



Green Mountain Power /
To: Kingdom Community Wind
Project File

Date: December 30, 2019

Memorandum

Project #: 57346.29

From: Allison Slaney,
Environmental Scientist

Re: Year 7 (2019) Non-Native Invasive Species Monitoring
– Wind Farm

INTRODUCTION

On behalf of Green Mountain Power ("GMP"), VHB conducted Non-Native Invasive Species Monitoring ("NNIS") monitoring for invasive vegetation within the Wind Farm portion of the Kingdom Community Wind Project ("KCW" or "Project") in Lowell, Vermont. The monitoring was conducted pursuant to the requirements of the Project's Certificate of Public Good ("CPG") issued by the Vermont Public Service Board ("PSB", renamed in 2017 to the Public Utility Commission or "PUC") Docket No. 7628, and in accordance with the Project's approved *Kingdom Community Wind Invasive Species Monitoring and Control Plan* ("Plan").¹ KCW NNIS monitoring was required by Vermont Agency of Natural Resources ("ANR") for 5 years following construction unless populations continue to grow. As the previous year's monitoring found that populations grew, another year of monitoring was required. This memorandum and supporting attachments address the results of the seventh year of NNIS plant monitoring, conducted during the summer of 2019.

The Plan requires monitoring in all areas where there has been construction soil disturbance, including re-vegetated rock fill slopes, rock cut slopes, crane path and access road surfaces, turbine pad surfaces, and any other construction sites within the limits of the Wind Farm, as well as 100 feet into the forest from the edge of disturbance where any invasive species are observed ("Study Area"). Per the Plan, invasive species monitoring began during the first full growing season following the completion of construction activities. The year 2019 represents Year 7 (the seventh full growing season), as construction was substantially completed in 2012.²

The following sections describe the monitoring methods, a brief presentation of results, as well as a summary of assessment and management recommendations. A list of the supporting documentation provided in the Attachments and referenced below includes:

- Attachment 1: Kingdom Community Wind Project, Lowell, Vermont, Invasive Vegetation Monitoring Map set, prepared by VHB;
- Attachment 2: Invasive Vegetation Monitoring Summary – Wind Farm Invasive Vegetation Monitoring, prepared by VHB;
- Attachment 3: Kingdom Community Wind – Wind Farm, Year 7 (2019) Invasive Vegetation Monitoring Photographs, prepared by VHB.

¹ VHB. June 2011. *Kingdom Community Wind Invasive Species Monitoring and Control Plan*.

² The Notice of Termination for the Project's Construction Stormwater Discharge (INDC) Permit (No. 6216-INDC.1) was filed on July 19, 2013.



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METHODS

Invasive species monitoring was conducted in accordance with the Plan by qualified VHB Environmental Scientists from July 15, 2019 through July 19, 2019. Those plant species that are considered Class A or B Noxious Weeds ("noxious weed(s)") in Vermont per the Quarantine Rule³ were documented and mapped. Per the Plan requirements, noxious weed occurrences were hand removed at the time of the survey if feasible. If not feasible, then occurrences were flagged in the field and treated via herbicide application or manual removal of seed heads shortly after the monitoring by qualified personnel. All identified occurrences and the type of control measure used are described in the table provided in Attachment 2, which also contains recommendations for follow-up monitoring and control in 2020.

In addition to monitoring for noxious weeds, VHB similarly documented the occurrences of species on the Invasive Species Watch List for Vermont.⁴ GMP voluntarily decided to control the populations of Watch List plant occurrences in conjunction with implementation of control measures for noxious weed plant occurrences.

Where invasive plants were observed, either noxious weeds or Watch List species, VHB extended the inventory 100-feet into adjacent forestland, per the Plan requirements. VHB marked each documented occurrence with orange flagging coded with a unique identification and photographed and located each occurrence using sub-meter capable GPS. The number of stems present at an occurrence was enumerated or estimated.

In VHB's Year 6 (2018) report, dated December 27, 2018, VHB recommended consideration of multiple herbicide applications, in select areas in 2019, to combat both the noxious weeds and the Watch List plants. This approach differs from prior years where the recommendation was a single herbicide application. The new approach proposes the cutting or mowing of live plants while in flower followed by an herbicide application in early summer, as a means to deplete the below-ground energy store of existing occurrences while also maximizing efficiency of the herbicide application. Subsequently, a second herbicide application later in the summer attempts to eliminate any plant matter that had been initially missed or re-sprouted.

Between June 19th and 21st, 2019, VHB confirmed "early flower" condition for the NNIS plants along the Access Road prior to mowing by a GMP contractor. During the same time period, VHB marked NNIS occurrences from Tower 1 through Tower 8 along the ridgeline in advance of the first of two herbicide applications, which were carried out the following week (of June 24th) by Vegetation Control Services ("VCS"). The remaining components of the Wind Farm (except for the transmission line corridor) were subject to a single herbicide application as described below.

As reported previously, in 2016 through 2019 invasive plants within the transmission line corridor could not be treated with herbicide as performed in 2014 and 2015 because the current Utility Herbicide Permit issued by the State of Vermont to GMP does not allow for the application of herbicide for reasons other than safety and reliability. As was done in 2016 through 2019, GMP contracted field crews from the Vermont Youth Conservation Corps who, under the

³ Vermont Department of Agriculture, Food & Markets. 2012. *Quarantine #3 Noxious Weeds*.

⁴ Department of Environmental Conservation. 2017. *Invasive Species Watch List for Vermont*.



supervision of VHB Scientists, manually removed the seed heads from all invasive plant occurrences within the Project's transmission corridor in (see the map set, Attachment 1). All seed head materials were bagged and removed for proper disposal in an off-site location.

From July 15th through July 25th, 2019, VHB completed a comprehensive survey of all NNIS occurrences within the Wind Farm. The following week (of July 29th), VCS completed herbicide application for all components of the Wind Farm save for the transmission line corridor (see Attachment 1). VCS was aware of the restriction to not apply herbicide within 50 feet of a mapped wetland or stream. This application represented the first time a second application of herbicide had occurred in a single season for the locations between Turbines 1 and 8.

RESULTS AND DISCUSSION

Based on Year 7 monitoring, two Class B Noxious Weeds, purple loosestrife (*Lythrum salicaria*) and common reed (*Phragmites australis*) were observed and documented. Two species listed on the Watch List, reed canary grass (*Phalaris arundinacea*), and spotted knapweed (*Centaurea stoebe*), were also observed and documented. No invasive plants were observed outside the area of disturbance in the 100-foot vicinity. The occurrences of these four plant species are depicted on the maps provided in Attachment 1 and population occurrences over the course of the seven year monitoring period are summarized in Table 1, below. Details on the individual occurrences, including population estimates, control treatment taken, and recommendations for future monitoring and control are included in Attachment 2.

Table 1. Seventh Year Summary of Invasive Plant Populations

Species	Year 1 (2013)			Year 2 (2014)			Year 3 (2015)			Year 4 (2016)			Year 5 (2017)			Year 6 (2018)			Year 7 (2019)		
	Population Size (Stems)			Population Size (Stems)			Population Size (Stems)			Population Size (Stems)			Population Size (Stems)			Population Size (Stems)			Population Size (Stems)		
	<20	21-100	>100	<20	21-100	>100	<20	21-100	>100	<20	21-100	>100	<20	21-100	>100	<20	21-100	>100	<20	21-100	>100
<i>Phalaris arundinacea</i>	30	32	8	104	99	53	160	137	25	188	101	50	137	75	41	111	85	79	132	77	56
<i>Phragmites australis</i>	-	-	-	4	-	-	3	-	-	3	1	-	8	2	-	32	3	-	14	2	-
<i>Centaurea stoebe</i>	-	-	-	26	12	9	41	63	14	90	52	17	87	48	30	61	52	40	127	95	41
<i>Lonicera morrowii</i>	-	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-
<i>Lythrum salicaria</i>	1	-	-	14	1	-	9	-	-	5	1	-	5	2	-	18	-	-	8	2	-
Sub-Total	31	32	8	148	112	62	214	200	39	287	155	67	238	127	71	222	140	119	281	176	97
Total	71			322			453			509			436			481			554		

On July 15-18 and 23, 2019, VHB located 10 purple loosestrife occurrences within the Wind Farm, mainly adjacent to stormwater treatment ponds, which represents a decrease from the number of occurrences observed in 2018 (eighteen occurrences) but an increase from 2017 (seven occurrences). Most of the purple loosestrife colonies were all small in size ranging between one and 20 stems. The total population of purple loosestrife has decreased since 2018, but the number of larger populations has increased (only two ranging from greater than 21 to less than 100 stems). No purple loosestrife occurrences were found in the forested portions of the Study Area.



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Common reed was found in 16 locations in 2019, which is a significant decrease from the 35 occurrences found in 2018. The common reed populations were found to be generally small; 14 populations with less than 20 stems and only two occurrences had a population size greater than 20 (but less than 100) stems. Common reed was observed mainly within roadside ditches or within or adjacent to stormwater treatment ponds.

Morrow's honeysuckle (*Lonicera Morrowii*) was not found during 2019 NNIS monitoring, which indicates that the single occurrence observed during 2015-2017 monitoring has likely been successfully eradicated.

As in previous years, reed canary grass was found to be the most abundant invasive species observed at the Wind Farm. The number of occurrences in 2019 is 265, which represents a decrease of 10 total occurrences from 2018. Herbicide application commenced in 2014, however as reported previously, the timing of the 2014 application may have been too late in the season to be optimally effective and the following year in 2015, 66 new occurrences were observed. The 2015 application appears to have been more successful according to the monitoring data, and this is believed to explain the relatively small increase in new occurrences in 2016. Similarly, the timing of the 2016 herbicide application appears to have been even more successful as there was a decrease in reed canary grass occurrences found during 2017 monitoring. In 2018, the large populations (greater than 100 stems each) saw an increase of 38 occurrences (see Figure 1 below). In 2019, there was decrease of reed canary grass populations in both the mid-size population (between 21 and 100 stems) and large population by 8 and 23, respectively, with a small increase in small (less than 20 stems) populations by 21.

Spotted knapweed was found in 263 locations during 2019, a significant increase from the 153 locations found during 2018. Similar to monitoring data on reed canary grass, more than half of the spotted knapweed occurrences in 2019 have a population size greater than 20 stems. Spotted knapweed was largely found along the sides of the access road, in roadside ditches, and other disturbed stony areas.

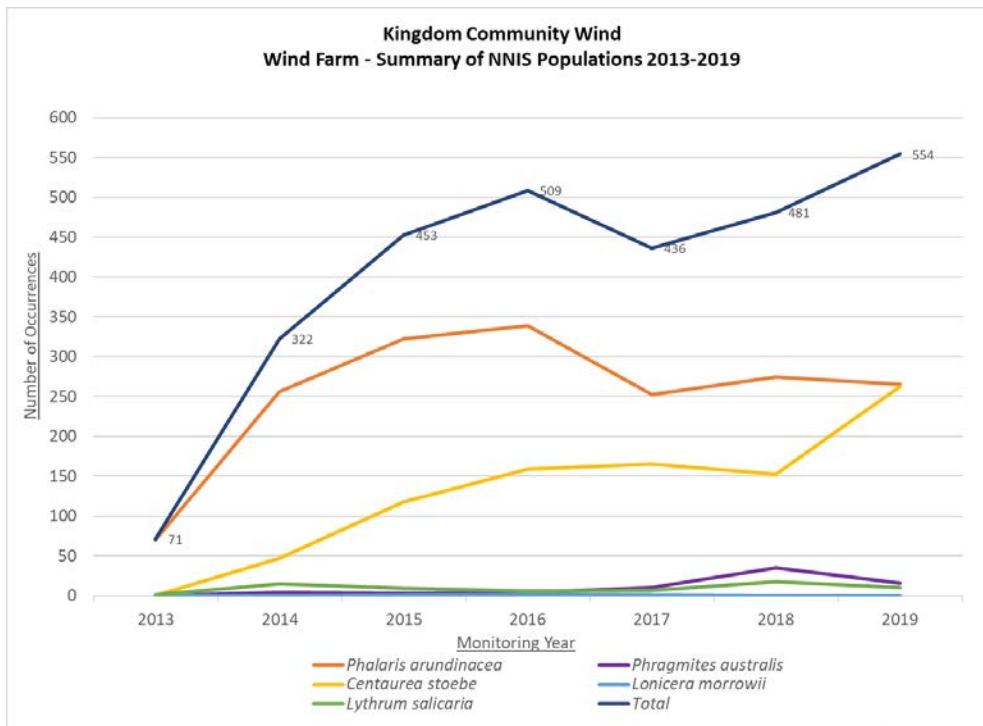


Figure 1. Year to year summary of non-native invasive species for most abundant species observed at the KCW Wind Farm location. Note the increasing (2014 to 2016) and decreasing (2017) trend in overall new occurrences since herbicide application commenced in summer, 2014. In 2019 there was a slight decrease in all species except spotted knapweed, with the latter species being solely responsible for the increase in the overall NNIS count.

The maps provided in Attachment 1 include symbols that categorize invasive plant occurrences by their species and approximate stem count. Details of the individual occurrences, including control treatment(s) applied during the applicable monitoring year and recommendations for future monitoring or control are included in Attachment 2. Table 1 and Figure 1 above summarize the Year 1 through Year 7 occurrences by species. A selection of photographs depicting representative conditions of invasive plant populations is provided in Attachment 3.

ASSESSMENT AND MANAGEMENT RECOMMENDATIONS

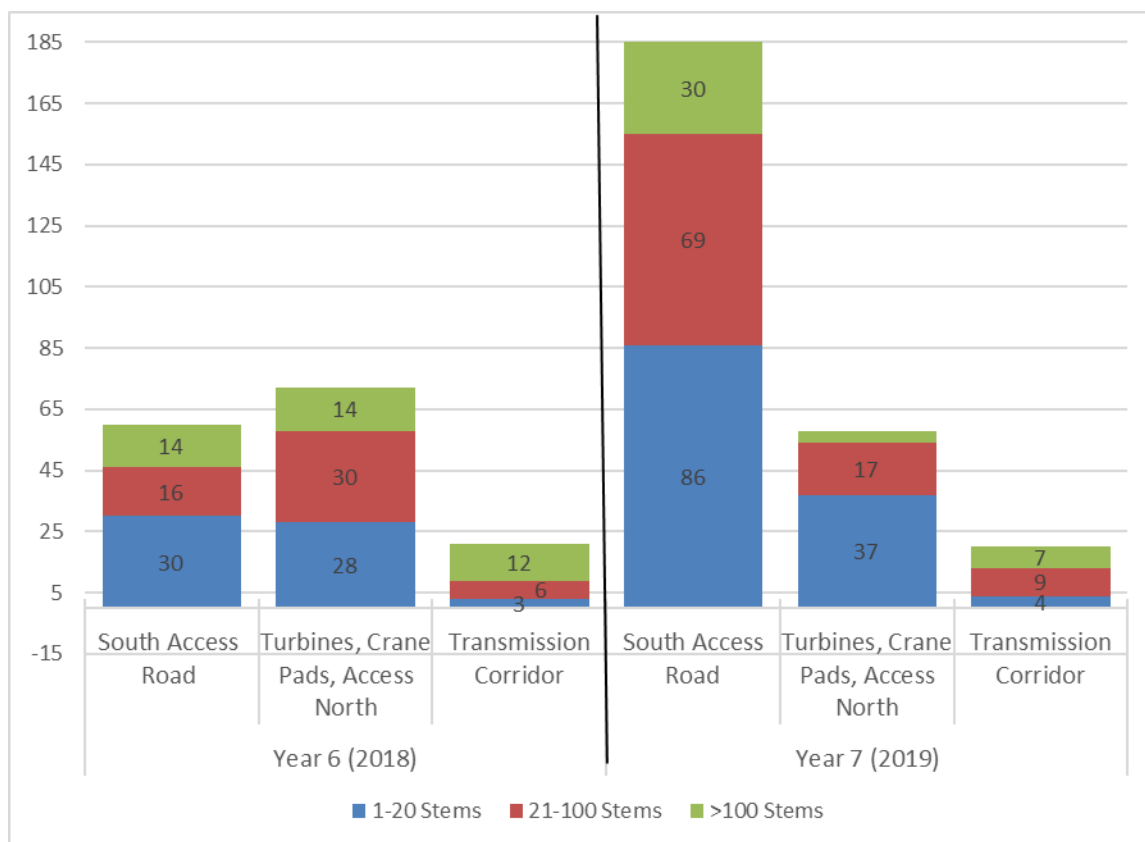
During the Project design phase, the KCW Access Road was located in the same alignment and in close proximity to existing logging roads. This design decision was made in part so that overall Project disturbance would be minimized, including the spread of existing or introduction of new invasive plants. Thorough field investigation during the 2019 monitoring season confirmed that invasive plants are not spreading into the undisturbed forest areas surrounding Project developments. Future monitoring and control, as necessary, should be carried out to prevent further spread with a special focus on those invasive species occurrences that encroach close to the edge or into the adjacent undisturbed forestland.



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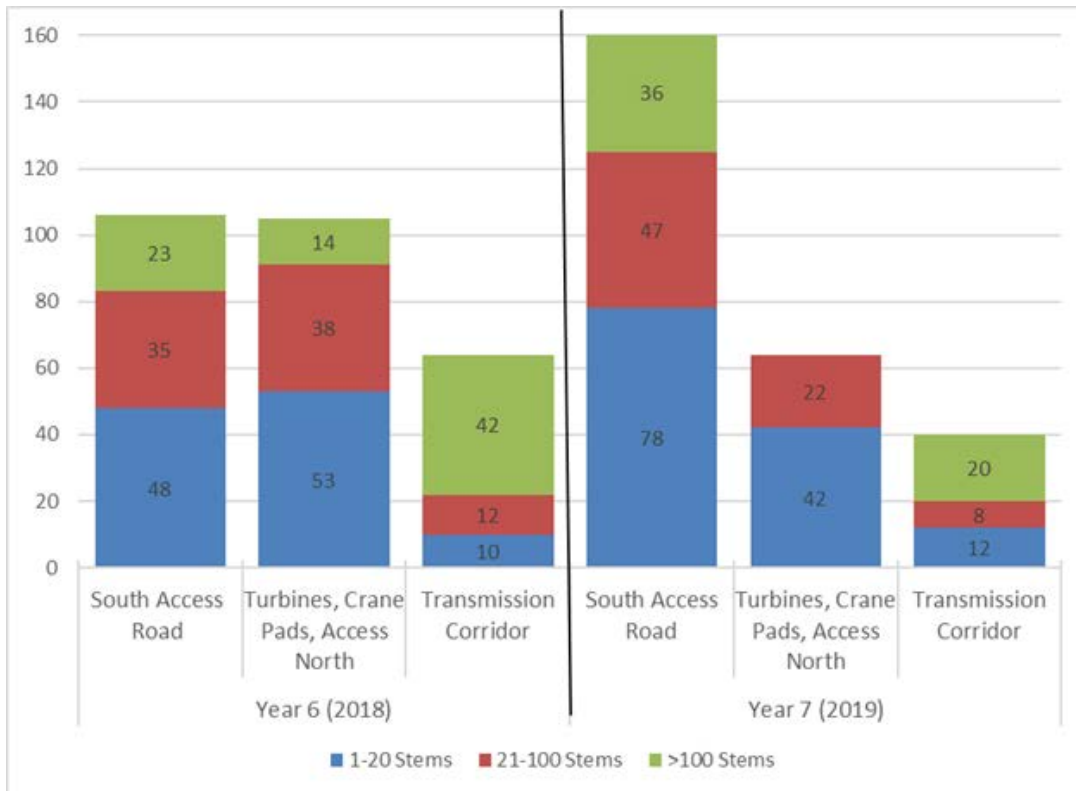
The majority of the observed NNIS species have stabilized or declined over the recent years of monitoring. VHB compared occurrence data by location to understand the trend of the observed increase. Of those larger populations which have increased, particularly knotweed, the access road is an area where new occurrences are most common. (See Figures 3-4).

Figure 3. Summary of spotted knapweed populations by location in 2018 and 2019.



With regards to the Watch List Species spotted knotweed, it is evident that the southern portion of the Access Road, which is identified as the roadway portion just north of the operations building and south to Vermont Route 100, has experienced a substantial increase in NNIS populations over the past year while populations within all other portions of the Wind Farm have actually decreased.

Figure 4. Summary of reed canary grass populations by location in 2018 and 2019.



With regards to the Watch List Species reed canary grass, There is an overall decrease in the number of occurrences from 2018 to 2019, but similar to spotted knapweed, there is a notable spike in occurrences of reed canary grass adjacent to the South Access Road, and all other occurrences of reed canary grass in all other portions of the monitored Wind Farm have actually decreased.

The relative increase in the populations of spotted knapweed and reed canary grass along the South Access Road may be due to the relatively high amount of vehicular activity at this location. Conversely, the occurrences of invasive species along the crane path and turbine pad slopes are declining. These areas experience significantly less vehicular traffic, suggesting that NNIS propagation may be linked in part to vehicular traffic. This may also be suggested by the fact that results from 2019 shows that NNIS occurrences decreased both in areas subjected to single and double herbicide treatments.

Overall, the presence of Class B Noxious Weeds (common reed and purple loosestrife) within the Project area remains low and has gone down from last year. During 2019, Watch List species spotted knapweed has increased overall and both Watch List species are present in higher numbers along the southern portion of the Access Road. Because the



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observed locations of both Class B and Watch List invasive plants have remained localized and confined to disturbed areas as described above, VHB concludes that they do not presently pose a threat to surrounding undisturbed forested areas. In addition, as shown in Figures above, it appears that the new occurrences suggest that herbicide applications and hand removal carried out in 2014 through 2019 were effective.

VHB recommends that GMP continue to prioritize the control of noxious weeds. The current populations are still small and localized, making the possibility of eradication or control down to extremely low rate of occurrence feasible. VHB once again recommends GMP continuing the treatment methods in the Turbine, Crane Pad, and Northern Access Road areas of the Wind Farm. These areas have shown success in decreasing NNIS occurrences. Likewise, the Transmission Corridor has experienced a decrease in occurrences for 2018 to 2019 and for this reason, VHB is of the opinion that hand pulling and removal in this area has been successful.

With regards to the Southern Access Road and the increased populations observed there, VHB recommends a slightly different, species specific management plan, based on 2019 field observations and current scientific literature. In 2018, VHB recommended spraying in early summer, once knapweed flowers had gone to bud, so that all populations could be easily identified and thoroughly sprayed. For 2020, VHB suggests introducing the multiple herbicide treatment protocol in this area to include spraying all NNIS populations in spring or early summer, before flower buds or seed heads appear, to ensure plants do not produce seed after being sprayed. Spraying of all NNIS should also be done in the fall, to target rosettes (specifically knapweed) that will overwinter (DiTomaso et al. 2013). Since all of the larger populations are known and GPS located, VHB recommends an earlier spraying protocol for 2020 as described above, with the same herbicide type/active ingredient from 2019, for all areas of the Wind Farm where herbicide is an acceptable form of treatment. Similar to the 2019 approach, areas along the Southern Access Road, where herbicide is proposed, should be mowed prior to each herbicide application, and mowed debris should be gathered and removed from the site, to the extent feasible. The New England Wildflower Society promotes mowing ahead of herbicide treatment and recognizes the investigation may appear to initially get worse, but with persistence, overtime, the root systems will thin and the below ground storage reserves will be exhausted.

Due to the declining success of NNIS control on the Southern Access Road, VHB also recommends considering coupling the multiple spray/mowing applications with a secondary controlling agent, to be used in conjunction with each primary treatment discussed above (*i.e.*, secondary herbicide type or biological agent). The use of such methods would need to be discussed with ANR and GMP as potential options, while considering cost, efficacy, potential effects on desirable plants, and execution methods (*i.e.*, test plots or whole site). Any herbicide treatment necessary in 2020 should be conducted by a certified applicator only. As previously mentioned, per conditions set forth in the Plan, ANR must approve any proposed herbicide application within 50 feet of a wetland or stream. Furthermore, VHB recommends that each herbicide treatment be applied by persons familiar with the phenology of each targeted NNIS or overseen by an environmental scientist. VHB conducted the annual monitoring activities several weeks after the initial spray application in 2019 to assess the population(s) that persisted after the initial treatment, at which time it was noted that many of occurrences had not been thoroughly treated. Many of the population margins appeared to have been left unsprayed, which could be a contributing factor in explaining the large number of reoccurring



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populations (and growing / new populations). Representative photographs of NNIS before and after treatment are provided in Attachment 3.

Though 2019 represents Year 7 of monitoring, per the Plan, GMP may only suspend monitoring with three successive years with no invasive species observed. As this has not transpired, VHB recommends that annual invasive plant monitoring and reporting should continue in 2020 as outlined above. GMP should continue to coordinate with the Vermont Pesticide Advisory Council, the Vermont Agency of Agriculture, and ANR, as necessary and appropriate during 2020 in a similar manner to the annual coordination and reporting undertaken during the Year 1 through Year 7 invasive plant monitoring.

VHB concludes that GMP has met the terms of the Project's CPG as it relates to invasive plant monitoring and reporting described in the Plan. On behalf of GMP, VHB has conducted seven consecutive years of invasive plant monitoring within the Wind Farm (as well as logging roads, described under separate cover) commencing the first full growing season after construction and ending after the 2019, or Year 7 monitoring. Per the Plan, monitoring and control activities will continue until there are three consecutive years with no invasive species detected.

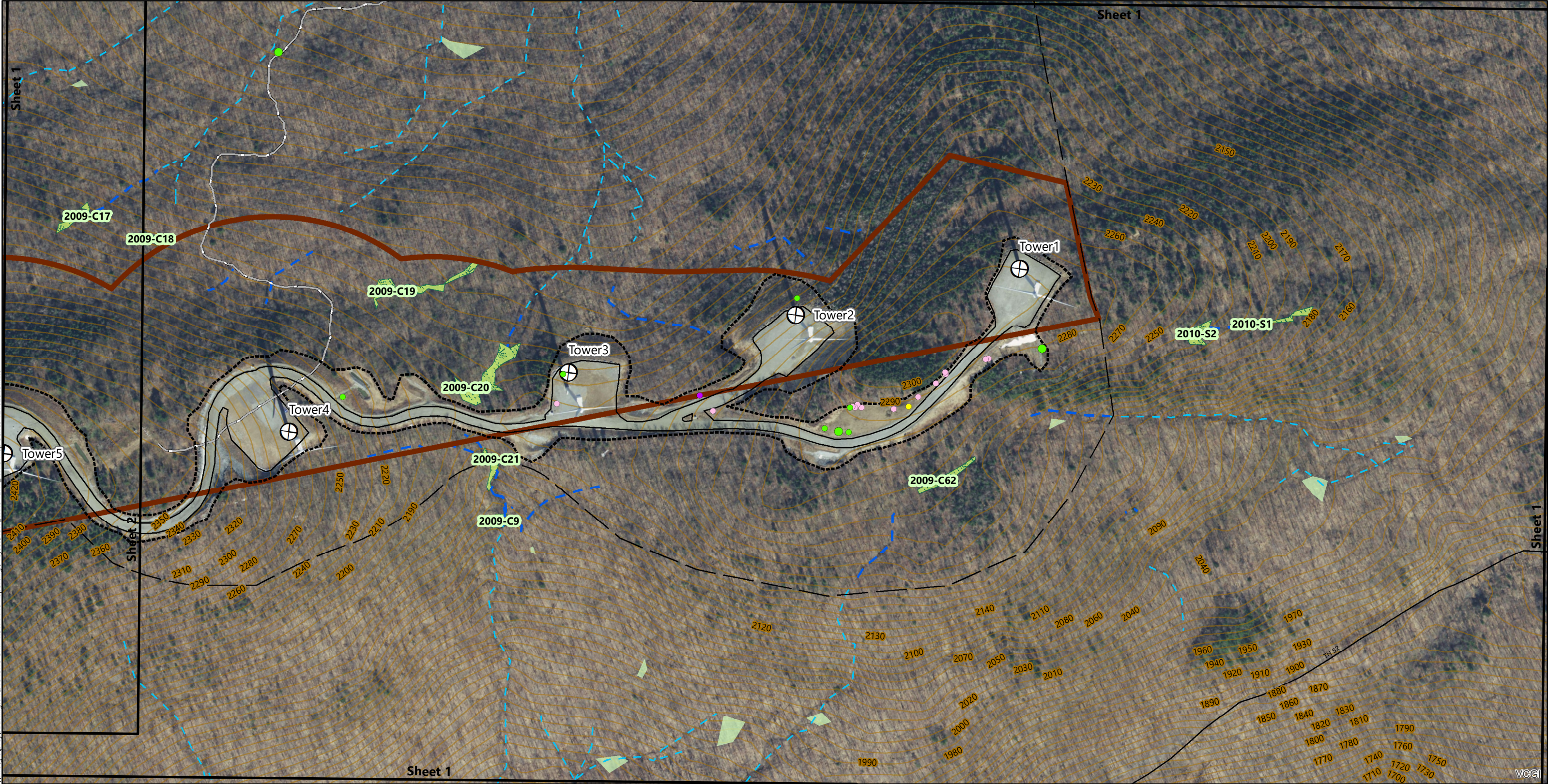
REFERENCES

DiTomaso, J. M.; Kyser, G. B.; Oneto, S. R.; Wilson, R. G.; Orloff, S. B.; Anderson, L. W.; Wright, S. D.; Roncoroni, J. A.; Miller, T. L.; Prather, T. S.; Ransom, C.; Beck, K. G.; Duncan, C.; Wilson, K. A.; Mann, J. J., 2013. Weed control in natural areas in the Western United States. Weed Research and Information Center, University of California, 544 pp

ATTACHMENTS

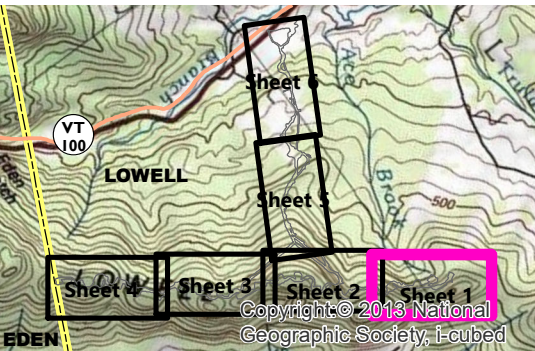
- Attachment 1: Wind Farm Invasive Species Monitoring Map set
- Attachment 2: Invasive Vegetation Monitoring Summary
- Attachment 3: Invasive Vegetation Monitoring Photographs

Attachment 1



- 2019 Invasive Species Locations (VHB)
Scientific_Name, StemCount
- Centaurea stoebe, 1 to 20
 - Centaurea stoebe, 21 to 100
 - Centaurea stoebe, Greater than 100
 - Lythrum salicaria, 1 to 20
 - Lythrum salicaria, 21 to 100
 - Phalaris arundinacea, 1 to 20
 - Phalaris arundinacea, 21 to 100
 - Phalaris arundinacea, Greater than 100
 - Phragmites australis, 1 to 20
 - Phragmites australis, 21 to 100
 - Phragmites australis, Greater than 100
 - Dense_Phragmites_Australis
 - Dense Phalaris Arundinacea
 - Dense Spotted Knapweed
 - Mitigation Parcel
 - Project Boundary (VHB)
 - Forest Road (VHB)
 - Road Surface

- Landing
- As Built - Limits of Clearing (Horizon)
- As Built - Edge of Gravel (Horizon)
- ⊗ Tower Location (K&L)
- Recon Stream (VHB)
- Recon Wetland (VHB)
- Delineated Wetland (VHB)
- Wetland Continues (VHB)
- 10 ft. Contour
- Sheet Index (VHB)



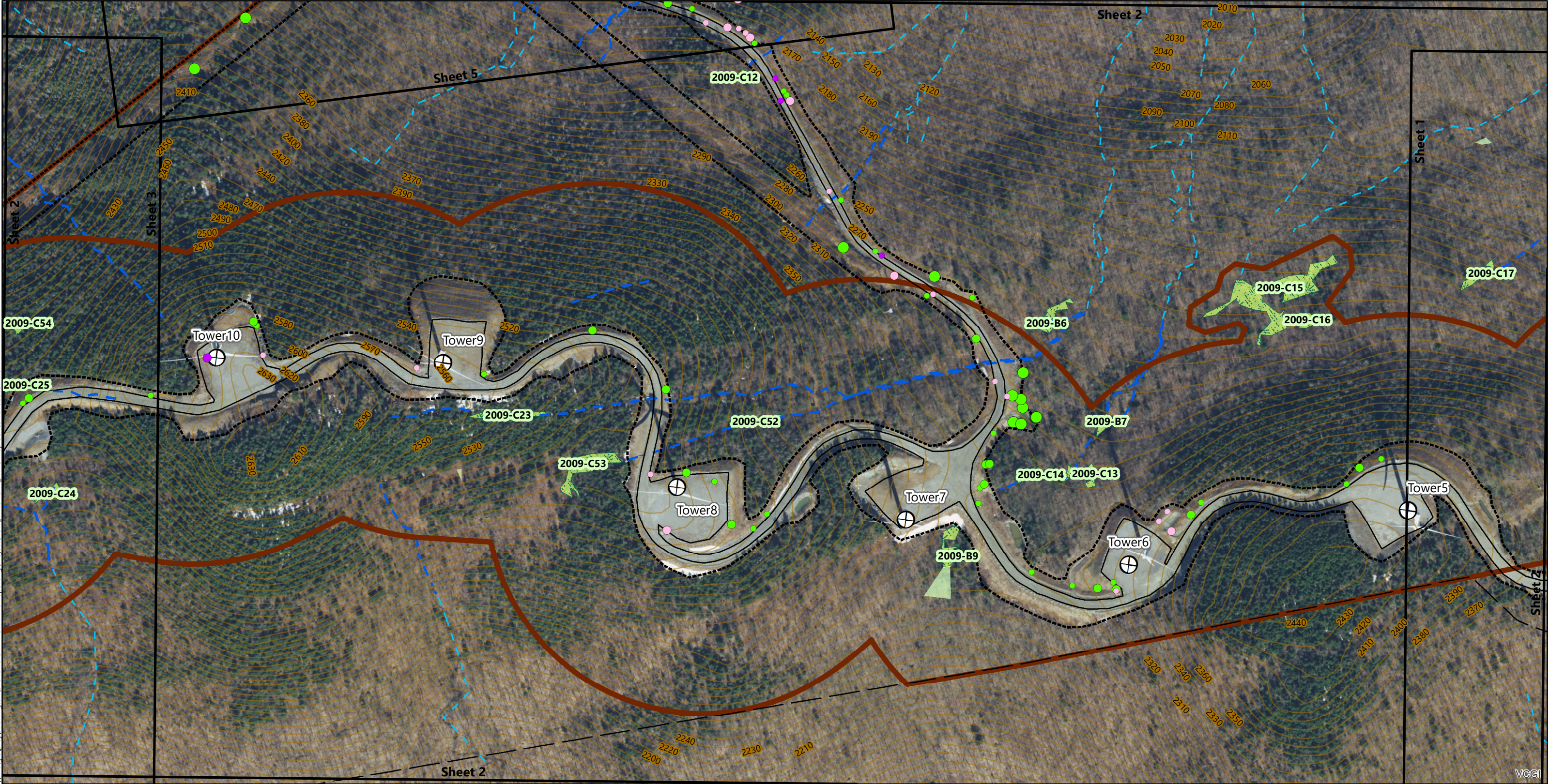
Kingdom Community Wind

Sources:
Background imagery provided by VCGI (Collected in 2017)
Horizons/Blais - 2011
K&L (Krebs and Lansing - 2011)
VTrans (2015)
VHB - 2011-2019

Lowell, Vermont

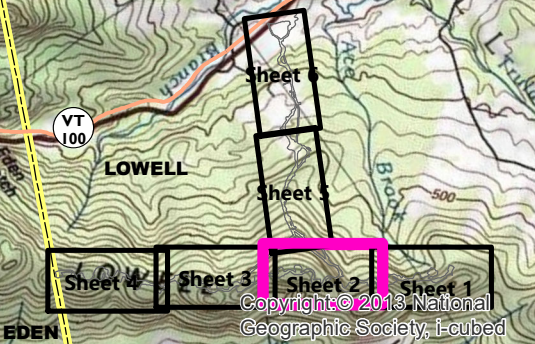
Wind Farm 2019 Invasive Species Monitoring

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- 2019 Invasive Species Locations (VHB)
- | Scientific_Name | StemCount |
|----------------------|------------------|
| Centaurea stoebe | 1 to 20 |
| Centaurea stoebe | 21 to 100 |
| Centaurea stoebe | Greater than 100 |
| Lythrum salicaria | 1 to 20 |
| Lythrum salicaria | 21 to 100 |
| Phalaris arundinacea | 1 to 20 |
| Phalaris arundinacea | 21 to 100 |
| Phalaris arundinacea | Greater than 100 |
- Phragmites australis, 1 to 20
Phragmites australis, 21 to 100
Phragmites australis, Greater than 100
Dense_Phragmites_Australis
Dense Phalaris Arundinacea
Dense Spotted Knapweed
Mitigation Parcel
Project Boundary (VHB)
Forest Road (VHB)
Road Surface

- Landing
As Built - Limits of Clearing (Horizon)
As Built - Edge of Gravel (Horizon)
Tower Location (K&L)
Recon Stream (VHB)
Recon Wetland (VHB)
Delineated Wetland (VHB)
Wetland Continues (VHB)
10 ft. Contour
Sheet Index (VHB)



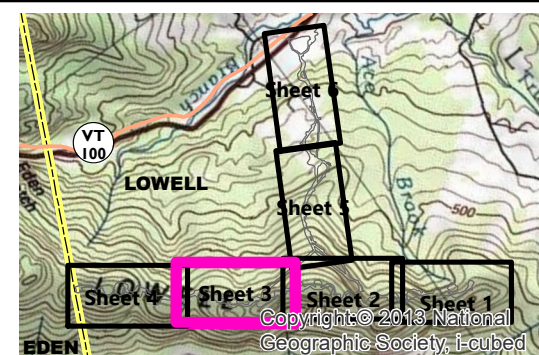
Kingdom Community Wind

Sources:
Background imagery provided by VCGI (Collected in 2017)
Horizons/Blais - 2011
K&L (Krebs and Lansing - 2011)
VTrans (2015)
VHB - 2011-2019

Lowell, Vermont

Wind Farm
2019 Invasive Species Monitoring

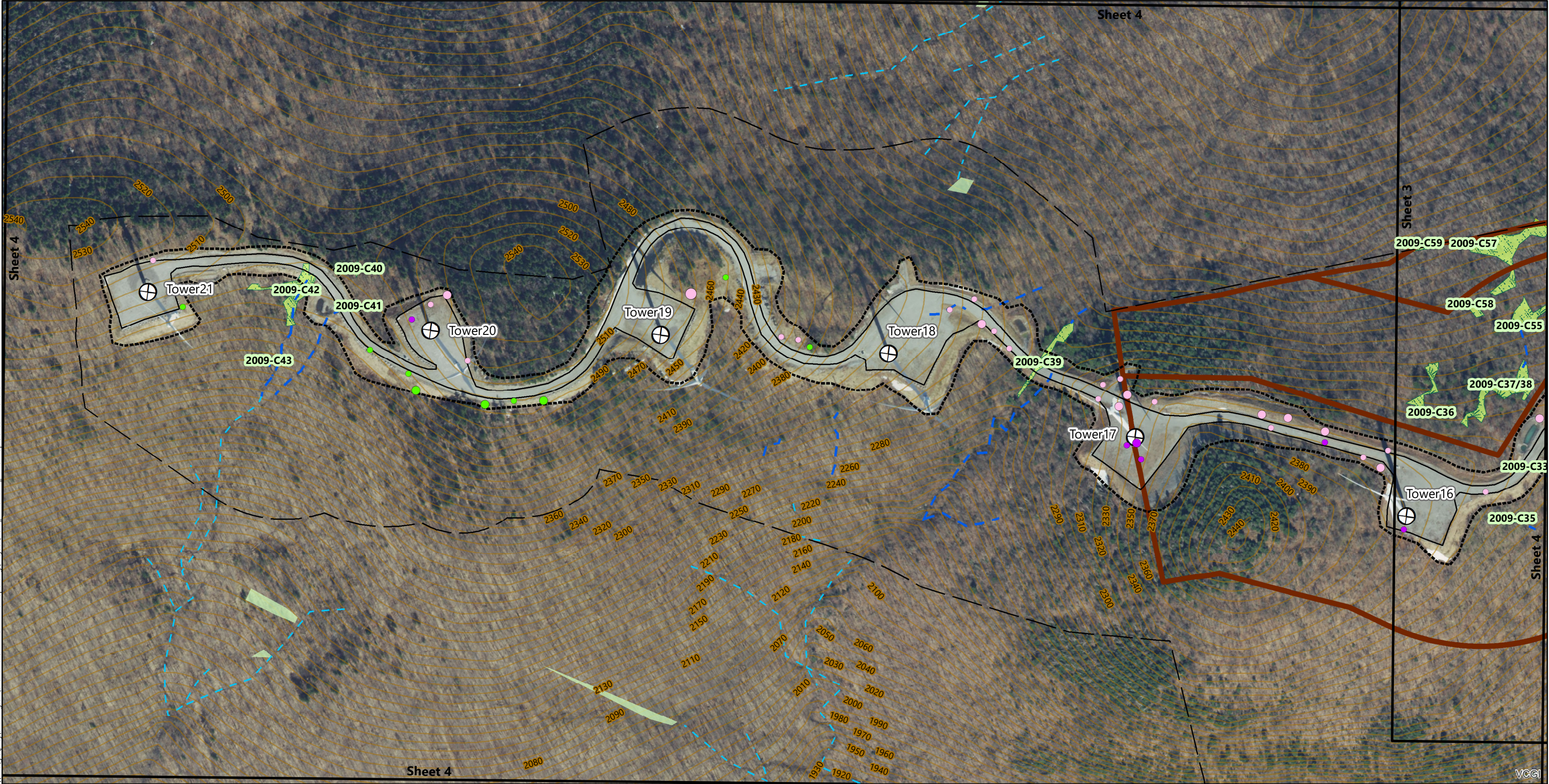
Sheet Number 2 of 6



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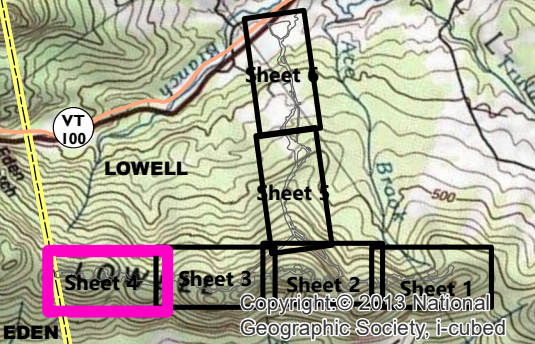
Wind Farm 2019 Invasive Species Monitoring

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- 2019 Invasive Species Locations (VHB)
Scientific_Name, StemCount
- Centaurea stoebe, 1 to 20
 - Centaurea stoebe, 21 to 100
 - Centaurea stoebe, Greater than 100
 - Lythrum salicaria, 1 to 20
 - Lythrum salicaria, 21 to 100
 - Phalaris arundinacea, 1 to 20
 - Phalaris arundinacea, 21 to 100
 - Phalaris arundinacea, Greater than 100
 - Phragmites australis, 1 to 20
 - Phragmites australis, 21 to 100
 - Phragmites australis, Greater than 100
 - Dense_Phragmites_Australis
 - Dense Phalaris Arundinacea
 - Dense Spotted Knapweed
 - Mitigation Parcel
 - Project Boundary (VHB)
 - Forest Road (VHB)
 - Road Surface

- Landing
- As Built - Limits of Clearing (Horizon)
- As Built - Edge of Gravel (Horizon)
- ⊗ Tower Location (K&L)
- Recon Stream (VHB)
- Recon Wetland (VHB)
- Delineated Wetland (VHB)
- Wetland Continues (VHB)
- 10 ft. Contour
- Sheet Index (VHB)



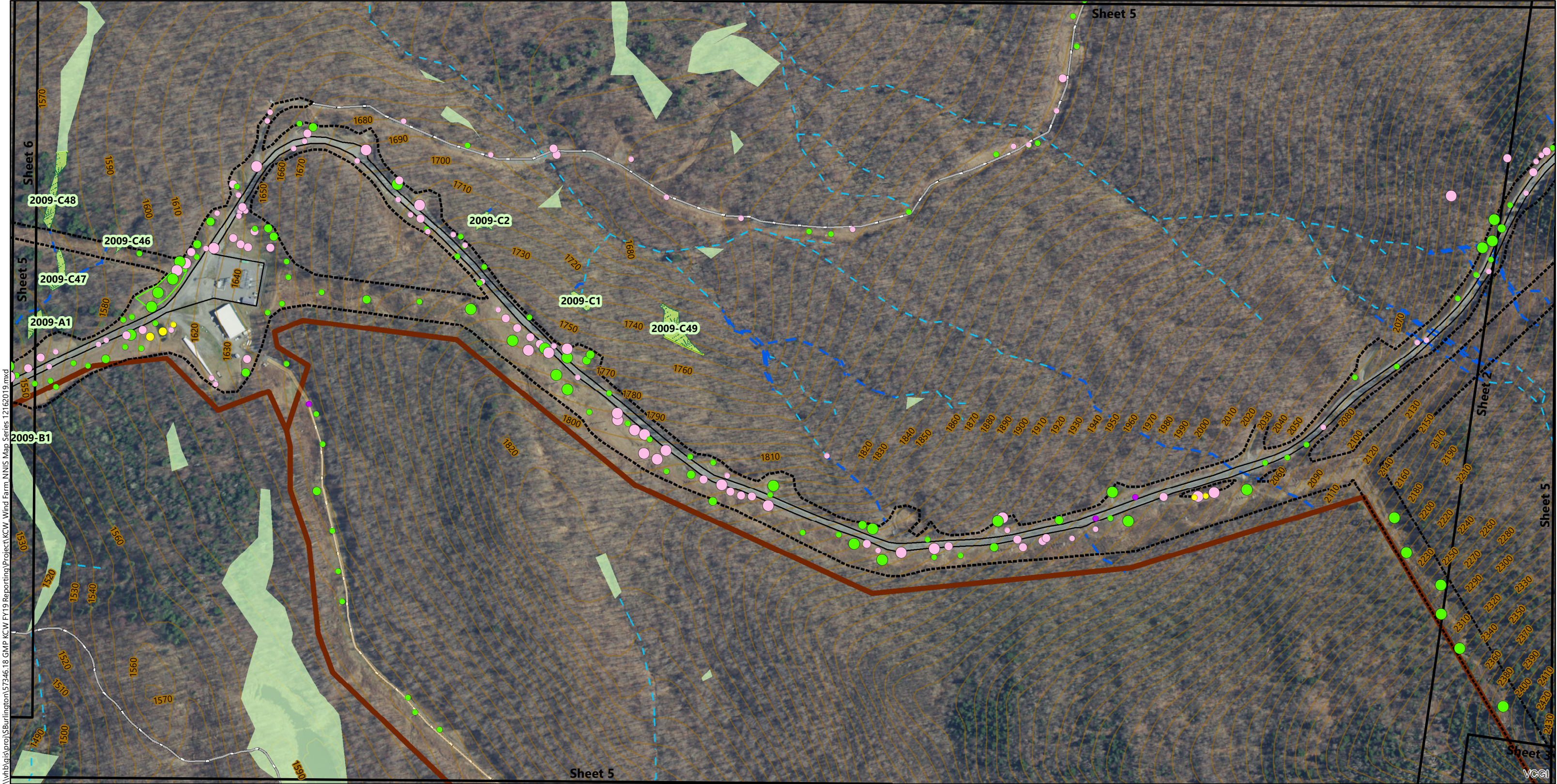
Kingdom Community Wind

Sources:
Background imagery provided by VCGI (Collected in 2017)
Horizons/Blais - 2011
K&L (Krebs and Lansing - 2011)
VTrans (2015)
VHB - 2011-2019

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Wind Farm
2019 Invasive Species Monitoring

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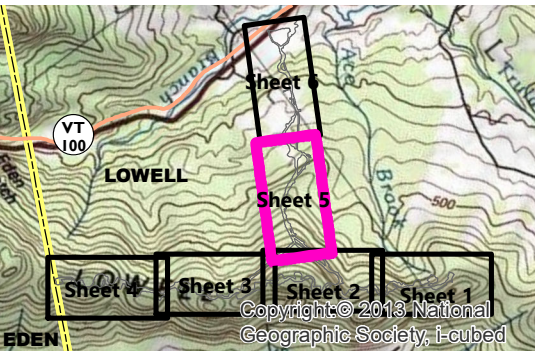


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- 2019 Invasive Species Locations (VHB)
Scientific_Name, StemCount
- Centaurea stoebe, 1 to 20
 - Centaurea stoebe, 21 to 100
 - Centaurea stoebe, Greater than 100
 - Lythrum salicaria, 1 to 20
 - Lythrum salicaria, 21 to 100
 - Phalaris arundinacea, 1 to 20
 - Phalaris arundinacea, 21 to 100
 - Phalaris arundinacea, Greater than 100

- Phragmites australis, 1 to 20
- Phragmites australis, 21 to 100
- Phragmites australis, Greater than 100
- Dense_Phragmites_Australis
- Dense Phalaris Arundinacea
- Dense Spotted Knapweed
- Mitigation Parcel
- Project Boundary (VHB)
- Forest Road (VHB)
- Road Surface

- Landing
- As Built - Limits of Clearing (Horizon)
- As Built - Edge of Gravel (Horizon)
- Power Location (K&L)
- Recon Stream (VHB)
- Recon Wetland (VHB)
- Delineated Wetland (VHB)
- Wetland Continues (VHB)
- 10 ft. Contour
- Sheet Index (VHB)



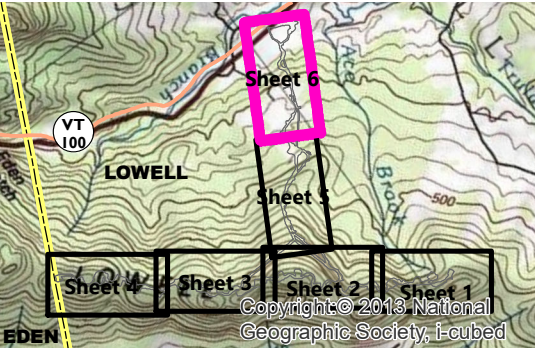
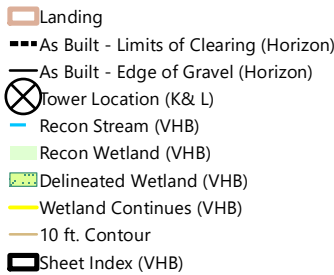
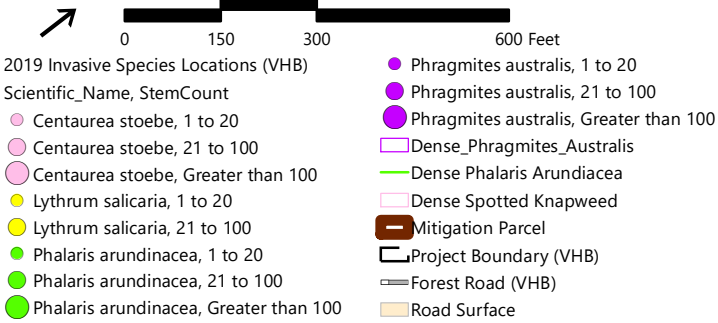
Kingdom Community Wind

Sources:
Background imagery provided by VCGI (Collected in 2017)
Horizons/Blais - 2011
K&L (Krebs and Lansing - 2011)
VTrans (2015)
VHB - 2011-2019

Lowell, Vermont

Wind Farm 2019 Invasive Species Monitoring

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Kingdom Community Wind

Sources:
Background imagery provided by VCGI (Collected in 2017)
Horizons/Blais - 2011
K&L (Krebs and Lansing - 2011)
VTrans (2015)
VHB - 2011-2019

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Wind Farm
2019 Invasive Species Monitoring

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Attachment 2

2019 Invasive Vegetation Monitoring Summary – Wind Farm Kingdom Community Wind Project
Green Mountain Power
Prepared by: VHB June 18, 2019 (A.Slaney)
Survey Date(s): July 15-18, 23, 2019

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-1	<i>Centaurea stoebe</i>	44.74251589070	-72.43336512400	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-10	<i>Centaurea stoebe</i>	44.73957964620	-72.43696319170	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-100	<i>Centaurea stoebe</i>	44.76384891420	-72.44182741740	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-101	<i>Centaurea stoebe</i>	44.76396552150	-72.44192030050	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-102	<i>Centaurea stoebe</i>	44.76426110650	-72.44204002070	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-103	<i>Centaurea stoebe</i>	44.76447620930	-72.44219034320	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-104	<i>Centaurea stoebe</i>	44.76461886820	-72.44229292700	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-105	<i>Centaurea stoebe</i>	44.76465305530	-72.44256138060	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-106	<i>Centaurea stoebe</i>	44.76471683340	-72.44252588950	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-107	<i>Centaurea stoebe</i>	44.76478646370	-72.44245086140	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-108	<i>Centaurea stoebe</i>	44.76475324800	-72.44234782340	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-109	<i>Centaurea stoebe</i>	44.76488791450	-72.44239821930	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-11	<i>Centaurea stoebe</i>	44.73942583350	-72.43703232930	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-110	<i>Centaurea stoebe</i>	44.76504621510	-72.44246781570	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-113	<i>Centaurea stoebe</i>	44.76570489380	-72.44264550060	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-114	<i>Centaurea stoebe</i>	44.76585999020	-72.44276661480	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-115	<i>Centaurea stoebe</i>	44.76605322970	-72.44293849680	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-116	<i>Centaurea stoebe</i>	44.76616470330	-72.44302566630	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-117	<i>Centaurea stoebe</i>	44.76646207020	-72.44338300740	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-118	<i>Centaurea stoebe</i>	44.76658044060	-72.44350795640	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-119	<i>Centaurea stoebe</i>	44.76661179860	-72.44367580080	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-12	<i>Centaurea stoebe</i>	44.73897754410	-72.43885019120	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-120	<i>Centaurea stoebe</i>	44.76667541490	-72.44388451470	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-121	<i>Centaurea stoebe</i>	44.76669491400	-72.44466454590	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-122	<i>Centaurea stoebe</i>	44.76692387910	-72.44517958780	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-123	<i>Centaurea stoebe</i>	44.76693414640	-72.44528004020	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-124	<i>Centaurea stoebe</i>	44.76730733870	-72.44596561790	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-125	<i>Centaurea stoebe</i>	44.76737624900	-72.44612364800	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-126	<i>Centaurea stoebe</i>	44.76744063600	-72.44632440510	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-127	<i>Centaurea stoebe</i>	44.76749660800	-72.44648850070	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-128	<i>Centaurea stoebe</i>	44.76755574750	-72.44664055640	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-129	<i>Centaurea stoebe</i>	44.76782936230	-72.44716166190	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-13	<i>Centaurea stoebe</i>	44.73751955690	-72.43976765560	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-130	<i>Centaurea stoebe</i>	44.76793632190	-72.44744029990	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-131	<i>Centaurea stoebe</i>	44.76806890920	-72.44771582330	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-132	<i>Centaurea stoebe</i>	44.76815613740	-72.44790449880	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-133	<i>Centaurea stoebe</i>	44.76823649190	-72.44810970040	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-134	<i>Centaurea stoebe</i>	44.76824287890	-72.44824602880	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-135	<i>Centaurea stoebe</i>	44.76827356500	-72.44850566090	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-136	<i>Centaurea stoebe</i>	44.76830179900	-72.44881976310	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-137	<i>Centaurea stoebe</i>	44.76825010120	-72.44907763640	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-138	<i>Centaurea stoebe</i>	44.76813721510	-72.44910250600	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-139	<i>Centaurea stoebe</i>	44.76818435750	-72.44921539230	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-14	<i>Centaurea stoebe</i>	44.73741354310	-72.43992244510	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-14	<i>Centaurea stoebe</i>	44.73507542020	-72.44204214730	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-140	<i>Centaurea stoebe</i>	44.76813008840	-72.44932052200	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-141	<i>Centaurea stoebe</i>	44.76793354790	-72.44984244480	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-142	<i>Centaurea stoebe</i>	44.76783541200	-72.45013194910	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-143	<i>Centaurea stoebe</i>	44.76793450770	-72.45061163080	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-144	<i>Centaurea stoebe</i>	44.76836918940	-72.45099332430	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-144	<i>Centaurea stoebe</i>	44.76856910200	-72.45104864670	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-145	<i>Centaurea stoebe</i>	44.76873425240	-72.45114198140	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-146	<i>Centaurea stoebe</i>	44.76904852200	-72.45122783860	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-147	<i>Centaurea stoebe</i>	44.76913746890	-72.45147825280	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-148	<i>Centaurea stoebe</i>	44.76920233530	-72.45158829780	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-149	<i>Centaurea stoebe</i>	44.76918291500	-72.45171565330	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-150	<i>Centaurea stoebe</i>	44.76922873030	-72.45206884610	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-151	<i>Centaurea stoebe</i>	44.76924519690	-72.45224878480	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-152	<i>Centaurea stoebe</i>	44.76927134000	-72.45243942310	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-153	<i>Centaurea stoebe</i>	44.76936500590	-72.45266086360	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-154	<i>Centaurea stoebe</i>	44.76943707930	-72.45278106110	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-155	<i>Centaurea stoebe</i>	44.76958239410	-72.45291509560	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-156	<i>Centaurea stoebe</i>	44.76972867730	-72.45300235690	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-156	<i>Centaurea stoebe</i>	44.76995305260	-72.45302337850	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-157	<i>Centaurea stoebe</i>	44.77078664230	-72.45323376890	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-158	<i>Centaurea stoebe</i>	44.77098703780	-72.45342199930	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-159	<i>Centaurea stoebe</i>	44.77118968860	-72.45360949380	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-160	<i>Centaurea stoebe</i>	44.77132199670	-72.45373138770	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-161	<i>Centaurea stoebe</i>	44.77140764750	-72.45383597060	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-162	<i>Centaurea stoebe</i>	44.77153563560	-72.45397889100	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-163	<i>Centaurea stoebe</i>	44.77174114380	-72.45450748470	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-164	<i>Centaurea stoebe</i>	44.77169426260	-72.45462558750	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-165	<i>Centaurea stoebe</i>	44.77163834750	-72.45476392880	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-166	<i>Centaurea stoebe</i>	44.77151594210	-72.45482061240	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-166	<i>Centaurea stoebe</i>	44.77141488250	-72.45488936210	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-17	<i>Centaurea stoebe</i>	44.73528121520	-72.44284567710	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-18	<i>Centaurea stoebe</i>	44.73339028020	-72.44538981780	A	Few	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-18	<i>Centaurea stoebe</i>	44.73511600850	-72.44287417540	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-19	<i>Centaurea stoebe</i>	44.73700571610	-72.44103019690	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-2	<i>Centaurea stoebe</i>	44.74232804030	-72.43342804570	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-20	<i>Centaurea stoebe</i>	44.73874868510	-72.43892935310	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-200	<i>Centaurea stoebe</i>	44.76830580820	-72.40680388500	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-201	<i>Centaurea stoebe</i>	44.76828338430	-72.40681879020	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-202	<i>Centaurea stoebe</i>	44.76792076930	-72.40697096970	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-203	<i>Centaurea stoebe</i>	44.76792679440	-72.40699823350	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-204	<i>Centaurea stoebe</i>	44.76780126460	-72.40695531880	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-205	<i>Centaurea stoebe</i>	44.76760418780	-72.40695614990	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-206	<i>Centaurea stoebe</i>	44.76736769000	-72.40702120010	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-207	<i>Centaurea stoebe</i>	44.76714716380	-72.40727465900	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-208	<i>Centaurea stoebe</i>	44.76713513180	-72.40733359590	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-209	<i>Centaurea stoebe</i>	44.76710121510	-72.40732173230	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-21	<i>Centaurea stoebe</i>	44.73889678530	-72.43854640610	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-210	<i>Centaurea stoebe</i>	44.76708979230	-72.40735384000	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-211	<i>Centaurea stoebe</i>	44.76608248290	-72.40835223600	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-212	<i>Centaurea stoebe</i>	44.76501996520	-72.40959963040	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-213	<i>Centaurea stoebe</i>	44.75907602620	-72.41482814130	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-214	<i>Centaurea stoebe</i>	44.75904181910	-72.41501874680	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-215	<i>Centaurea stoebe</i>	44.75915282970	-72.41505133330	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-216	<i>Centaurea stoebe</i>	44.75836770630	-72.41465188100	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-217	<i>Centaurea stoebe</i>	44.75552634040	-72.41862700280	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-218	<i>Centaurea stoebe</i>	44.75570710630	-72.41930433390	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-219	<i>Centaurea stoebe</i>	44.75463013020	-72.42211120060	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-22	<i>Centaurea stoebe</i>	44.73894730050	-72.43838343500	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-220	<i>Centaurea stoebe</i>	44.75361163800	-72.42338597940	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-222	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-223	<i>Centaurea stoebe</i>	44.75090087610	-72.42511790110	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-224	<i>Centaurea stoebe</i>	44.75063598860	-72.42534406570	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-225	<i>Centaurea stoebe</i>	44.74968105090	-72.42494396820	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-226	<i>Centaurea stoebe</i>	44.75863885510	-72.41739765340	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-227	<i>Centaurea stoebe</i>	44.75868993880	-72.42194926650	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-228	<i>Centaurea stoebe</i>	44.75874853250	-72.42287767590	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-229	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-23	<i>Centaurea stoebe</i>	44.73895957290	-72.43809782440	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-230	<i>Centaurea stoebe</i>	44.75871561180	-72.42305268070	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-231	<i>Centaurea stoebe</i>	44.75864491860	-72.42315196010	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-232	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-233	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-234	<i>Centaurea stoebe</i>	44.75809243420	-72.42438578850	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-235	<i>Centaurea stoebe</i>	44.75783613780	-72.42544515700	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-236	<i>Centaurea stoebe</i>	44.75817369250	-72.43102782200	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-237	<i>Centaurea stoebe</i>	44.75828894940	-72.43100318490	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-238	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-239	<i>Centaurea stoebe</i>	44.75981516000	-72.43372311220	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-24	<i>Centaurea stoebe</i>	44.73931975110	-72.43693420340	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-240	<i>Centaurea stoebe</i>	44.76148836400	-72.43468188730	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-241	<i>Centaurea stoebe</i>	44.76156868940	-72.43480521720	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-242	<i>Centaurea stoebe</i>	44.76273137760	-72.43515133830	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-243	<i>Centaurea stoebe</i>	44.76286724470	-72.43521406130	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-244	<i>Centaurea stoebe</i>	44.76323914280	-72.43540008150	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-245	<i>Centaurea stoebe</i>	44.76352099330	-72.43546820710	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-246	<i>Centaurea stoebe</i>	44.76389843580	-72.43564155600	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-248	<i>Centaurea stoebe</i>	44.76428342660	-72.43617232990	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-249	<i>Centaurea stoebe</i>	44.76424651840	-72.43692583810	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-25	<i>Centaurea stoebe</i>	44.73942694810	-72.43670446600	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-25	<i>Centaurea stoebe</i>	44.74038479730	-72.43534846870	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-250	<i>Centaurea stoebe</i>	44.76415225150	-72.43711393890	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-250	<i>Centaurea stoebe</i>	44.76421144190	-72.43728977120	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-251	<i>Centaurea stoebe</i>	44.76410494400	-72.43729418840	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-252	<i>Centaurea stoebe</i>	44.76383556080	-72.43797452990	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-253	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-254	<i>Centaurea stoebe</i>	44.76387342140	-72.43815467570	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-255	<i>Centaurea stoebe</i>	44.76405937860	-72.43763767610	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-256	<i>Centaurea stoebe</i>	44.76381118990	-72.43828333470	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-256	<i>Centaurea stoebe</i>	44.76362386050	-72.43892107500	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-257	<i>Centaurea stoebe</i>	44.76379103180	-72.43842332310	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-257	<i>Centaurea stoebe</i>	44.76361862290	-72.43909322260	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-258	<i>Centaurea stoebe</i>	44.76369241980	-72.44023013140	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-259	<i>Centaurea stoebe</i>	44.76371610070	-72.44043145450	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-260	<i>Centaurea stoebe</i>	44.76368969470	-72.44063159910	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-261	<i>Centaurea stoebe</i>	44.76369771290	-72.44088398180	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-263	<i>Centaurea stoebe</i>	44.76371600450	-72.44119728150	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-267	<i>Centaurea stoebe</i>	44.76369562840	-72.44097570480	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-27	<i>Centaurea stoebe</i>	44.74087545410	-72.43436882300	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-28	<i>Centaurea stoebe</i>	44.74094194510	-72.43413538330	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-28	<i>Centaurea stoebe</i>	44.74155709840	-72.43310909970	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-3	<i>Centaurea stoebe</i>	44.74108553280	-72.43424700550	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-30	<i>Centaurea stoebe</i>	44.76380438330	-72.43788706670	C	Extensive/Dense	N/A	Herbicide Applied	Monitor

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Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-31	<i>Centaurea stoebe</i>	44.76399415500	-72.43732973610	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-32	<i>Centaurea stoebe</i>	44.76422470930	-72.43641512620	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-33	<i>Centaurea stoebe</i>	44.76423301210	-72.43625420600	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-34	<i>Centaurea stoebe</i>	44.76385227390	-72.43580255380	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-35	<i>Centaurea stoebe</i>	44.76337523150	-72.43559676860	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-36	<i>Centaurea stoebe</i>	44.76320466080	-72.43555613750	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-37	<i>Centaurea stoebe</i>	44.76313329470	-72.43546987070	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-37	<i>Centaurea stoebe</i>	44.76300080610	-72.43546850500	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-38	<i>Centaurea stoebe</i>	44.76237920930	-72.43518623280	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-39	<i>Centaurea stoebe</i>	44.76209347420	-72.43518542280	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-4	<i>Centaurea stoebe</i>	44.74074715760	-72.43491196780	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-40	<i>Centaurea stoebe</i>	44.76199398130	-72.43515778890	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-41	<i>Centaurea stoebe</i>	44.76186812360	-72.43509493100	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-43	<i>Centaurea stoebe</i>	44.76174012950	-72.43501034500	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-44	<i>Centaurea stoebe</i>	44.76164718600	-72.43494588140	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-45	<i>Centaurea stoebe</i>	44.76153945560	-72.43490475610	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-48	<i>Centaurea stoebe</i>	44.76122215650	-72.43473843470	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-49	<i>Centaurea stoebe</i>	44.76077353140	-72.43453338530	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-50	<i>Centaurea stoebe</i>	44.76057061120	-72.43444643940	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-500	<i>Celastrus stoebe</i>	44.75756501110	-72.42856244460	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-501	<i>Celastrus stoebe</i>	44.75760324270	-72.42876139230	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-504	<i>Celastrus stoebe</i>	44.75779912980	-72.43006483860	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-506	<i>Celastrus stoebe</i>	44.75782960100	-72.43037608220	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-506	<i>Celastrus stoebe</i>	44.75858026820	-72.43254989850	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-507	<i>Celastrus stoebe</i>	44.75793893820	-72.43071726430	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-508	<i>Celastrus stoebe</i>	44.75797467430	-72.43096591880	B	Extensive/Dense	N/A	Removal and Disposal	Monitor
2019-CEST-509	<i>Celastrus stoebe</i>	44.75967718130	-72.43378864470	B	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-CEST-51	<i>Centaurea stoebe</i>	44.76049230450	-72.43436811220	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-511	<i>Celastrus stoebe</i>	44.76024447200	-72.43438512900	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-512	<i>Celastrus stoebe</i>	44.76034790790	-72.43449320370	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-CEST-514	<i>Celastrus stoebe</i>	44.76072434500	-72.43456992740	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-CEST-52	<i>Centaurea stoebe</i>	44.76027699860	-72.43423210870	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-520	<i>Celastrus stoebe</i>	44.76164602730	-72.43511042210	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-525	<i>Celastrus stoebe</i>	44.76397050240	-72.43738671010	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-526	<i>Celastrus stoebe</i>	44.76395145130	-72.43731734960	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-527	<i>Celastrus stoebe</i>	44.76394276140	-72.43742026630	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-528	<i>Celastrus stoebe</i>	44.76379518680	-72.43762036760	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-529	<i>Celastrus stoebe</i>	44.76371647680	-72.43757816960	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-53	<i>Centaurea stoebe</i>	44.75988843660	-72.43400545720	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-530	<i>Celastrus stoebe</i>	44.76366416890	-72.43751429370	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor

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Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-CEST-531	<i>Celastrus stoebe</i>	44.76375712140	-72.43734614250	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-532	<i>Celastrus stoebe</i>	44.76280526950	-72.43820869670	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-533	<i>Celastrus stoebe</i>	44.76356145700	-72.43727714630	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-54	<i>Centaurea stoebe</i>	44.75976852600	-72.43383968750	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-546	<i>Celastrus stoebe</i>	44.76274649720	-72.43869914060	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-547	<i>Celastrus stoebe</i>	44.76281217540	-72.43870576320	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-55	<i>Centaurea stoebe</i>	44.75960093400	-72.43370036790	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-56	<i>Centaurea stoebe</i>	44.75954794010	-72.43358751690	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-57	<i>Centaurea stoebe</i>	44.75940346020	-72.43346659890	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-58	<i>Centaurea stoebe</i>	44.75868256730	-72.43263149580	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-6	<i>Centaurea stoebe</i>	44.74055464100	-72.43531988740	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-60	<i>Centaurea stoebe</i>	44.75846544040	-72.43231403340	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-61	<i>Centaurea stoebe</i>	44.75834945670	-72.43193450310	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-64	<i>Centaurea stoebe</i>	44.75830572960	-72.43176451570	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-65	<i>Centaurea stoebe</i>	44.75806250750	-72.43097606970	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-66	<i>Centaurea stoebe</i>	44.75794559840	-72.43065826540	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-66	<i>Centaurea stoebe</i>	44.75759282330	-72.42697839290	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-67	<i>Centaurea stoebe</i>	44.75775172710	-72.42913601010	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-68	<i>Centaurea stoebe</i>	44.75781308040	-72.42533032920	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-69	<i>Centaurea stoebe</i>	44.75807332890	-72.42423673740	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-7	<i>Centaurea stoebe</i>	44.74039272860	-72.43555364220	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-70	<i>Centaurea stoebe</i>	44.75851595370	-72.42335762850	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-700	<i>Celastrus stoebe</i>	44.76756971390	-72.44638626890	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-701	<i>Celastrus stoebe</i>	44.76356214390	-72.43961213670	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-703	<i>Celastrus stoebe</i>	44.76356406680	-72.43972189790	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-704	<i>Celastrus stoebe</i>	44.76360682850	-72.44039173130	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-705	<i>Celastrus stoebe</i>	44.76373459490	-72.44137574310	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-706	<i>Celastrus stoebe</i>	44.76435148540	-72.44188983050	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-707	<i>Celastrus stoebe</i>	44.76439729650	-72.44202928310	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-708	<i>Celastrus stoebe</i>	44.76446456580	-72.44204555950	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-709	<i>Celastrus stoebe</i>	44.76479876120	-72.44223205660	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-71	<i>Centaurea stoebe</i>	44.75848301710	-72.42076341630	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-710	<i>Celastrus stoebe</i>	44.76542882460	-72.44234835480	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-711	<i>Celastrus stoebe</i>	44.76552104190	-72.44234087350	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-712	<i>Celastrus stoebe</i>	44.76574633740	-72.44250778570	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-715	<i>Celastrus stoebe</i>	44.76649467410	-72.44329258460	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-73	<i>Centaurea stoebe</i>	44.75849268080	-72.41944142990	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-74	<i>Centaurea stoebe</i>	44.75866393800	-72.41896119880	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-74	<i>Centaurea stoebe</i>	44.75863331610	-72.41763141630	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-750	<i>Celastrus stoebe</i>	44.76760909270	-72.44674321020	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor

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2019-CEST-751	<i>Celastrus stoebe</i>	44.76765876320	-72.44688804670	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-752	<i>Celastrus stoebe</i>	44.76770906440	-72.44705462630	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-753	<i>Celastrus stoebe</i>	44.76824084770	-72.44845366640	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-755	<i>Celastrus stoebe</i>	44.76824339170	-72.44895928800	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-CEST-756	<i>Celastrus stoebe</i>	44.76840878220	-72.44924883880	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-759	<i>Celastrus stoebe</i>	44.76888908820	-72.45118298490	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-760	<i>Celastrus stoebe</i>	44.77074835550	-72.45656043890	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-770	<i>Celastrus stoebe</i>	44.77138120650	-72.45365590170	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-773	<i>Celastrus stoebe</i>	44.77042275870	-72.45291850590	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-775	<i>Celastrus stoebe</i>	44.76975296450	-72.45294786610	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-780	<i>Celastrus stoebe</i>	44.76933512430	-72.45217588840	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-781	<i>Celastrus stoebe</i>	44.76806644380	-72.44977087850	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-782	<i>Celastrus stoebe</i>	44.76816825700	-72.44947227710	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-783	<i>Celastrus stoebe</i>	44.76832949950	-72.44907315780	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-785	<i>Celastrus stoebe</i>	44.76838076730	-72.44837738820	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-785	<i>Celastrus stoebe</i>	44.76825284580	-72.44790426670	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-786	<i>Celastrus stoebe</i>	44.76796215900	-72.44716170650	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-788	<i>Celastrus stoebe</i>	44.76762303580	-72.44656010270	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-8	<i>Centaurea stoebe</i>	44.73970201090	-72.43647983490	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-9	<i>Centaurea stoebe</i>	44.73954764420	-72.43675555480	B	Few	N/A	Herbicide Applied	Monitor
2019-CEST-90	<i>Centaurea stoebe</i>	44.76335883790	-72.43884563740	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-91	<i>Centaurea stoebe</i>	44.76348313710	-72.43915989450	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-92	<i>Centaurea stoebe</i>	44.76350922070	-72.43936667140	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-96	<i>Centaurea stoebe</i>	44.76365228120	-72.44131474150	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-97	<i>Centaurea stoebe</i>	44.76366478460	-72.44149447010	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-CEST-98	<i>Centaurea stoebe</i>	44.76364624340	-72.44171058140	A	Few	N/A	Herbicide Applied	Monitor
2019-CEST-99	<i>Centaurea stoebe</i>	44.76375718890	-72.44166299320	A	Few	N/A	Herbicide Applied	Monitor
2019-LYSA-1	<i>Lythrum salicaria</i>	44.75761305340	-72.42880337240	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-2	<i>Lythrum salicaria</i>	44.75757428790	-72.42867053950	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-20	<i>Lythrum salicaria</i>	44.76864385150	-72.45107772350	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-200	<i>Lythrum salicaria</i>	44.76748553130	-72.40692894310	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-21	<i>Lythrum salicaria</i>	44.76870896730	-72.45121889580	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-22	<i>Lythrum salicaria</i>	44.76882144080	-72.45115022170	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-3	<i>Lythrum salicaria</i>	44.76338967570	-72.43879230380	A	Few	B	Herbicide Applied	Monitor
2019-LYSA-4	<i>Lythrum salicaria</i>	44.76338541000	-72.43895101410	B	Extensive/Scattered	B	Herbicide Applied	Monitor
2019-LYSA-6	<i>Lythrum salicaria</i>	44.76339804700	-72.43912162890	B	Extensive/Scattered	B	Herbicide Applied	Monitor
2019-LYSA-9	<i>Lythrum salicaria</i>	44.76364125810	-72.44163581090	A	Few	B	Herbicide Applied	Monitor
2019-PHAR-1	<i>Centaurea stoebe</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-100	<i>Phalaris arundinacea</i>	44.76348064400	-72.43897717490	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-101	<i>Phalaris arundinacea</i>	44.76334484530	-72.43928735590	A	Few	N/A	Herbicide Applied	Monitor

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2019-PHAR-102	<i>Phalaris arundinacea</i>	44.76349935880	-72.43931236520	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-104	<i>Phalaris arundinacea</i>	44.76342710610	-72.43945121680	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-105	<i>Phalaris arundinacea</i>	44.76341957550	-72.43973435960	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-106	<i>Phalaris arundinacea</i>	44.76344235490	-72.43996825920	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-107	<i>Phalaris arundinacea</i>	44.76352801430	-72.44010803670	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-108	<i>Phalaris arundinacea</i>	44.76341999590	-72.44044447820	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-109	<i>Phalaris arundinacea</i>	44.76349348460	-72.44046615090	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-110	<i>Phalaris arundinacea</i>	44.76353631860	-72.44065419870	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-112	<i>Phalaris arundinacea</i>	44.76367507000	-72.44158824830	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-113	<i>Phalaris arundinacea</i>	44.76354127640	-72.44162526100	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-114	<i>Phalaris arundinacea</i>	44.76345300440	-72.44182262290	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-115	<i>Phalaris arundinacea</i>	44.76356452220	-72.44179174210	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-116	<i>Phalaris arundinacea</i>	44.76376027770	-72.44171064450	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-117	<i>Phalaris arundinacea</i>	44.76396879520	-72.44200946410	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-118	<i>Phalaris arundinacea</i>	44.76460851760	-72.44250491350	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-118	<i>Phalaris arundinacea</i>	44.76489952250	-72.44243947270	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-119	<i>Phalaris arundinacea</i>	44.76517853750	-72.44249661720	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-120	<i>Phalaris arundinacea</i>	44.76529322780	-72.44258326600	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-121	<i>Phalaris arundinacea</i>	44.76544815720	-72.44257698330	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-123	<i>Phalaris arundinacea</i>	44.76558143200	-72.44271498330	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-124	<i>Phalaris arundinacea</i>	44.76567878450	-72.44275965380	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-125	<i>Phalaris arundinacea</i>	44.76566527130	-72.44288781730	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-126	<i>Phalaris arundinacea</i>	44.76581096460	-72.44286114630	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-127	<i>Phalaris arundinacea</i>	44.76589306350	-72.44291620810	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-128	<i>Phalaris arundinacea</i>	44.76596142220	-72.44295229410	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-129	<i>Phalaris arundinacea</i>	44.76602670340	-72.44294923450	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-130	<i>Phalaris arundinacea</i>	44.76639308240	-72.44327704090	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-131	<i>Phalaris arundinacea</i>	44.76665490020	-72.44386154960	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-132	<i>Phalaris arundinacea</i>	44.76667823470	-72.44448220650	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-133	<i>Phalaris arundinacea</i>	44.76689441610	-72.44532362480	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-133	<i>Phalaris arundinacea</i>	44.76687499560	-72.44548180490	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-134	<i>Phalaris arundinacea</i>	44.76737387040	-72.44613661810	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-135	<i>Phalaris arundinacea</i>	44.76723088060	-72.44580694870	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-135	<i>Phalaris arundinacea</i>	44.76749437870	-72.44651822300	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-136	<i>Phalaris arundinacea</i>	44.76817384040	-72.44811774470	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-137	<i>Phalaris arundinacea</i>	44.76806710650	-72.44932279410	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-138	<i>Phalaris arundinacea</i>	44.76871211300	-72.45114192990	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-139	<i>Phalaris arundinacea</i>	44.76890358940	-72.45152008990	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-140	<i>Phalaris arundinacea</i>	44.76902769670	-72.45176984250	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-141	<i>Phalaris arundinacea</i>	44.76918817170	-72.45188891670	A	Few	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-141	<i>Phalaris arundinacea</i>	44.76920936390	-72.45242238170	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-142	<i>Phalaris arundinacea</i>	44.76934797260	-72.45275602630	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-143	<i>Phalaris arundinacea</i>	44.77094161350	-72.45337875450	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-2	<i>Phalaris arundinacea</i>	44.73335471690	-72.44470974840	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-20	<i>Phalaris arundinacea</i>	44.76302105540	-72.43546770490	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-200	<i>Phalaris arundinacea</i>	44.76873594760	-72.40650073470	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-201	<i>Phalaris arundinacea</i>	44.76706615980	-72.40736041230	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-202	<i>Phalaris arundinacea</i>	44.76692614840	-72.40712705960	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-203	<i>Phalaris arundinacea</i>	44.76685795480	-72.40721141210	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-204	<i>Phalaris arundinacea</i>	44.76677541640	-72.40734259380	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-205	<i>Phalaris arundinacea</i>	44.76727780110	-72.40883896380	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-206	<i>Phalaris arundinacea</i>	44.76522028880	-72.40984473220	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-207	<i>Phalaris arundinacea</i>	44.76354485820	-72.41127451760	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-208	<i>Phalaris arundinacea</i>	44.76094422590	-72.41397315210	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-209	<i>Phalaris arundinacea</i>	44.76074478300	-72.41404626480	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-21	<i>Phalaris arundinacea</i>	44.76268040820	-72.43530423570	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-210	<i>Phalaris arundinacea</i>	44.76056520630	-72.41398436130	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-211	<i>Phalaris arundinacea</i>	44.75944062530	-72.41488916350	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-212	<i>Phalaris arundinacea</i>	44.75930361690	-72.41484516410	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-213	<i>Phalaris arundinacea</i>	44.75839341680	-72.41475696780	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-214	<i>Phalaris arundinacea</i>	44.75837663190	-72.41466766300	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-215	<i>Phalaris arundinacea</i>	44.75825343670	-72.41482125190	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-216	<i>Phalaris arundinacea</i>	44.75808385270	-72.41503199910	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-217	<i>Phalaris arundinacea</i>	44.75787186150	-72.41547101980	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-218	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-218	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-219	<i>Phalaris arundinacea</i>	44.75795805760	-72.41669645850	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-22	<i>Phalaris arundinacea</i>	44.76237654790	-72.43522639630	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-220	<i>Phalaris arundinacea</i>	44.75800971530	-72.41670065130	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-222	<i>Phalaris arundinacea</i>	44.75631542710	-72.41803404470	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-223	<i>Phalaris arundinacea</i>	44.75614235030	-72.41799032100	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-224	<i>Phalaris arundinacea</i>	44.75601082320	-72.41819557660	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-225	<i>Phalaris arundinacea</i>	44.75602360400	-72.41813742550	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-226	<i>Phalaris arundinacea</i>	44.75598564980	-72.41811909810	B		N/A	Herbicide Applied	Monitor
2019-PHAR-227	<i>Phalaris arundinacea</i>	44.75620206870	-72.41854713290	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-228	<i>Phalaris arundinacea</i>	44.75619304760	-72.41884921330	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-229	<i>Phalaris arundinacea</i>	44.75612047700	-72.41874574210	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-230	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-231	<i>Phalaris arundinacea</i>	44.75627233770	-72.42003185050	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-232	<i>Phalaris arundinacea</i>	44.75606926430	-72.42116153140	B	Extensive/Dense	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-233	<i>Phalaris arundinacea</i>	44.75506878160	-72.42154214170	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-234	<i>Phalaris arundinacea</i>	44.75372520090	-72.42372388820	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-235	<i>Phalaris arundinacea</i>	44.75372619090	-72.42379921240	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-236	<i>Phalaris arundinacea</i>	44.75260752720	-72.42383385720	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-237	<i>Phalaris arundinacea</i>	44.75173170210	-72.42472351060	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-238	<i>Phalaris arundinacea</i>	44.75166138500	-72.42471298480	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-239	<i>Phalaris arundinacea</i>	44.75098862090	-72.42460008000	B		N/A	Herbicide Applied	Monitor
2019-PHAR-24	<i>Phalaris arundinacea</i>	44.76217121390	-72.43520540250	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-24	<i>Phalaris arundinacea</i>	44.76158981160	-72.43491966140	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-240	<i>Phalaris arundinacea</i>	44.74669779990	-72.42726713740	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-241	<i>Phalaris arundinacea</i>	44.75812433720	-72.41688489740	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-242	<i>Phalaris arundinacea</i>	44.75815566190	-72.41686330970	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-243	<i>Phalaris arundinacea</i>	44.75834491760	-72.41713143840	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-244	<i>Phalaris arundinacea</i>	44.75854374340	-72.41709987350	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-246	<i>Phalaris arundinacea</i>	44.75859044750	-72.41701650280	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-247	<i>Phalaris arundinacea</i>	44.75861677290	-72.41709570820	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-248	<i>Phalaris arundinacea</i>	44.75869556080	-72.41692615420	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-249	<i>Phalaris arundinacea</i>	44.75873426980	-72.41697171460	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-250	<i>Phalaris arundinacea</i>	44.75868887100	-72.41716817510	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-251	<i>Phalaris arundinacea</i>	44.75871945200	-72.41726484500	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-252	<i>Phalaris arundinacea</i>	44.75867862710	-72.41736828010	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-254	<i>Phalaris arundinacea</i>	44.75887912660	-72.41751379530	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-255	<i>Phalaris arundinacea</i>	44.75885698570	-72.41823481630	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-256	<i>Phalaris arundinacea</i>	44.75892307850	-72.41863241760	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-257	<i>Phalaris arundinacea</i>	44.75876806720	-72.41912830360	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-258	<i>Phalaris arundinacea</i>	44.75848683500	-72.41982398870	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-259	<i>Phalaris arundinacea</i>	44.75851977180	-72.42059130980	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-26	<i>Phalaris arundinacea</i>	44.76134000740	-72.43485282160	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-260	<i>Phalaris arundinacea</i>	44.75869723600	-72.42203238710	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-261	<i>Phalaris arundinacea</i>	44.75869783140	-72.42209528110	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-262	<i>Phalaris arundinacea</i>	44.75874842000	-72.42279286370	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-263	<i>Phalaris arundinacea</i>	44.75849132300	-72.42360178590	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-264	<i>Phalaris arundinacea</i>	44.75844827730	-72.42386537510	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-265	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-266	<i>Phalaris arundinacea</i>	44.75829225490	-72.42401523680	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-267	<i>Phalaris arundinacea</i>	44.75835165900	-72.42383750680	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-268	<i>Phalaris arundinacea</i>	44.75810119220	-72.42439443710	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-269	<i>Phalaris arundinacea</i>	44.75799804740	-72.42473973070	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-270	<i>Phalaris arundinacea</i>	44.75783933010	-72.42633157110	A	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-271	<i>Phalaris arundinacea</i>	44.75801231500	-72.42965918170	C	Few	N/A	Herbicide Applied	Monitor

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Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-272	<i>Phalaris arundinacea</i>	44.75802741290	-72.43040475220	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-273	<i>Phalaris arundinacea</i>	44.75828666010	-72.43107560380	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-274	<i>Phalaris arundinacea</i>	44.75844754690	-72.43194763790	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-275	<i>Phalaris arundinacea</i>	44.75876918980	-72.43248099580	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-276	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-277	<i>Phalaris arundinacea</i>	44.75948058170	-72.43337366600	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-278	<i>Phalaris arundinacea</i>	44.75953728190	-72.43328659520	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-279	<i>Phalaris arundinacea</i>	44.75997805280	-72.43379570020	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-28	<i>Phalaris arundinacea</i>	44.76064970490	-72.43448056340	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-280	<i>Phalaris arundinacea</i>	44.76012172070	-72.43400899050	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-281	<i>Phalaris arundinacea</i>	44.76096553680	-72.43449498870	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-282	<i>Phalaris arundinacea</i>	44.76133278970	-72.43467209490	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-283	<i>Phalaris arundinacea</i>	44.76131391360	-72.43454188060	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-284	<i>Phalaris arundinacea</i>	44.76134297750	-72.43446874930	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-285	<i>Phalaris arundinacea</i>	44.76142257620	-72.43473565290	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-286	<i>Phalaris arundinacea</i>	44.76165486090	-72.43483387210	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-287	<i>Phalaris arundinacea</i>	44.76189581340	-72.43489720960	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-288	<i>Phalaris arundinacea</i>	44.76248295440	-72.43507505120	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-289	<i>Phalaris arundinacea</i>	44.76272965270	-72.43516782200	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-29	<i>Phalaris arundinacea</i>	44.76043266200	-72.43433957850	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-290	<i>Phalaris arundinacea</i>	44.76281566360	-72.43514706940	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-291	<i>Phalaris arundinacea</i>	44.76349605410	-72.43551404370	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-292	<i>Phalaris arundinacea</i>	44.76430684550	-72.43607667950	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-293	<i>Phalaris arundinacea</i>	44.76438948650	-72.43619965200	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-294	<i>Phalaris arundinacea</i>	44.76417800640	-72.43726196250	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-296	<i>Phalaris arundinacea</i>	44.76381048340	-72.43812508480	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-297	<i>Phalaris arundinacea</i>	44.76390603350	-72.43804576910	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-298	<i>Phalaris arundinacea</i>	44.76402484910	-72.43776159540	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-299	<i>Phalaris arundinacea</i>	44.76376857140	-72.43833279770	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-3	<i>Phalaris arundinacea</i>	44.73444386380	-72.44287738890	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-30	<i>Phalaris arundinacea</i>	44.75998225230	-72.43411036170	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-33	<i>Phalaris arundinacea</i>	44.75887372950	-72.43287880000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-34	<i>Phalaris arundinacea</i>	44.75868910150	-72.43265357090	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-4	<i>Phalaris arundinacea</i>	44.73458766710	-72.44235829800	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-40	<i>Phalaris arundinacea</i>	44.75781861350	-72.42983904760	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-400	<i>Phalaris arundinacea</i>	44.76384763940	-72.43833905590	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-401	<i>Phalaris arundinacea</i>	44.76374457820	-72.43852523350	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-402	<i>Phalaris arundinacea</i>	44.76370170320	-72.43876462200	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-403	<i>Phalaris arundinacea</i>	44.76362983300	-72.43919202530	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-404	<i>Phalaris arundinacea</i>	44.76364534610	-72.43930486500	A	Few	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latitude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-405	<i>Phalaris arundinacea</i>	44.76368324560	-72.44079670030	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-406	<i>Phalaris arundinacea</i>	44.76378803880	-72.44082982380	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-407	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-408	<i>Phalaris arundinacea</i>	44.76373574910	-72.44103424510	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-409	<i>Phalaris arundinacea</i>	44.76378487270	-72.44108636770	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-45	<i>Phalaris arundinacea</i>	44.75751671590	-72.42755471830	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-46	<i>Phalaris arundinacea</i>	44.75774138910	-72.42581228980	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-48	<i>Phalaris arundinacea</i>	44.75861238600	-72.41899396100	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-49	<i>Phalaris arundinacea</i>	44.75875260500	-72.41833856520	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-5	<i>Phalaris arundinacea</i>	44.73455300280	-72.44213693070	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-5	<i>Phalaris arundinacea</i>	44.73496413290	-72.44147793160	B	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-PHAR-50	<i>Phalaris arundinacea</i>	44.75873283480	-72.41820303690	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-500	<i>Phalaris arundinacea</i>	44.74918038170	-72.42606012700	B	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-501	<i>Phalaris arundinacea</i>	44.74901447360	-72.42596365770	B	Few	N/A	Removal and Disposal	Monitor
2019-PHAR-502	<i>Phalaris arundinacea</i>	44.74997573190	-72.42637483540	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-503	<i>Phalaris arundinacea</i>	44.74998063180	-72.42645349600	C	Extensive/Dense	N/A	Removal and Disposal	Monitor
2019-PHAR-504	<i>Phalaris arundinacea</i>	44.75040858980	-72.42637248200	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-PHAR-505	<i>Phalaris arundinacea</i>	44.75051631640	-72.42654731190	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-506	<i>Phalaris arundinacea</i>	44.75130846930	-72.42654761380	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-PHAR-507	<i>Phalaris arundinacea</i>	44.75465971740	-72.42674133230	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-508	<i>Phalaris arundinacea</i>	44.75529070170	-72.42685974860	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-509	<i>Phalaris arundinacea</i>	44.75563660870	-72.42685052490	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-51	<i>Phalaris arundinacea</i>	44.75815440230	-72.42414003570	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-510	<i>Phalaris arundinacea</i>	44.75586398590	-72.42667496180	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-PHAR-511	<i>Phalaris arundinacea</i>	44.75626376770	-72.42685017430	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-512	<i>Phalaris arundinacea</i>	44.75658351110	-72.42676791540	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-513	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	C	Extensive/Scattered	N/A	Removal and Disposal	Monitor
2019-PHAR-514	<i>Phalaris arundinacea</i>	44.75828093110	-72.42010186660	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-514	<i>Phalaris arundinacea</i>	44.75744515880	-72.42818933650	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-515	<i>Phalaris arundinacea</i>	44.75771663430	-72.42966883650	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-520	<i>Phalaris arundinacea</i>	44.75818296790	-72.43168963930	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-521	<i>Phalaris arundinacea</i>	44.75828430740	-72.43198500790	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-522	<i>Phalaris arundinacea</i>	44.75848962120	-72.43256423100	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-523	<i>Phalaris arundinacea</i>	44.75873823460	-72.43276743280	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-524	<i>Phalaris arundinacea</i>	44.75904587970	-72.43325387950	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-526	<i>Phalaris arundinacea</i>	44.75968001430	-72.43403741720	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-527	<i>Phalaris arundinacea</i>	44.76011292320	-72.43435309370	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-527	<i>Phalaris arundinacea</i>	44.76075080200	-72.43477495460	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-528	<i>Phalaris arundinacea</i>	44.76090676460	-72.43482802010	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-529	<i>Phalaris arundinacea</i>	44.76117632930	-72.43492565600	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-53	<i>Phalaris arundinacea</i>	44.75864659670	-72.41763232550	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-530	<i>Phalaris arundinacea</i>	44.76133478290	-72.43495837180	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-531	<i>Phalaris arundinacea</i>	44.76179223200	-72.43521933550	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-532	<i>Phalaris arundinacea</i>	44.76221470760	-72.43548068460	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-54	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-540	<i>Phalaris arundinacea</i>	44.76377312800	-72.43732243810	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-541	<i>Phalaris arundinacea</i>	44.76372097930	-72.43717997430	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-542	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-544	<i>Phalaris arundinacea</i>	44.76338225130	-72.43718139470	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-545	<i>Phalaris arundinacea</i>	44.76325479730	-72.43725631310	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-545	<i>Phalaris arundinacea</i>	44.76270621310	-72.43830445790	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-546	<i>Phalaris arundinacea</i>	44.76314017690	-72.43729505960	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-547	<i>Phalaris arundinacea</i>	44.76307925700	-72.43749135850	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-548	<i>Phalaris arundinacea</i>	44.76307219090	-72.43769989250	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-55	<i>Phalaris arundinacea</i>	44.75757181740	-72.42782783960	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-6	<i>Phalaris arundinacea</i>	44.73518615390	-72.44129785210	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-65	<i>Phalaris arundinacea</i>	44.75810178580	-72.43127457990	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-7	<i>Phalaris arundinacea</i>	44.73539682340	-72.44107637830	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-700	<i>Phalaris arundinacea</i>	44.76299507550	-72.43698925200	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-700	<i>Phalaris arundinacea</i>	44.76359891550	-72.43890865880	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-701	<i>Phalaris arundinacea</i>	44.76274592940	-72.43654926860	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-701	<i>Phalaris arundinacea</i>	44.76352842720	-72.43935504110	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-702	<i>Phalaris arundinacea</i>	44.76249519870	-72.43599001710	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-702	<i>Phalaris arundinacea</i>	44.76352566940	-72.43942630600	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-702	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-703	<i>Phalaris arundinacea</i>	44.76375987500	-72.44127371590	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-706	<i>Phalaris arundinacea</i>	44.76448689150	-72.44208290930	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-707	<i>Phalaris arundinacea</i>	44.76480525630	-72.44217265830	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-708	<i>Phalaris arundinacea</i>	44.76489500780	-72.44228267570	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-710	<i>Phalaris arundinacea</i>	44.76609253850	-72.44277505210	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-711	<i>Phalaris arundinacea</i>	44.76643934730	-72.44313213000	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-713	<i>Phalaris arundinacea</i>	44.76666122200	-72.44352550590	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-715	<i>Phalaris arundinacea</i>	44.76530528690	-72.44243369950	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-716	<i>Phalaris arundinacea</i>	44.76538110900	-72.44245344710	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-717	<i>Phalaris arundinacea</i>	44.76547560800	-72.44249517420	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-750	<i>Phalaris arundinacea</i>	44.76408539380	-72.43872499390	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-751	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-752	<i>Phalaris arundinacea</i>	44.76654296420	-72.44303977110	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-753	<i>Phalaris arundinacea</i>	0.00000000000	0.00000000000	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-754	<i>Phalaris arundinacea</i>	44.76662471200	-72.44316865950	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor

Invasive Vegetation Monitoring								
Unique Identification ¹	Species	Latiude ²	Longitude ²	Colony Size (approximate stem count) ³	Colony Density	Vermont Noxious Weed Classification ⁴	2019 Treatment Type	2020 Recommendations
2019-PHAR-755	<i>Phalaris arundinacea</i>	44.76740082280	-72.44581133050	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-756	<i>Phalaris arundinacea</i>	44.76773294330	-72.44707640400	A	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-757	<i>Phalaris arundinacea</i>	44.76767182070	-72.44739549000	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-758	<i>Phalaris arundinacea</i>	44.76822049630	-72.44881794140	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-759	<i>Phalaris arundinacea</i>	44.76883079820	-72.45082082800	C	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-760	<i>Phalaris arundinacea</i>	44.76901785210	-72.45145225720	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-761	<i>Phalaris arundinacea</i>	44.76908791470	-72.45162344770	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-762	<i>Phalaris arundinacea</i>	44.76911443500	-72.45195033960	C	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-764	<i>Phalaris arundinacea</i>	44.76943763500	-72.45544438660	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-765	<i>Phalaris arundinacea</i>	44.76970664680	-72.45698764820	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-766	<i>Phalaris arundinacea</i>	44.77024063190	-72.45715889020	B	Extensive/Dense	N/A	Herbicide Applied	Monitor
2019-PHAR-767	<i>Phalaris arundinacea</i>	44.77032971850	-72.45716182730	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-770	<i>Phalaris arundinacea</i>	44.77144983430	-72.45372673600	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-771	<i>Phalaris arundinacea</i>	44.77113839990	-72.45346116690	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-774	<i>Phalaris arundinacea</i>	44.76981918880	-72.45291914270	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-777	<i>Phalaris arundinacea</i>	44.76962490250	-72.45279059110	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-781	<i>Phalaris arundinacea</i>	44.76842181390	-72.44830587580	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-783	<i>Phalaris arundinacea</i>	44.76835629240	-72.44797171590	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAR-790	<i>Phalaris arundinacea</i>	44.76741345600	-72.44585826880	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-791	<i>Phalaris arundinacea</i>	44.76673649140	-72.44435003290	B	Extensive/Scattered	N/A	Herbicide Applied	Monitor
2019-PHAR-9	<i>Phalaris arundinacea</i>	44.73734123560	-72.44092888420	A	Few	N/A	Herbicide Applied	Monitor
2019-PHAU-1	<i>Phragmites australis</i>	44.73489998300	-72.44286622060	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-1000	<i>Phragmites australis</i>	44.74077689170	-72.43334782320	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-15	<i>Phragmites australis</i>	44.75787934840	-72.43000009370	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-18	<i>Phragmites australis</i>	44.75862376570	-72.42202649040	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-2	<i>Phragmites australis</i>	44.73927032780	-72.43625862060	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-20	<i>Phragmites australis</i>	44.76880922500	-72.45130514310	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-200	<i>Phragmites australis</i>	44.76607350900	-72.40861158850	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-201	<i>Phragmites australis</i>	44.75320391670	-72.42378025570	B	Extensive/Dense	B	Herbicide Applied	Monitor
2019-PHAU-202	<i>Phragmites australis</i>	44.75100984990	-72.42499244150	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-203	<i>Phragmites australis</i>	44.75850700210	-72.41973384420	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-204	<i>Phragmites australis</i>	44.75870426230	-72.42228467120	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-205	<i>Phragmites australis</i>	44.75787181910	-72.42944157650	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-30	<i>Phragmites australis</i>	44.76649610330	-72.44293235250	B	Extensive/Scattered	B	Herbicide Applied	Monitor
2019-PHAU-4	<i>Phragmites australis</i>	44.73935413820	-72.43620920760	B	Extensive/Scattered	B	Herbicide Applied	Monitor
2019-PHAU-5	<i>Phragmites australis</i>	44.73929858070	-72.43601302390	A	Few	B	Herbicide Applied	Monitor
2019-PHAU-7	<i>Phragmites australis</i>	44.74068340770	-72.43479965390	A	Few	B	Herbicide Applied	Monitor

Invasive vegetation survey for the Wind Farm was conducted by VHB - July 15-18, 23, 2019.
¹ A Unique Identification was assigned to each population of non-native species found within the monitoring area; individual
² Occurrences mapped via use of GPS Location - LAT/LONG in NAD 83
³ Population size code A= less than or equal to 20 stems, B= between 21 and 100 stems, C= greater than 100 stems
⁴ Vermont Noxious Weed Classification follows the VT Agency of Agriculture, Food, & Markets 20 031 020 Quarantine #3 - Noxious Weeds
No NNIS woodland dispersal observed

Attachment 3



GMP Kingdom Community Wind Project Photographs: Wind Farm 2019

PROJECT NUMBER

57346.19

Year 7 (2019) Non-Native Invasive Species Monitoring Wind Farm Lowell, Vermont

Green Mountain Power

163 Acorn Lane

Colchester, Vermont 05446



NO. 1 / 7.15.2019 2:09 PM

DESCRIPTION

View of extensive *Phalaris arundinacea* occurrence (2019-PHAR-220).



NO. 2 / 7.16.2019 2:43 PM

DESCRIPTION

View of extensive *Phalaris arundinacea* occurrence adjacent to the access road (2019-PHAR-405).



NO. 3 / 7.16.2019 12:01 PM

DESCRIPTION

View of extensive *Phalaris arundinacea* occurrence along the transmission corridor (2019-PHAR-515).



NO. 4 / 7.15.2019 3:13 PM

DESCRIPTION

View of a small *Phragmites australis* occurrence (2019-PHAU-201).



NO. 5 / 7.15.2019 11:50 AM

DESCRIPTION

View of a small population of *Lythrum salicaria*, regrowth after herbicide treatment (2019-LYSA-200).



NO. 6 / 7.16.2019 12:05 PM

DESCRIPTION

View of a dense *Centaurea stoebe* population, along the access road (2019-CEST-61).



NO. 7 / 7.15.2019 1:42 PM

DESCRIPTION

View of a *Centaurea stoebe* population, regrowth after herbicide treatment (2019-CEST-214).



NO. 8 / 7.15.2019 11:53 AM

DESCRIPTION

View of a *Centaurea stoebe* population, regrowth after herbicide treatment (2019-CEST-206).

Photographs taken by VHB Environmental Scientists on July 15-18 and 23, 2019.