost any time of year, and the application of herbicides, when appropriately targeted, often reduces the impact on the surrounding environment. Mowing operations can dramatically impact sensitive areas through rutting and trampling or cutting of desirable vegetation. This impact can alter the hydrology and topography of sensitive areas and can influence the development of non-desirable invasive plant species through the disturbance of soils. Mowing operations can significantly impact nesting sites within the ROW and can substantially reduce food sources for pollinators and wildlife.

In many cases, the mowing of areas containing woody vegetation (without herbicide application) can influence sprouting and growth of non-desirable species. Many woody species respond to mowing by producing buds and branches at a higher rate. This will result in a denser cover of non-desirable species within the ROW. A more densely covered woody area would lead to the need for increased chemical use.

Mowing or cutting activities may pose a threat to the safety of the workers conducting the maintenance of the ROW. Steep slopes, rocky slopes, and mowing areas adjacent to water could result in accidents during maintenance activities. In addition, the mowing or cutting of poisonous species is heavily discouraged as this could result in an increased likelihood of contact and exposure to maintenance personnel. The

mowing of these plants will also not lead to successful control of the species, which will extend the threat of exposure to workers on the ROW.

Herbicides with low acute toxicities should be applied at the minimum application rates possible. Herbicides will be applied selectively in sensitive areas and within the entire ROW as appropriate. Specifically, herbicides with short half-lives and low soil and groundwater mobility will be used. This will minimize environmental impacts, both long- and short-term, and avoid off-site impacts from the ROW herbicide applications. Herbicides will only be applied by Licensed Applicators who are adept at identifying both target and non-target species.

Treatment methods used within the ROW will be selected based on the sensitivity of the treatment location, target species composition, and vegetation density. A selective combination of mechanical, cultural, and chemical (IVM) measures to control target species within the ROW will be the most successful method of control. These practices involve management activities that influence the growth of desirable native species, which will restrict the development of non-desirable species. NEER will use the most appropriate treatment method to maintain the ROW in a scientific and environmentally sound manner.

6 SENSITIVE AREA IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

Sensitive areas are defined in 333 CMR 11.04 as "any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable effects." Specifically, these areas are identified as public groundwater supplies, public surface water supplies, private drinking water supplies, surface waters, wetlands, state-listed species habitat, inhabited areas, and agricultural areas. These areas may or may not be identifiable in the field to maintenance workers.

Herbicides used in these areas traditionally have a low toxicity to humans and animals and have short persistence in soils and groundwater. It is the intent of NEER to only use herbicides and application techniques that are recommended for sensitive areas (per 333 CMR 11.04) for all treatments within the ROW. This will minimize the threat of any potential communication errors resulting from inaccurate field identification of sensitive areas.

6.1 Location of Sensitive Areas within the Right-of-Way

A map depicting sensitive areas identified at the time of the composition of this VMP has been included as Figure 1 in Attachment A. Six wetland areas are found along the ROW corridor in Bellingham. One perennial stream crosses the ROW approximately 125 feet east of the access road for Cove Machinery off Route 140 (Mendon Street). No public water supplies were identified within or adjacent to the ROW (within 400 feet). Four potential NHESP vernal pools have been identified adjacent to the ROW; however, these potential vernal pools would need to be certified to become jurisdictional.

6.2 Treatment of Sensitive Areas within the Right-of-Way

Herbicide treatment within the following proximity of sensitive areas will be limited (Limited-Spray) within the ROW:

- A distance between 100 and 400 feet of any Class A Surface Water Source

- Any Zone II or IWPA [Interim Wellhead Protection Area]
- 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
- 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
- Between 50 and 100 feet of any identified Private Well
- Between 10 and 100 feet of any Wetlands or Water Over Wetlands
- Between 10 feet from the mean annual high-water line of any river and the outer boundary of the Riverfront Area
- Between ten feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat
- 100 feet of any Agricultural or Inhabited Area

Herbicide treatment within the following proximity of sensitive areas will NOT BE ALLOWED (No-Spray) within the ROW:

- Any Zone I
- 100 feet of any Class A Surface Water Source
- 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
- 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
- A lateral distance of 100 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake
- 50 feet of any identified Private Well [within 100 feet of the ROW]
- 10 feet of any Wetlands or Water Over Wetlands
- 10 feet of the mean annual high-water line of any river
- 10 feet of any Certified Vernal Pool

Table 4 details whether any of the limited or restricted use sensitive areas are found on the ROW:

Table 4. Sensitive Areas on the Right-of-Way

Limited-Spray Areas	ROW Within Zone
(a) any Zone II or IWPA [Interim Wellhead Protection Area]	No
(b) a distance of between 100 feet and 400 feet of any Class A Surface Water Source	No
(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	No
(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	No

(e) a distance of between 50 and 100 feet of any identified Private Well	No
(f) a distance of between 10 and 100 feet of any wetlands or water over wetlands	**Yes for 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	**Yes**
(h) a distance of between ten feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat	No
(i) a distance of 100 feet of any agricultural or inhabited area	No
No-Spray Areas	
(a) any Zone I	No
(b) 100 feet of any Class A Surface Water Source	No
(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	No
(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	No
(e) a lateral distance of 100 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake	No
(f) 50 feet of any identified Private Well [within 100 feet of the ROW]	No
(g) 10 feet of any wetlands or water over wetlands	**Yes for Wetlands**
(h) 10 feet of the mean annual high-water line of any river	**Yes**
(i) 10 feet of any Certified Vernal Pool	No

Sensitive areas will be identified for required protection prior to the implementation of herbicide applications within the ROW. Sensitive area locations are identified in Attachment A of this VMP. A figure or map depicting the locations of these sensitive areas will be supplied annually in the YOP. Prior to the commencement of herbicide applications within the ROW, NEER will delineate the boundaries and setback distances of sensitive areas within the ROW. Delineation will include global positioning system (GPS) survey and the hanging of distinctly identifiable and labeled flagging within the ROW.

Prior to the application of herbicides within the ROW, the treatment crew foreman will ensure that the boundaries of the sensitive areas have been delineated and are clearly visible to the entire field crew. The foreman will review the setback limitations and locations with their field crew prior to herbicide applications. In addition, herbicides will not be stored or mixed within 100 feet of sensitive areas. A minimum of 12 months will elapse between herbicide applications in limited treatment areas (i.e. wetlands and vernal pools). All other restrictions for herbicide use in sensitive areas will be followed as detailed by 333 CMR 11.04.

7 OPERATIONAL GUIDELINES FOR APPLICATORS RELATIVE TO HERBICIDE USE

NEER will restrict contracts for vegetation management activities within the ROW to companies that employee applicators that maintain current Massachusetts Certified Pesticide licenses. All applications conducted within the ROW will be supervised by a certified applicator that has a current Category 40 (Right-of-Way) license. All applicators will be required to comply with all applicable local, state, and federal laws and regulations, including 333 CMR 11.00, and to adhere to herbicide label restrictions of use. In addition, all workers conducting herbicide application within the ROW will abide by the following guidelines.

7.1 Safety

NEER requires that all workers and contractors conducting work within any NEER ROW receive their NEER Safety training prior to entry to the ROW. This training reviews personal protective measures and policies that are required for all workers actively working on the NEER ROW. It is required that all contract personnel follow NEER's safety requirements while working on the ROW. Access to the ROW will be via established roadways and access roads. All gates located within the ROW will be immediately closed and locked following entry. NEER must be contacted whenever workers are conducting activities within the ROW.

7.1.1 Workers

All herbicide applicators will carefully read the Safety Data Sheet (SDS) and herbicide label prior to the mixing and/or use of any herbicides within the ROW. Any personal protective equipment (PPE) detailed on the herbicide label must be used during herbicide applications.

Pesticide mixing and storage should be conducted according to the label instructions, per associated regulations, and as detailed in this VMP. The process of pesticide mixing poses the highest safety risk to technicians. Care should be taken to avoid exposure of workers to highly concentrated pesticides. The measures detailed in the Remedial Plan to Address Spills and Related Accidents (Section 9.0 of this VMP) should be strictly adhered to in the event of an accident involving pesticides.

When conducting mowing operations, operators should walk the work areas prior to the commencement of mowing to ensure that wildlife is not found in the area, hazards are identified and removed (if possible), equipment footing is assessed, and soil stability is reviewed. Mower operators must wear applicable PPE to ensure safety from accidents occurring during management.

Workers conducting cut stump treatments should be cognizant of any environmental hazards that are present in the work area. Workers should ensure that equipment has been maintained prior to use to ensure safe operation.

7.1.2 Equipment

All equipment used within the ROW for the purpose of vegetation management must be inspected daily prior to entering the ROW to ensure the equipment is safe for users and not posing any threat to the environment. NEER will be responsible for approving the use of any equipment within the ROW by their employees or contractors. Extreme care will be taken when mobilizing equipment within the ROW.

7.1.3 Landowners

The ROW is limited in proximity to abutting landowners. However, landowners whose property is either under NEER's ROW easement or abuts the ROW will be notified prior to proposed herbicide applications and will be treated courteously and respectfully. NEER or its contractors will obtain permission from landowners prior to entering the ROW through private land.

Contractors conducting ROW management activities within the ROW will notify the NEER company representative of any questions or complaints from the public or government agencies that relate to ROW vegetation management. NEER will be responsible for managing any complaints or questions related to the ROW management activities in a timely manner.

7.2 Weather

Mechanical and chemical vegetation control activities could be hindered or impaired during segments of inclement weather. As detailed previously in this VMP, foliar herbicide applications will not be made during periods of moderate or heavy rainfall. Foliar treatments may be effective in light mist situations. Cut-stump applications can be conducted in moderate rainfall, but not heavy rainfall. Mowing during moderate to heavy rain events could cause safety risks to the operator and may increase the potential of rutting and topography alteration.

Excessive wind can create non-target drift during foliar applications. The risk of drift is not significant during cut stump applications. Pesticide labels generally specify wind speed ranges in which chemicals should not be applied. Applicators should monitor the effect of wind speeds on the applied herbicide to ensure that wind speeds are not resulting in the movement of herbicides onto non-target vegetation. In the event that wind speeds are regularly causing off-target movement, the application should cease.

7.3 Equipment Calibration

All equipment used to convey herbicides during foliar or cut stump applications will be calibrated and inspected annually prior to use. Foliar applications will be completed with a nozzle setting that distributes herbicides in larger droplets and not mist.

7.4 Record Keeping

Massachusetts state regulations require the completion of annual reports detailing the quantities of all pesticides used by licensed and certified pesticide applicators. Forms are completed annually and returned to the Division of Crop and Pest Services, Pest Management. Record keeping is required for all certified commercial applicators and licensed applicators in the Commonwealth of Massachusetts. The records must include the information specified in 333 CMR 10.14.

NEER will require the weekly submittal of daily pesticide application use reports for all pesticide applications conducted within the ROW. The use report will (at a minimum) include the following information:

- Date, name, and address of vegetation management contractors
- Identification of site or work area within ROW
- List of crew members
- Equipment used (mechanical and/or chemical)
- Method of application
- Description of target vegetation
- Amount, concentration, product name of herbicides, adjuvants and dilutants (with EPA Registration Number)
- Weather conditions during treatment
- Notation of unusual conditions or incidents
- Detail of any public inquiries
- Recording and verification of sensitive areas on ROW map

7.5 Right-of-Way Vegetation Management Limits

The NEER vegetation management plan is associated with the ROW limits at the Bellingham 345kV Transmission Line and involves the removal or control of all undesirable vegetation within those limits.

7.6 Sensitive Area Restrictions

Table 4 in Section 6.2 of this VMP documents sensitive area restrictions that apply to this ROW. As detailed in the VMP, two No-Spray zones and two Limited-Spray zones are found within the ROW. In sensitive areas where herbicide treatments are allowed, only the minimum labeled application rate to control the targeted plant species can be applied.

The No-Spray zones detailed on Table 4 that occur within the ROW are: 10 feet of any wetlands or water over wetlands, and 10 feet of the mean annual high-water line of any river. The Limited-Spray zones found within the ROW are: a distance of between 10 and 100 feet of any wetlands or water over wetlands and a distance of between 10 feet from the mean annual high water line of any river and the outer boundary of the Riverfront Area.

7.7 Identification of Sensitive Areas

Herbicide applications will not begin until sensitive areas have been identified in the field and reviewed with the pesticide application personnel. Herbicide applicators will be provided with the annual YOP, which will include documentation of the sensitive areas within the ROW. The treatment crew will hang flagging along the limits of the sensitive areas prior to conducting herbicide applications. The limits will be reviewed in the field with the entire herbicide application crew prior to the commencement of herbicide applications. The crew supervisor (Certified Applicator) is responsible for the communication of the limits of treatment within sensitive areas within the ROW.

7.8 Rights-of-Way Specifications

As defined and detailed in the YOP, the Certified Applicator will coordinate with NEER and its representatives regarding which portions of the ROW will be treated, the range of dates of treatments, the method of treatment, and the materials, equipment, and mixing rates to be used.

The NEER YOP will be supplied to the Certified Applicator. This document will include the maps associated with the ROW that were provided with the YOP. The YOP will include treatment restrictions; sensitive area limitations or instructions and any additional special treatment instructions or considerations for working on the ROW; SDS and pesticide labels for approved chemicals; mixing rate instructions; and daily pesticide use log sheets. Work will not commence on managing the ROW until the Certified Applicator has received these documents.

All field crews will be required to carry the YOP, the VMP, spill mitigation/control kit, first aid supplies, and sensitive area marking equipment (site map, measuring devices or GPS, and spray paint or flagging) with them during any and all applications.

7.9 General Requirements for Right-of-Way Management Activities

All vegetation management operations conducted within the ROW must be conducted in accordance with this VMP and all written instruction from NEER. Failure to comply with these instructions are grounds for immediate stoppage of operations and disciplinary action (at the discretion of NEER). The following general requirements must also be followed:

- Adherence to all chemical labels
- Provision of the designated herbicide mixture for use within the ROW to NEER (including manufacturer and brand name)
- Attendance of all applicators in NEER ROW safety training
- Restriction of herbicide treatment application due to inclement weather conditions (rainfall, snowfall, frozen ground, wind speeds and temperature)

8 IDENTIFICATION AND QUALIFICATIONS OF INDIVIDUALS DEVELOPING AND SUBMITTING THE VEGETATION MANAGEMENT PLAN

The individual representing NEER and responsible for submitting and supervising the VMP is:

James Hopfer

Principal Forester

East Region Vegetation Management

425 N. Williamson Boulevard

Daytona Beach, FL 32114

Telephone: 386-212-1385

James.Hopfer@nexteraenergy.com

The VMP was developed by SWCA Environmental Consultants, Incorporated (SWCA). The contact person at SWCA is:

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Scott Fisher has prepared and/or supervised the implementation of VMPs and YOPs for over 75 miles of ROW for electrical and gas transmission organizations, the National Parks Service, the Massachusetts Department of Conservation and Recreation, the United States Coast Guard, the Massachusetts

Department of Transportation, and the Army Corps of Engineers – New England District. The plans developed and field work completed have involved the use of IVM techniques such as those detailed in this VMP. S. Fisher is a Massachusetts Licensed Pesticide Applicator and is licensed as a Commercial Supervisor or Applicator in seven other states in the Northeast.

All herbicide treatments will be conducted by a contractor licensed to perform pesticide applications within ROWs in the Commonwealth of Massachusetts.

9 REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

This section serves as a general procedural guide to address pesticide accidents or spills within the ROW. The vegetation management contractor is responsible for the containment, clean-up, and reporting of chemical spills or accidents. This information is only a guide to informational sources and will be made available to the vegetation management contractor in the YOP. State and federal statues establish emergency response procedures that must be followed by the vegetation management contractors in the event of a spill or related accident.

Under the Federal Insecticide, Fungicide and Rodenticide Act, it is the legal responsibility of the applicator to clean up pesticide spills resulting from their use and handling of a product. Applicators are liable for damages, subject to penalties, and obligated to clean up and decontaminate areas resulting from pesticide spills.

The following are general guidelines to prevent and address spills and related accidents that occur within the ROW:

TYPES OF CHEMICAL SPILLS THAT REQUIRE ACTION

Chemicals include, but are not limited to the following:

- Herbicides
- Bar and chain oil
- Motor and hydraulic oil
- Diesel fuel
- Gasoline
- Title 3 hazardous materials

REQUIRED SPILL RESPONSE EQUIPMENT

As a minimum, the ROW crew should have available on the job site:

- VMP and YOP with emergency contact lists
- SDS and product labels
- Product fact sheets
- Appropriate absorbent material such as “Speedi Dri™” or “Soak Up™”
- Shovel

- Broom
- Flagging
- Leak proof container
- Heavy-duty plastic bags

PERSONAL CONTACT

In the event of personal contact with hazardous chemicals:

- Wash affected area with plenty of soap and water
- Change clothing which has absorbed hazardous chemicals
- If necessary, contact a physician
- If necessary, contact the proper emergency services
- If necessary, follow the procedures for Reportable or Non-Reportable Spills as outlined below
- Avoid breathing the fumes of hazardous chemicals

9.1 Spill/Accident Contact Information

(Information Subject to Change as Necessary)

Table 5. Herbicide Manufacturers Contact Information

Manufacturer	Telephone Number	Trade Name (EPA Registration No.)
Monsanto	314-694-4000	Roundup Custom (EPA Reg. No 524-343)
Corteva AgriScience	800-992-5994	Garlon 3A (EPA Reg. No 62719-37)
Corteva AgriScience	800-992-5994	Garlon 4 Ultra (EPA Reg. No 62719-527)
Bayer	800-334-7577	Oust XP (EPA Reg. No 432-1552)
Nu Farm Americas	877-325-1840	Polaris AC Complete (EPA Reg. No 228-570)

Table 6. State and Local Agencies Contact Information

Agency	Telephone Number	Special Instructions
Massachusetts Pesticide Bureau	617-626-1700	ASAP (call within 48 hours)
Massachusetts DEP, Emergency Response Section	Main Office: 888-304-1133	Call for emergencies involving reportable quantities of hazardous materials. Provide location (town, street address, pole number) and material spilled
Massachusetts Poison Information Center	800-682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

Table 7. Emergency Services Contact Information

Emergency Service	Telephone Number
Massachusetts State Police, Central Office	617-566-4500 or 911
Bellingham Police Department	508-966-1212
ChemTrec	800-424-9300

The NEER contact in the case of spills or accidents is:

Nicole Albers

Environmental Services Manager

700 Universe Boulevard

Juno Beach, Florida 33478

Telephone: 561-694-3548

Nicole.Albers@fpl.com

9.2 Clean-up Procedures

Education and attention will constantly be directed at accident and spill prevention. The following is a guideline in the event of an unfortunate incident.

Reportable Spills (spills of reportable quantity of material): Follow steps 1 through 11.

Non-Reportable Spills: Follow steps 1 through 4 and 7 through 9 and contact the NEER representative.

Table 8. Herbicide Spill Checklist

Step	Action		Completed
1	Use all PPE as directed by product label or SDS.		
2	Cordon off spill area to unauthorized people and traffic to reduce the spread and exposure of the spill.		
3	Identify source of spill and apply corrective action; if possible, stop or limit any additional amounts of spilled product.		
4	Contain spill and confine the spread by damming or diking with soil, clay or other absorbent materials.		
5	Report spills of "reportable quantity" to Massachusetts Department of Environmental Protection and MADAR.		
6	If the spill cannot be contained or cleaned up properly, or if there is a threat of contamination to any bodies of water, immediately contact any of the following applicable emergency response personnel:		
	Local fire, police and rescue:	911	
	NEER:	561-904-3328	
	Product Manufacturers		
	1.	1.	
	2.	2.	
	3.	3.	
	ChemTrec:	800-424-9300	
7	Remain at the scene to provide information and assistance to responding emergency clean-up crews.		
8	Refer to the various sources of information relative to handling and clean-up of spilled product.		
9	If possible, complete the process of soaking up the spill with absorbent materials.		
10	Sweep or shovel contaminated products and soil into leak-proof containers for proper disposal at approved location.		
11	Spread activated charcoal over spill area to inactivate any residual herbicide.		

ATTACHMENT A

Wetlands