New Jersey Pinelands Electric-Transmission Right-of-Way Vegetation-Management Plan

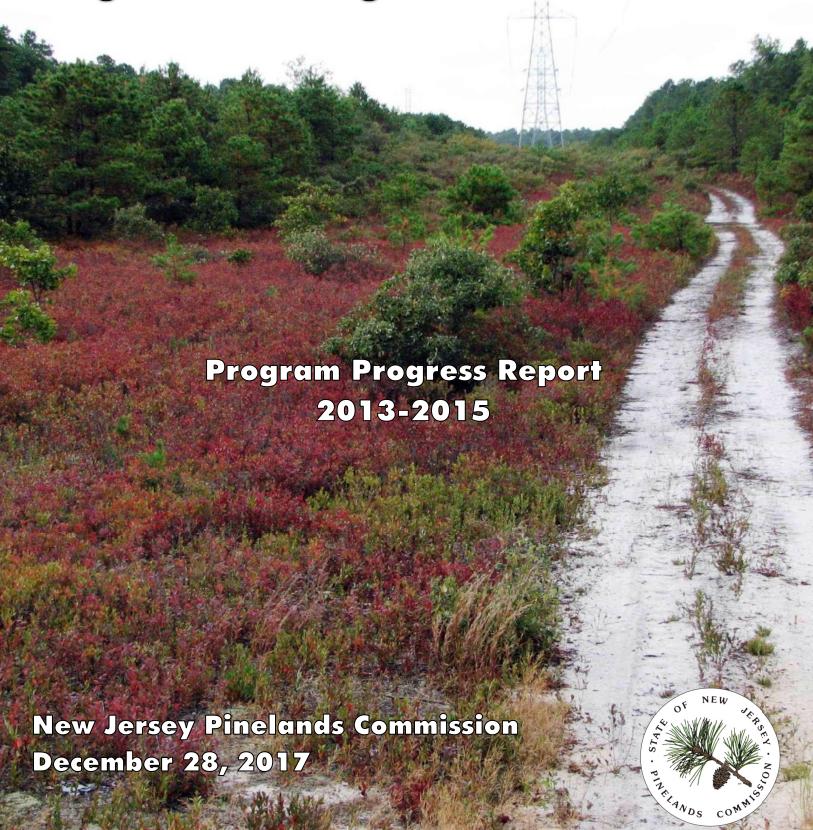


TABLE OF CONTENTS

EXEC	EXECUTIVE SUMMARY		
l:	BACKGROUND	4	
II.	ROW PLAN OVERVIEW		
III:	PILOT PROGRAM	7	
IV:	2013-2015 PROGRESS REPORT	8	
V:	INTERIM REPORT ON VEGETATION STUDY PLOTS	17	
VI:	SUMMARY OF VEGETATION MANAGEMENT	21	
LIST	OF FIGURES		
Figu	ure 1: Electric Transmission ROW's in the Pinelands Area	5	
Figu	ure 2: GIS Map of a Typical Electric Transmission ROW's.	6	
Figu	ure 3: Comparison of Total Number of ROW Spans to Acreage of ROW's	7	
Tabl	ole 1: Number of ROW Spans Managed 2013-2015	9	
Figu	ure 4: Number of ROW Spans Managed by Each Utility Company	10	
Figu	ure 5: Wetlands Spans Managed 2013-2015	11	
Figu	ure 6: Photograph of Vehicle Tracks in Wetlands Span.	12	
Figu	ure 7: Photograph of Access Road Improvement	14	
Figu	ure 8: Photograph of ROW Span in Active Agricultural	15	
Figu	ure 9: Photograph of Tree Topping in ROW Span	16	
Tabl	ole 2: Vegetation Types of Sample Plots	17	
Figu	ure 10: Comparison of Woody Vegetation in Sample Plots to Adjacent Forest	19	
Figu	ure 11: Cumulative Managed Spans 2010-2015	21	

EXECUTIVE SUMMARY

This is the second status report on the New Jersey Pinelands Electric Transmission Right-of-Way Vegetation Management Plan (ROW Plan). The Pinelands Comprehensive Management Plan (CMP) contains a Pilot Program for the management of vegetation within Pinelands Area electric transmission line rights-of-way (Figure 1). The purpose of the Pilot Program is to implement and evaluate the ROW Plan. The Pilot Program started in 2010 and continues through 2019. A Final Executive Director's Report on the success of the Pilot Program's implementation will be issued by September 30, 2019.

The first status report on the Pilot Program covered years 2010-2012. This second status report covers years 2013-2015. During the three years subject of this report, Atlantic City Electric (ACE), Jersey Central Power and Light (JCP&L) and Public Service Enterprise Group (PSEG) demonstrated a broader understanding of the vegetation management prescriptions (prescriptions) contained in the ROW Plan.

Each electric transmission line is comprised of individual spans. Spans are the segments of the electric transmission line typically located between two towers. Most of the 3,041 spans in the Pinelands Area have been managed in accordance with the prescriptions contained in the ROW Plan at least once since the inception of the Pilot Program in 2010. After six years, the ROW Plan is functioning well as a means of regulating and permitting vegetation management within electric transmission line rights-of-way in the Pinelands Area. Following the prescriptions contained in the ROW Plan, woody vegetation in the Pinelands rights-of-way continues to reflect the natural vegetation communities in the surrounding area.

While some administrative issues have occurred with the Pilot Program during the three year period subject of this status report, these issues do not warrant suspension of the Pilot Program as provided for in the CMP. One issue that was identified in the first status report and is again identified in this status report is the need to clarify the limitation on the use of vehicles to assist with vegetation management in wetland spans with a "cut trees manually" prescription. This prescription is intended to limit soil disturbance in sensitive wetlands. At a minimum, access to these wetlands spans to hand cut the vegetation requires the use of vehicles on existing access roads in the respective wetland spans. However, the specific limitations on the further use of vehicles in wetland spans to manage vegetation needs to be clarified in the ROW Plan.

For further reading, the **New Jersey Pinelands Electric Transmission Right-of-Way Vegetation Management Plan** is available on the Pinelands Commission website at www.nj.gov/pinelands/



I: BACKGROUND

Introduction

The New Jersey Pinelands Commission (Commission) protects the Pinelands Area through its implementation of the CMP. The CMP, which took effect on January 14, 1981, contains the regulations that guide land-use, development and natural resource protection in the Pinelands Area. The Pinelands Area comprises an approximately one million acre region that includes portions of seven counties in southern New Jersey.

Electric transmission rights-of-way in the Pinelands Area traverse hundreds of miles of land and comprise thousands of acres of mixed habitat. Before this Pilot Program was prepared to address these rights-of-way more effectively, it was recognized that proper maintenance of the vegetation in these rights-of-way could provide ecological benefits and improve electric transmission safety and reliability.

This report addresses the management of vegetation within the electric transmission line rights-of-way in the Pinelands Area. All right-of-way vegetation management must be undertaken in accordance with the prescriptions contained in the ROW Plan. The ROW Plan is incorporated by reference into the CMP as a Pilot Program.

ROW Plan Preparation

In 2006, Commission and Rutgers University staffs collaborated to develop an ecologically based electric transmission line right-of-way vegetation management plan for the Pinelands Area, in cooperation with representatives from the New Jersey Board of Public Utilities, ACE, JCP&L and PSEG. The overall goal was to prepare a right-of-way vegetation management plan that creates and maintains relatively stable and sustainable early successional habitats that reflect characteristic Pinelands habitats, requires minimal vegetation management, ensures electric transmission reliability and safety and minimizes the need for individual applications to the Commission and the resulting permit reviews.

To achieve this goal, a geographic-information system (GIS) database of electric-transmission line rights-of-way was created. The locations and names of all electric transmission lines (79kv and higher) in the Pinelands Area with specific span-by-span information was provided by the three utility companies. Vegetation and habitat information both on and adjacent to the electric transmission line rights-of-way were mapped. Vegetation-management data used by the three utility companies inside and outside the Pinelands Area was gathered and summarized. As a result, a span-by-span vegetation management plan was developed.

ROW Plan Approval

The ROW Plan, dated March 2009, was approved by the Commission in October 2009. The ROW Plan specifies a variety of prescriptions on a span by span basis that seek to achieve several ecological and electric transmission line right-of-way objectives.

Pilot Program Rule Adoption

After the ROW Plan was approved, the regulations to implement a Pilot Program were amended into the CMP (N.J.A.C. 7:50-10.31 through 10.35). The Pilot Program regulations became effective on December

21, 2009. These CMP regulations implement the Pilot Program for a ten year period. The CMP requires that by September 30, 2019, a Final Executive Director's Report on the Pilot Program's implementation be provided to the Commission, the three utility companies and the Board of Public Utilities, to determine whether the Pilot Program is successful in accordance with evaluation criteria set forth in the CMP (N.J.A.C. 7:50-10.35(a)).

If the Executive Director finds that the Pilot Program has been successful, he or she shall propose an amendment to the CMP to institute the ROW Plan on a permanent basis.

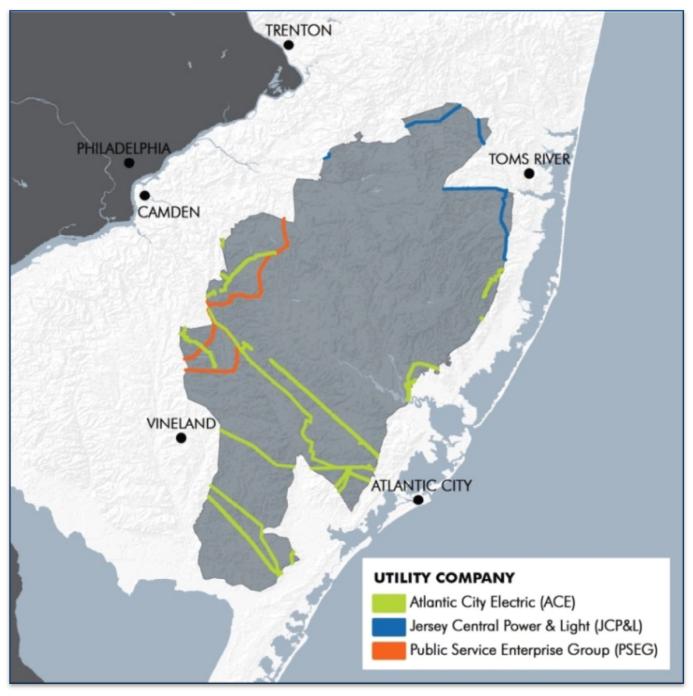


Figure 1: Electric Transmission Rights-of-Way in the Pinelands Area (shown in gray) managed by ACE, JCP&L, and PSE&G.

II: ROW PLAN OVERVIEW

The ROW Plan includes a GIS layer of existing electric-transmission line rights-of-way in the Pinelands Area (Figure 2), a comparison of vegetation in existing managed rights-of-way, a summary of vegetation management strategies used by utility companies inside and outside of the Pinelands Area and vegetation management prescriptions for each of the 3,041 spans in the Pinelands Area.

The purpose of the ROW Plan is twofold:

- 1. Create and maintain relatively stable and sustainable early successional habitats that are characteristic of the Pinelands and which provide habitat for native Pinelands plants and animals, including threatened and endangered species; and
- 2. Ensure the reliability and safety of the electric transmission system in the Pinelands Area by creating and maintaining low growth vegetation communities.

The ROW Plan authorizes two basic prescriptions within the electric transmission line rights-of-way; either "cut trees manually" or "mow." Most wetland spans must be cut manually. Mowing machines are allowed in upland spans and a few wetland spans. Some of the prescriptions also include time of year restrictions to protect threatened and endangered species. There are 59 different variations of these two basic prescriptions.

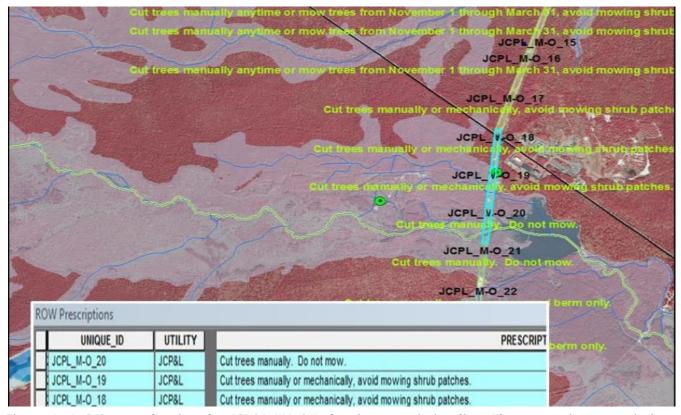


Figure 2: A GIS map showing the JCP&L "M-O" electric transmission line. The vegetation prescription, unique span ID number, utility company and other span information, including wetlands and T&E species location, are all available for each span.

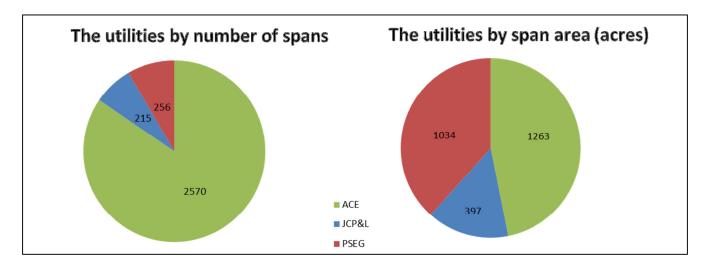


Figure 3: The difference between the number of spans by company is shown in this pie chart. In the Pinelands, ACE has the greatest number of spans by far compared to PSEG and JCP&L. However, when you look at total right-of-way area, PSEG has almost as much area of right-of-way ROW as ACE.

III: THE PILOT PROGRAM

Progress Reporting

The three utility companies are responsible for carrying out prescriptions contained in the ROW Plan for the duration of the Pilot Program. It is anticipated that the ten year monitoring period will allow for application of the prescription for each span at least two times and will afford sufficient time to evaluate the change in vegetation communities that occur as a result of those prescriptions. The Pilot Program has three main components:

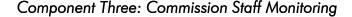
Component One: Utility Company Reporting

The three companies must submit annual reports to the Commission's Executive Director that identify all vegetation management activities completed for the preceding year.



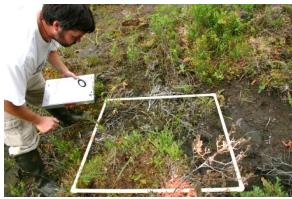
Component Two: Commission Staff Inspections

Regular inspections by Commission staff are conducted to verify that the vegetation management activities undertaken by the utility companies are consistent with the ROW Plan prescription for that particular span. Every span is included for inspection and is inspected on a rotating basis.



Scientifically based monitoring of individual vegetation plots is conducted by Commission staff to assess the outcomes of the vegetation management activities.





IV: 2013-2015 PROGRESS REPORT

The CMP requires that the Commission's Executive Director submit a progress report to the Commission, the three utility companies and the Board of Public Utilities. This report is the second such report. The report must address the following items:

- ITEM 1. The type and extent of vegetation management activities undertaken;
- ITEM 2. Any significant problems or issues; and
- **The need for any amendments to the ROW Plan.**

Item 1: The type and extent of vegetation management activities:

This section summarizes the type and extent of vegetation management activities conducted from 2013 through 2015. It is important to note that, for the purposes of this report and all ROW Plan reports, the number of spans is used as a metric as opposed to the area of the spans. Each span has its own unique ID number and the three utility companies utilize this ID number to report vegetation management on a span by span basis. Each year, a particular span is either reported as "managed" or "not managed" by the three utility companies. Each year the number of managed spans is highly variable depending on which company is undertaking vegetation management (See Table 1). 2013 was a major activity year for JCP&L vegetation management, with slightly more than 50 percent of its Pinelands Area spans being managed, while ACE and

PSEG were less active. In comparison, during 2014, PSEG had a busy year and managed 63 percent of its Pinelands Area spans. In 2015, ACE took the lead in Pinelands Area activity and managed half of its spans.

Table 1: Number of Right-Of-Way Spans Reported Managed in 2013, 2014 and 2015

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UTILITY COMPANY	# ROW SPANS MANAGED	TOTAL # ROW SPANS
ACE	232 (9%)	2,570
JCP&L	120 (56%)	215
PSEG	32 (13%)	256
Total	384 (13% of all spans)	3.041

2014

UTILITY COMPANY	# ROW SPANS MANAGED	TOTAL # ROW SPANS
ACE	49 (1.9%)	2,570
JCP&L	0	215
PSEG	162 (63%)	256
Total	211 (7% of all spans)	3,041

2015

UTILITY COMPANY	# ROW SPANS MANAGED	TOTAL # ROW SPANS
ACE	1,286 (50%)	2,570
JCP&L	44 (20%)	215
PSEG	87 (34%)	256
Total	1,417 (47% of all spans)	3,041

Total managed this reporting period: 2,012 spans

During the 2010-2012 reporting period, a total of 1,141 spans were managed. The 2013-2015 reporting period yielded almost twice the number of spans being managed; with a total of 2,012 spans. These numbers suggest that it is getting easier for the three utility companies to execute the prescriptions required by the ROW Plan.

The fact that ACE has a greater number of Pinelands spans is shown in Figure 4 below:

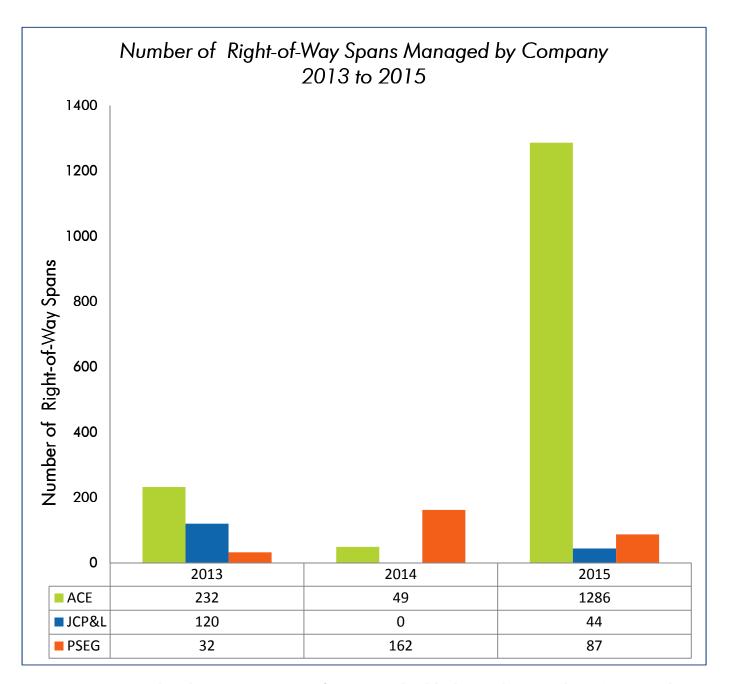


Figure 4: A graphical representation of Figure 3, highlighting that ACE has six times the number of spans to manage each year than the other two utilities.

The main distinction between all the prescriptions is that mowing is not permitted in most wetland spans. Wetland spans are more difficult to manage for a variety of reasons; these include frequent flooding, the difficulty in crews accessing the span, the difficulty of hand cutting a span and the need to remove cut tree branches and logs from the wetland as required by the ROW Plan. Figure 5 shows that more than 75% of the spans managed over the past three years were upland spans which could simply be machine mowed.

Pinelands wide, approximately 24% of the spans contain at least some wetlands. In 2013, only 9% of spans that were managed contained wetlands. In 2014, 16% of spans that were managed contained wetlands. In 2015, just over 20% of spans that were managed contained wetlands. It is anticipated that future management reporting will reflect that the three utility companies have reached the 24% of wetlands spans as managing wetlands spans becomes just as routine as managing upland spans.

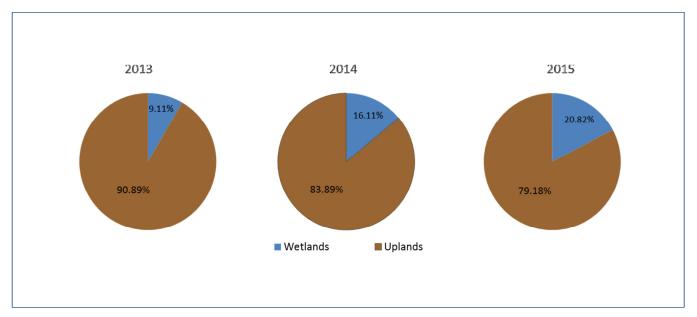


Figure 5: Percentage of wetland spans managed over the three year period.

Item 2: Any significant problems or issues:

No violations of the prescriptions were reported during the 2013-2015 period. Neither utility company self-reporting or Commission staff inspections noted any deviations in the required prescriptions for this reporting period. The first reporting period had both self-reported violations and staff reported violations of the prescriptions. This may represent the learning curve for both the three utility companies and their contractors with respect to becoming increasingly familiar with the required prescriptions of all spans.

Although no significant problems or significant issues were raised, a number of issues were identified by the three utility companies and the Commission staff during the 2013-2015 review period.

First Issue: The utility companies questioned whether mowers or other vehicles were allowed in the "cut trees manually, do not mow" spans. Since 2010, it has been observed that vehicles are being used in these spans; at a minimum, mowers travel along existing access roads to reach other spans where mowing is permitted. Vehicles are also used in the wetland spans to bring crews in to hand cut trees and then, as required by the ROW Plan, to remove cut vegetation from the wetland spans. So in practice, vehicles are being used in the "cut trees manually, do not mow" spans to facilitate vegetation management, although primarily on existing access roads and not in the span itself. The ROW Plan should be clarified to address this issue.



Figure 6: Vehicle tracks from a mower traveling through a "Cut trees manually. Do not mow" wetland span to reach an upland span (background) where mowing is permitted. Minimizing vehicle disturbance in wetland spans remains a challenge of the ROW Plan.

Second Issue: The three utility companies questioned whether the mowing of access road shoulders was allowed in the "Cut trees manually. Do not mow" spans. One utility company requested a prescription modification concerning a particular electric transmission line in Monroe Township, Gloucester County to enable mowing of access road shoulders in wetlands spans. The requested mowing was to be done from the existing access road with a boom mounted mower with the vehicle never leaving the existing access road. The ROW Plan (page 40) discusses maintenance of existing access roads and indicates that such maintenance is permitted "using the vegetation-management prescription provided for that span." If the prescription was followed, the mower would not be allowed in the wetland span. The Commission staff determined that if the mower remained on the access road, the shoulder area vegetation could be cut as proposed by the utility company. The ROW Plan needs to clarify whether radial arm mowers can be used in wetland spans provided the vehicle remains on the existing access road.

Third Issue: A utility company questioned what constitutes an acceptable Mistletoe Plan when the prescription for a given span specified in the ROW Plan requires the utility company to "Develop a Mistletoe Plan." The ROW Plan intended that the utility submit the Mistletoe Plan to the Commission staff for its review prior to cutting any spans with trees which have this rare epiphytic plant growing on them to demonstrate that the proposed vegetation management would not result in an irreversible adverse impact on the local population of Mistletoe. The ROW Plan should be clarified to address that this prescription is only permitted if a Mistletoe Plan demonstrates that the vegetation cutting is consistent with the CMP threatened and endangered species protection standard.

Fourth Issue: The improvements to existing right-of-way access roads continued to occur in 2013-2015. The ROW Plan (page 40) allows for "periodic maintenance" of existing access roads in the ROW without application to the Commission. Although some examples as to what constitutes maintenance are discussed in the ROW Plan, including the conditions that access road maintenance fill be limited to the existing original road width and that grading be limited to the elevation of the existing access road bed, two utility companies have completed access road improvements in wetlands which were clearly in excess of that needed for road "maintenance." The ROW Plan indicates that "construction of new access roads...are not covered under this ROW Plan." Access road improvements which go beyond maintenance require application to the Commission. Access road improvements in wetlands, such as the one shown in Figure 7, must be demonstrated to be the minimum necessary to maintain the electric transmission line and must not disrupt the natural hydrology of streams and wetlands. The ROW Plan needs to provide further guidance on this issue.

Fifth Issue: The three utility companies are required to annually submit a summary of their vegetation management activities. Compilation of this information to monitor the Pilot Program continues to require a significant amount of work by the Commission staff. The Commission staff continued to work on getting each of the three utility companies to submit its annual reporting in a uniform format. For example, although each of the three utility companies had spans (e.g. farm fields, salt marsh) where no actual vegetation cutting would ever be required under the ROW Plan (See Figure 8), two of the utility companies reported field inspection of such spans and their determination that no vegetation cutting was required as "vegetation management activities." To address the reporting inconsistency, a letter was sent to all three utility companies asking them to clarify their annual reporting to distinguish between spans which were inspected that year but vegetation management was not required and those spans where vegetation management actually occurred.

Sixth Issue: During the 2013-2015 reporting period, an issue was identified regarding a lack of access to spans which are located on Federal lands such as the FAA Technical Center in Galloway Township and Joint Base McGuire-Dix-Lakehurst in Pemberton Township. While these Federal lands contain less than 75 spans in total, access to these spans had not been secured for site inspections in 2010-2015. The Commission staff will require site inspections on Federal lands rights-of-way. This will involve requiring the concerned utility companies to schedule these site inspections with Federal personnel.

Seventh Issue: The CMP provides that "minor adjustments" can be made to the prescriptions without formal amendments to the ROW Plan. Two modifications were requested by the utility companies in this reporting period. Both were determined to be minor and were addressed by the Commission's Executive Director as provided for in the Pilot Program without requiring formal amendments to the ROW Plan.

First minor adjustment: A utility company requested to mow access road shoulders in "Do not mow" wetland spans. The staff determined this did not actually require any prescription modification, rather a prescription clarification about the use of boom mounted mowers on access roads everywhere in the Pinelands Area. It was determined that the periodic maintenance of vegetation growing within five feet of existing access roads via the use of boom mounted mowers which stay on the access road at all times is permitted and constitutes maintenance. Vegetation management within the remainder of each wetland span must continue in accordance with the prescription and no vehicles are permitted in the span off of the access road.



Figure 7: This newly constructed 2015 span access road improvement is beyond the scope of routine maintenance authorized by the ROW Plan. A Pinelands application must be completed for access road improvements beyond routine maintenance.



Figure 8: This agricultural span in Buena Vista Township is maintained by the landowner, not the utility. As a result, this span was not reported as being "managed" by the utility in the past six years.

Second minor adjustment: In 2013 the Northern Long-Eared Bat was proposed to be listed as a federally threatened species and this was adopted in 2015. As a result, some utility companies have started topping trees which may be habitat for this bat species instead of removing them entirely from the right-of-way (Figure 9). Additionally, timing restrictions are being observed as to cutting work so that potential bat roosting trees are not disturbed during the brooding season. In certain wetland spans, the Pilot Program prescription was restricted to a window of the driest time of the year; July through October. However, with the bat breeding season extending into this window, only October was left for vegetation management which was deemed too short of a season by at least one utility company. A prescription modification was requested to move the management window to October through March 1. As this modification involved only 13 spans, the modification was determined to be minor and was approved by the Executive Director in 2014.



Figure 9: Trees topped in a span. The prescription for this wetland span requires hand cut and removal of trees by hand in late summer. However, concerns over wetlands impacts caused by vehicles needed to remove the trees from the span and impacts to the newly Federally listed Northern long-eared bat lead a utility company to request a prescription timing window modification and to perform tree topping instead of the ROW Plan prescription.

Item 3: Needed Amendments to the ROW Plan.

Amendment One: A section of an ACE-transmission line (783 Line in Barnegat Township) was relocated in 2006 as part of an electric transmission line upgrade. The ROW Plan contains the pre-2006 location of the transmission line right-of—way. The ROW Plan currently contains no mechanism to update each utility company's mapping layers and provide these location updates to the Commission. Utility company security regulations also limit the availability of this information. An amendment should be considered that provides a means for the Commission to receive information on electric transmission line relocations.

Amendment Two: Clarifications of the following words, terms and prescriptions in the ROW Plan:

"Cut Trees Manually. Do not mow" Prescription: Clarification of this prescription to address to what extent, if any, vehicles are permitted in the wetland span.

Access road maintenance: Only routine maintenance of existing access roads is permitted under this ROW Plan. Routine maintenance is discussed in the ROW Plan. The discussion should be expanded and clarified.

Vegetation removal beyond the pre-existing managed portion of the right-of-way. The ROW Plan

should be clarified to indicate that the prescriptions only pertain to the historically maintained portion of the right-of way and not to all existing vegetation in the right-of-way. A Pinelands application is required for removal of vegetation from the right-of-way in areas that were never managed.

Emergency Access to repair a utility line: Such access is permitted under the ROW Plan. However, the ROW Plan should be clarified to indicate that, as practical, emergency stream and wetland crossings should be accomplished via temporary mats, temporary bridging or temporary fill and that all structures must be promptly removed upon repair completion.

American Mistletoe Plan: Conditioning a span prescription on this requirement raises the issue of whether the prescription can be undertaken consistent with the CMP's threatened and endangered species requirements. The ROW Plan should specify that the prescription can only be undertaken if the utility company develops a Mistletoe Plan and the Commission finds that the Mistletoe Plan is consistent with the CMP's threatened and endangered species protection standard.

V: INTERIM REPORT ON VEGETATION STUDY PLOTS

Introduction

One of the four criteria that the Executive Director will use to evaluate the success of the Pilot Program in the 2019 Final Executive Director's Report is whether or not "the vegetation-management prescriptions have resulted in relatively stable and sustainable early successional habitats that are characteristic of the Pinelands and which provide habitat for native-Pinelands plants and animals, including threatened and endangered species (N.J.A.C. 7:50-10.35)." To address this, Commission staff established two vegetation plots in each of 24 right-of-way spans that represent six different vegetation type/vegetation-management prescription combinations (Table 2). Although the vegetation in all 24 managed right-of-way spans contained some amount of trees, shrubs, and herbs, each span was categorized into one of the six vegetation types based on whether it was upland or wetland and whether trees, shrubs, or herbs dominated the vegetation in the span (Table 2).

Table 2: Vegetation types and management prescriptions associated with 24 ROW spans selected for vegetation monitoring.

Vegetation Type	Management Prescription	# of Spans	# Plots/Span	Total # of Plots
Wetland Cedar	Manual tree removal	4	2	8
Wetland Shrub	Manual tree removal	4	2	8
Upland Herb	Mow trees, shrubs and herbs	4	2	8
Upland Shrub	Mow trees, shrubs and herbs	4	2	8
Upland Scrub	Mow trees, shrubs and herbs	4	2	8
Upland Tree	Mow trees, shrubs and herbs	4	2	8

Vegetation in these managed rights-of-way plots is surveyed each year of the Pilot Program. In addition to these annual surveys, in 2012, two reference plots were established in the forest adjacent to each right-of-way span to determine if the right-of-way vegetation was similar to and characteristic of the nearby Pinelands forest. Although these data were collected in 2012, Commission staff completed a preliminary

analysis for this 2013-2015 progress report. The methods and results of the preliminary comparison of the ROW and adjacent-forest vegetation are described below. For this preliminary analysis, only woody species (trees, shrubs, and vines) were evaluated because some herbaceous plants from both sets of plots have yet to be identified.

Methods

From June through August of 2012, Commission staff used 100-m² circular plots to complete vegetation surveys in both the managed right-of-way spans and the adjacent forest. Plot locations were selected to best characterize the representative plant community and to avoid the right-of-way and forest edges. In each right-of-way and adjacent-forest plot, all woody plant species were identified and the dominant shrub species were determined based on plant cover. The woody plant communities, the dominant shrub species, and the number of woody species were compared separately between right-of-way and adjacent-forest plots using various mathematical and statistical techniques.

Results

A total of 61 woody species were present in the right-of-way and adjacent-forest plots. Of the 61 woody species, 77% are considered native Pinelands species, 16% are non-Pinelands species, and 7% are unable to be placed in either category. Both native and non-Pinelands species were found in right-of-way and adjacent-forest plots. Sixteen tree and 39 shrub species were present in the right-of-way plots and 16 tree and 31 shrub species were present in the adjacent-forest plots.

There were no statistical differences in the woody plant communities present in the right-of-way and adjacent-forest plots. For the dominant shrub analysis, statistical differences were found between right-of-way and adjacent-forest plots only for the upland scrub vegetation type. The difference for the upland scrub type was due to subtle variations in the cover of three native shrub species, including bear oak (*Quercus ilicifolia*), which displayed greater cover in the right-of-way plots, and black huckleberry (*Gaylussacia baccata*) and dangleberry (*G. frondosa*), which showed greater cover in the forest plots. No statistical difference was found in the number of woody species between the six vegetation types in right-of-way and adjacent-forest plots (Figure 10).

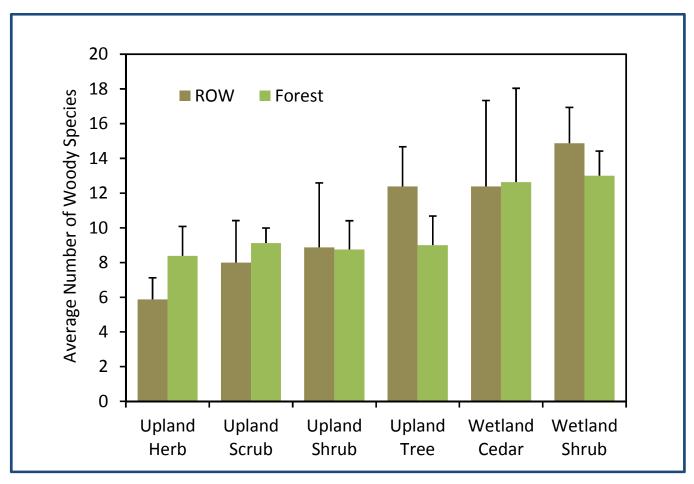


Figure 10: The average number of woody plant species in ROW and adjacent forest plots for six vegetation types.

Interim Conclusion on Vegetation Study Plots

Other than the right-of-way plots being managed, no major differences in woody plant communities, dominant shrub cover, or the number of woody species were found between right-of-way and adjacent-forest plots. An analysis of the herbaceous vegetation between right-of-way and forest plots will be completed at some point in the future when all of the herbaceous plant specimens have been identified.



Male wild turkeys using the low vegetation in the ROW to display in spring 2015.

VI: Summary of Vegetation Management

While there continue to be administrative and interpretation issues with the ROW Plan, this second progress report for 2013-2015 demonstrates that the Pilot Program and associated ROW Plan is being implemented successfully. With some additional added clarification, the ROW Plan will provide an even more effective framework for managing this unique Pinelands habitat. In general, we also anticipate that, over time, there will be a reduced need for regulatory guidance.

When the ROW Plan was approved, it was projected that, on average, each utility company would have four year cycles for vegetation maintenance, meaning that after year four, the utility company begins again, cutting the spans managed in year one. Figure 11 below indicates that it took PSEG about only three years to have cut most of its 256 spans in the Pinelands Area. JCP&L followed with an average of four years to have managed its 215 Pinelands Area spans. ACE took five years for most of its 2,570 spans in the Pinelands Area to be reported as managed. This may be due to the fact that ACE had by far the most spans in the Pinelands Area. As of 2015, 488 ACE spans have not been reported as managed because, based upon site inspection, no vegetation management was necessary.

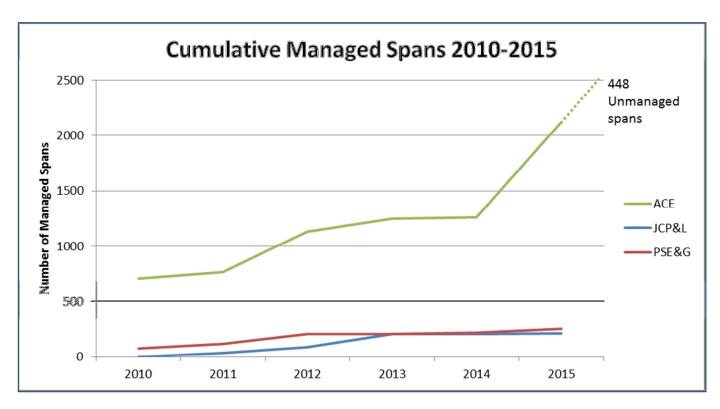


Figure 11: Span management over the past six years by utility company.

