

Amherst Island Wind Project 2019 Post-Construction Mortality Monitoring Report

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Executive Summary

Natural Resource Solutions Inc. was retained to conduct three (3) years of post-construction monitoring at the operational Amherst Island Wind Project, located in Loyalist Township, Lennox and Addington County, Ontario. This wind energy facility has a generating capacity of 74.3MW and consists of 26 turbines in an agricultural landscape dominated by pasture. Occasional wooded habitats, wetlands, and aquatic features are also present in the areas surrounding the project infrastructure. This report provides the detailed methods and results from the first year of post-construction monitoring for bird and bat mortality conducted at the Amherst Island Wind Project in 2019.

During twice weekly searches from May 1 to October 31, 2019, a total of 28 bird mortalities were documented within the search areas around the subset of 10 turbines. Observed bird mortalities consisted mostly of landbird species considered common in the province. Using correction factors for searcher efficiency, scavenger removal, and proportion of area searched, an estimated bird mortality rate of 4.77 birds/turbine/year (1.66 birds/MW/year) was determined for the Amherst Island Wind Project. This is below the provincial threshold of 14 birds/turbine/year. No significant bird mortality events were documented.

During searches for raptor mortalities at applicable turbines, a total of three (3) raptor mortalities were documented in the search areas around the turbines. Raptor mortalities were comprised of one (1) each of Peregrine Falcon (*Falco peregrinus*), Rough-legged Hawk (*Buteo lagopus*), and American Kestrel (*Falco sparverius*). The estimated raptor mortality rate for the Amherst Island Wind Project is 0.19 raptors/turbine/year (0.07 raptors/MW/year). This is below the provincial threshold of 0.2 raptors/turbine/year.

During twice weekly searches from May 1 to October 31, 2019, a total of 35 bat mortalities were documented within the search areas around the subset of 10 turbines. Bat mortalities of both migratory and resident species were documented, including Hoary Bat (*Lasiurus cinereus*), Silver-haired Bat (*Lasionycteris noctivagans*), Eastern Red Bat (*Lasiurus borealis*), Big Brown Bat (*Eptesicus fuscus*), and Little Brown Myotis (*Myotis lucifugus*). The first three species above are considered long-distance migratory species which over-winter outside of Ontario, and accounted for 71% of the total bat mortality observations at the Amherst Island Wind Project in 2019. Using correction factors for searcher efficiency, scavenger removal, and proportion of area searched, an estimated bat mortality rate of 5.36 bats/turbine/year (1.88 bats/MW/year) was determined for the Amherst Island Wind Project. This is below the provincial threshold of 10 bats/turbine/year.

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1.0 Introduction

Natural Resource Solutions Inc. (NRSI) was retained to conduct the first year of post-construction monitoring at the operational Amherst Island Wind Project (Amherst Island WP), located in Loyalist Township in Lennox and Addington County, Ontario. The Amherst Island WP consists of 26 wind energy generating turbines with a total nameplate capacity of 74.3MW. The project area and turbine locations can be seen on Map 1.

Post-construction mortality monitoring at the Amherst Island WP in 2019 included bird and bat mortality monitoring, searcher efficiency trials, scavenger removal trials, raptor mortality monitoring and visibility class mapping of substrates searched. These surveys were conducted in accordance with provincial guidelines and project approval conditions to assess the potential impacts of this wind energy generating facility on local and migratory birds and bats.

The purpose of this report is to provide the detailed methods and results from the first year of post-construction mortality monitoring conducted at the Amherst Island WP.

For the purposes of this report, NRSI will frequently use the terms 'mortality' and 'carcass'. The term 'mortality' will refer to dead birds and bats that were found in the vicinity of turbines at the Amherst Island WP. The term 'carcass' will refer to dead birds and bats that have been placed beneath wind turbines by NRSI staff for the purposes of searcher efficiency and/or scavenger removal trials.

2.0 Mortality Monitoring Methodology

2.1 Mortality Monitoring

2.1.1 Sample Locations

For wind energy projects consisting of greater than 10 turbines, a subset of at least 30% of turbines (minimum 10 turbines) is required to be monitored (OMNR 2011a, OMNR 2011b). In accordance with these requirements, a subset of 10 turbines (38.5%) were selected by Stantec Consulting Ltd. in consultation with the Ministry of Natural Resources and Forestry (Stantec 2013). NRSI conducted mortality monitoring at this subset of 10 turbines in 2019, following the monitoring period and search frequency described below. The subset of turbines that were monitored at the Amherst Island WP in 2019 is shown on Map 1.

2.1.2 Monitoring Period and Search Frequency

NRSI biologists conducted twice weekly (3 and 4 day intervals) mortality monitoring for birds and bats at the subset of 10 turbines during the entire monitoring period of May 1 to October 31, 2019. For the purposes of this monitoring program, searches in May and June are considered to have been completed in Spring, July and August in Summer, and September and October in Fall.

Mortality monitoring specific to raptors occurred for the full duration of the year, as follows:

- Once weekly at all 26 turbines in January, February, and March (Winter 1),
- Once weekly at the 10 subset turbines in April (Winter 1),
- Twice weekly (3 and 4 day intervals) at the 10 subset turbines in May through October (Spring, Summer, and Fall, as defined above),
- Once weekly at the 10 subset turbines in November (Winter 2), and
- Once weekly at all 26 turbines in December (Winter 2).

In addition, raptor mortality monitoring was conducted once per month from May to November (inclusive) at the remaining 16 turbines.

As a result of turbine maintenance, inclement weather or other safety concerns, some turbines could not be searched on particular scheduled dates. This relatively minor

adjustment to the monitoring protocol is not expected to impact the results or conclusions presented in this report. The dates when turbines were not able to be searched are listed in Table 1.

Table 1. Summary of Regular Search Days When Turbines Could Not Be Searched (2019)

Date (2019)	Date Turbine Next Searched (2019) ¹	Turbine(s)	Rationale
December 6	December 13 ¹	S30	Turbine Maintenance
December 6	December 13	S07, S13, S14, S28, S33	Inclement Weather

¹ Due to a variety of factors which may include the duration of turbine maintenance, weather conditions, the location of the project, and/or staff availability, this turbine could not be searched again until the next regularly scheduled search day.

2.1.3 Sample Area and Survey Duration

NRSI biologists conducted mortality searches within a 50m radius of each turbine base. Mortality searches were conducted using linear transects, spaced approximately 5m apart. Any mortality that was incidentally observed beyond the search radius was still documented, photographed, and collected, but was not included in formal calculations of estimated mortality rates. In order to maintain a consistent search effort, mortality searches followed a consistent search time throughout each month of searching. When searching all 26 turbines during January-March and December for raptor mortalities, a search time of 20 minutes per turbine was used. At the subset of 10 turbines, a search time of 20 minutes per turbine was used during the months of April and November, and 30 minutes per turbine during the months of May, June and October. In an attempt to increase the searcher efficiency values, and ultimately the accuracy of the estimated mortality rates, the search effort was increased to 40 minutes per turbine during the months of July, August, and September at the subset turbines.

2.1.4 Data Collection

During each visit to conduct mortality searches, all appropriate information was documented, including weather conditions, date, time, and observer. The mortality monitoring data collection sheet has been provided in Appendix I.

In addition to general information collected on each visit, a variety of specific information was recorded upon encountering any mortality. This detailed information collected for each mortality, as shown on the data sheet provided in Appendix I, included species (if

identifiable), sex of the individual (if identifiable), condition, estimated time since death, any apparent injuries, direction and distance from turbine base, substrate type and visibility class, and a unique mortality identification number for future reference. Specific UTM coordinates and photographs were also taken for each specimen to allow for further analysis, if necessary.

2.2 Scavenger Removal Trials

As per the *Environmental Effects Monitoring Plan for Wildlife* (EEMP, Stantec 2013) carcasses for small birds, bats and raptors were used for scavenger removal trials to determine scavenging rate. Carcasses of small birds and bats were combined into one trial applicable to both. A separate trial was conducted for raptor carcasses. Due to the difficulty in obtaining a sufficient number of fresh raptor carcasses, waterfowl carcasses were occasionally used in place of raptors as they represent similarly-sized surrogates. This minor substitution is not expected to have any material result on the annual corrected mortality rate for raptors. The monitoring program for each trial type (small birds/bats and raptors) are detailed in the sections below.

2.2.1 Small Birds and Bats

Scavenger removal trials for small birds and bats were conducted in each of the Spring, Summer, and Fall seasons of mortality monitoring. A minimum of 10 carcasses were placed in each monitoring season. No more than five (5) carcasses were placed at one time. Carcasses were placed throughout the range of habitats and substrate types being searched during each season. Species, UTM coordinates, direction and distance from turbine base, substrate, and visibility class were all noted on a data sheet during the placement of each specimen. The scavenger removal data sheet has been provided in Appendix I.

Carcasses placed included both small bird and bat specimens, with each trial consisting of at least one-third representation of each of bird and bat carcasses. Small bird carcasses included species commonly encountered in this region of the province and ranged in size from very small to moderately-sized carcasses. Migratory bat carcasses were used in each seasonal scavenger removal trial and included Hoary Bat (*Lasiurus cinereus*), Eastern Red Bat (*Lasiurus borealis*), and Silver-haired Bat (*Lasionycteris*

noctivagans). Carcasses used in scavenger removal trials were obtained from the Royal Ontario Museum and/or were collected from operational wind energy facilities within Ontario. A list of the bird and bat species used during scavenger removal trials has been provided in Appendix II.

During each scavenger removal trial, the bird and bat carcasses were left for up to 14 days and were checked at the same frequency as mortality searches, or approximately twice per week, to note any scavenging or signs of scavenger presence. Following completion of the scavenger removal trials after 14 days, all remaining test carcasses were picked up and disposed of appropriately.

2.2.2 Raptors

Scavenger removal trials for raptors were conducted in three (3) grouped seasons: a) Winter 1, from January through April; b) combined Spring/Summer/Fall, from May through October; and c) Winter 2, November and December. A minimum of 10 carcasses were placed in each monitoring season as defined above, with the exception of Winter 2. For the Winter 2 SC trails, a sufficient quantity of fresh large bird carcasses was unavailable for the full season, therefore only 4 carcasses were placed. Given the short duration of the Winter 2 season, this avoids bias in the trial resulting from saturation of large carcasses available to scavengers. This same rationale was used to combine the Spring/Summer/Fall seasons for the raptor scavenger removal trial, particularly given that large bird mortality rates are typically low and thus the availability of large bird carcasses on the landscape would typically be low.

No more than two (2) raptor carcasses were placed at one time, and no more than two (2) carcasses were placed at any single turbine during each seasonal trial. These measures were also taken to avoid bias in the trial resulting from saturation of carcasses available to scavengers. Carcasses were placed throughout the range of habitats and substrate types being searched during each season. Species, UTM coordinates, direction and distance from turbine base, substrate, and visibility class were all noted on a data sheet during the placement of each specimen. The scavenger removal data sheet has been provided in Appendix I. A list of the large bird species used during scavenger removal trials has been provided in Appendix II.

During each scavenger removal trial, the large bird carcasses were left for up to four (4) search events during each season (4 weeks in Winter 1 and Winter 2, and 14 days in the Spring/Summer/Fall). Carcasses were checked at the same frequency as mortality searches, or approximately once per week in the Winter seasons and twice per week in the Spring/Summer/Fall season, to note any scavenging or signs of scavenger presence.

2.3 Searcher Efficiency Trials

In conjunction with mortality searches, NRSI conducted searcher efficiency trials on staff that conducted mortality searches at the Amherst Island WP. Similar to scavenger removal trials, searcher efficiency trials must be conducted at least once per season (Spring, Summer, and Fall), and on each searcher and in each visibility class that was searched during that season. In order to obtain more accurate results and to account for seasonal changes in groundcover, weather, or soil saturation, NRSI conducted monthly searcher efficiency trials from May to October. In accordance with the EEMP (Stantec 2013), searcher efficiency trials were not conducted for raptor mortalities, as large birds are highly visible and searcher efficiency results would be expected to approach very closely to 1.0, if not 1.0 itself.

During each trial, searchers were tested without their knowledge through the placement of a minimum of 10 test carcasses per visibility class searched by the searcher, with no more than three (3) carcasses placed on any one date. In one instance, the searcher was tested with nine (9) carcasses in one visibility class searched and 11 carcasses in the other visibility class searched, instead of 10 in each. In each of June and July, one of the searchers was not able to be tested with 10 carcasses in each visibility class due to the number of their search days being less than the number of days required for a full trial sample, considering that no more than three (3) carcasses can be placed on any one search date. Therefore, the searcher was tested with as many carcasses as possible, including eight (8) carcasses in one visibility class and (7) in the other, in each month. These very minor deviations are not expected to have any material result on the annual corrected mortality rate for birds or bats.

Carcasses were placed randomly within the search radius throughout the subset of 10 turbines at the Amherst Island WP. Distance and direction from turbine base, visibility class and substrate type, and UTM coordinates were recorded for each test carcass placed. Trial carcasses were unmarked to avoid introducing bias by alerting the searcher to the trial. Each found specimen was later compared to the total number of carcasses placed within the project area and the locations of their placement. The data sheet used for searcher efficiency trials has been provided in Appendix I.

In order to meet the understood intent of the MNRF guidelines (OMNR 2011a, OMNR 2011b) to limit searcher bias, NRSI has not physically marked carcasses at this project, as it could influence the results of the trial and alert the searcher to an ongoing searcher efficiency trial. Instead, NRSI biologists collect detailed location information of the trial carcass with date placed, UTM coordinates, distance and direction from the turbine, and mapped location of the carcass. All collected carcasses are compared to these detailed date, location and species information to distinguish between trial carcasses and actual turbine mortalities. These steps have been taken to ensure that the location of the carcass, along with species information, is well documented for future reference if there is uncertainty about whether or not an observed carcass is a turbine-related fatality or a trial carcass.

Searcher efficiency carcasses included both bird and bat specimens, with each trial consisting of at least one-third representation of each of bird and bat carcasses. Bird carcasses used in the searcher efficiency trials included species commonly encountered in this region of the province and varied in size from very small to moderate-sized carcasses. Bat carcasses used during searcher efficiency trials consisted of the three (3) migratory species known to occur within Ontario, including Hoary Bat, Eastern Red Bat, and Silver-haired Bat. Carcasses used in searcher efficiency trials were obtained from the Royal Ontario Museum and/or were collected from operational wind energy facilities within Ontario. A list of the bird and bat species used during searcher efficiency trials has been provided in Appendix III.

2.4 Proportion of Area Searched

Following Ministry of Natural Resources and Forestry (MNRF) guidelines, visibility class maps were completed by searchers at a minimum frequency of once per season (OMNR 2011a, OMNR 2011b). Due to the potential for changing conditions, NRSI completed visibility class maps once per month from May to October to provide additional information to increase the accuracy of the estimated mortality rates. Visibility class maps were completed once per season in each of Winter 1 and Winter 2 due to the lack of vegetation growth and relatively consistent search substrates.

Visibility class mapping was completed for the 50m search radius at each turbine. This mapping categorized habitats according to visibility classes recommended by the MNRF (OMNR 2011a, OMNR 2011b). These include visibility classes 1 through 4, in addition to areas which may be deemed "unsearchable", such as aquatic features, areas deemed safety hazards, or other areas where searching was not possible. Mapping of these visibility classes within each search radius was conducted and calculated as per a repeatable methodology using a combination of these visibility class field maps, review of aerial photographs, and use of Geographic Information System (GIS) software. The data sheet used to record visibility class mapping has been provided in Appendix I.

In order to help increase the accuracy of searcher efficiency rates and minimize the influence of the proportion of area searched on the bird and bat mortality estimates, the majority of the search radii at the subset of 10 turbines were maintained at visibility class 1 and 2 through occasional plowing and mowing, as needed, for the duration of the growing season (May through October), wherever possible. Small areas of other visibility classes were present, particularly near the limit of the 50m radii. When small and temporary areas of other visibility classes were present, they were searched thoroughly until scheduled vegetation maintenance could occur. As a result, the majority of the 50m radius at each turbine was searched for the duration of the 2019 monitoring period. Some areas were determined to be visibility classes that were not searched as part of this monitoring program (i.e. visibility classes 3 and 4). In these cases, the appropriate proportion of area searched was calculated and used for final mortality estimates. Visibility class maps of each turbine in each month are provided in Appendix VII.

Maintenance of the 50m search radius was only completed when necessary to maintain appropriate visibility and it also followed a strict schedule developed by NRSI that ensured the maintenance activities were completed in a manner to minimize or eliminate any potential negative influence on the mortality monitoring, searcher efficiency trials and scavenger removal trials. The maintenance of the search areas is expected to increase the accuracy of the final estimated mortality rates at the Amherst Island WP.

3.0 Scavenger Removal Trial Results

Scavenging activity at the Amherst Island WP was low to moderate throughout the monitoring seasons, with higher scavenging activity noted in Winter 2, specific to raptors. Details on the date placed, species, distance and direction from turbine, visibility class, dates checked and by whom, UTM coordinates, and whether the carcass was scavenged have been provided in Appendix II.

3.1 Small Birds and Bats

Table 2 shows the results from the seasonal scavenger removal trials conducted for small birds and bats at the Amherst Island WP.

Table 2. Number of Carcasses Remaining During Scavenger Removal Trials for Small Birds and Bats at the Amherst Island WP (2019)

Number of Carcasses Remaining						
Spring Trial (May/June)						
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S01	1	1	1	1	1	
S05	1	1	1	1	1	
S07	1	1	1	1	1	
S14	1	1	1	0	0	
S28	1	1	1	1	1	
S02	1	0	0	0	0	
S03	1	0	0	0	0	
S18	1	1	1	0	0	
S22	1	1	1	1	1	
S36	1	1	0	0	0	
Total	10	8	7	5	5	
Summer Tr	ial (July/	August)				
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S02	1	0	0	0	0	
S18	1	0	0	0	0	
S07	1	1	1	1	1	
S14	1	0	0	0	0	
S36	1	1	1	1	1	
S28	1	1	1	1	0	
S01	1	1	1	1	1	
S03	1	1	1	1	1	
S22	1	1	1	1	1	
S05	1	1	1	0	0	
S18	1	1	1	1	1	

Number of Carcasses Remaining						
S36	1	1	1	1	1	
Total	12	9	9	8	7	
Fall Trial (S	eptembe	r/October)				
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S01	1	1	0	0	0	
S03	1	1	1	1	1	
S05	1	1	1	1	1	
S22	1	1	0	0	0	
S36	1	1	1	0	0	
S02	1	0	0	0	0	
S07	1	1	1	1	1	
S14	1	1	1	0	0	
S18	1	0	0	0	0	
S28	1	1	1	1	1	
Total	10	8	6	4	4	

To address the small bird/bat scavenger removal rates for each of the specific monitoring periods, NRSI has used the following equation recommended by the MNRF:

$$Sc = \frac{n_{visit1} + n_{visit2} + n_{visit3...}}{n_{visit0} + n_{visit1} + n_{visit2...}}$$

Sc: proportion of carcasses not removed by scavengers

n_{visit0}: total number of carcasses placed

 $n_{visit1} - n_{visit3}...$: numbers of carcasses remaining on visits 1 through 3 etc.

Using the scavenger removal results presented in Table 2, and the equation provided by the MNRF, the seasonal scavenger removal rates for small birds and bats have been determined as follows:

$$Sc_{Spring} = (8 + 7 + 5 + 5) / (10 + 8 + 7 + 5)$$

$$= 25 / 30$$

$$= 0.83$$

$$Sc_{Summer} = (9 + 9 + 8 + 7) / (12 + 9 + 9 + 8)$$

$$= 33 / 38$$

$$= 0.87$$

$$Sc_{Fall} = (8 + 6 + 4 + 4) / (10 + 8 + 6 + 4)$$

$$= 22 / 28$$

$$= 0.79$$

The above scavenger removal rates represent the proportion of carcasses still remaining from one visit to the next. These values generally represent low to moderate scavenging activity throughout the year. The above scavenger removal rates for small birds/bats will be used to calculate the estimated small bird/bat mortality rates in Sections 6.0 and 8.0.

3.2 Raptors

Table 3 shows the results from the seasonal scavenger removal trials conducted for raptors at the Amherst Island WP.

Table 3. Number of Carcasses Remaining During Scavenger Removal Trials for Raptors at the Amherst Island WP (2019)

Number of Carcasses Remaining						
Winter 1 Trial (January-April)						
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S30	1	1	1	1	1	
S33	1	1	1	1	1	
S13	1	1	1	1	1	
S34	1	1	1	1	1	
S19	1	1	1	1	1	
S19	1	1	0	0	0	
S27	1	1	1	1	1	
S09	1	1	1	1	1	
S29	1	1	1	1	1	
S16	1	1	1	1	1	
Total	10	10	9	9	9	
Spring/Sun	nmer/Fall	Trial (May	-October)			
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
Turbine S36	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S36	1	1	1	1	0	
S36 S22	1	1	1	1	0	
\$36 \$22 \$05	1 1 1	1 1 1	1 1 1	1 1 1	0 1 1	
\$36 \$22 \$05 \$01	1 1 1	1 1 1	1 1 1	1 1 1 1	0 1 1 1 1	
\$36 \$22 \$05 \$01 \$28	1 1 1 1	1 1 1 1	1 1 1 1 0	1 1 1 1 0	0 1 1 1 0	
\$36 \$22 \$05 \$01 \$28 \$01	1 1 1 1 1	1 1 1 1 1	1 1 1 1 0	1 1 1 1 0	0 1 1 1 0	
\$36 \$22 \$05 \$01 \$28 \$01 \$02	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 0 1	1 1 1 1 0 1	0 1 1 1 0 1	
\$36 \$22 \$05 \$01 \$28 \$01 \$02 \$14	1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 0 1 1	1 1 1 1 0 1 1	0 1 1 1 0 1 1	
\$36 \$22 \$05 \$01 \$28 \$01 \$02 \$14	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 0 1 1 1	1 1 1 0 1 1 1	0 1 1 1 0 1 1 0	
\$36 \$22 \$05 \$01 \$28 \$01 \$02 \$14 \$07 \$18	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 0 1 1 1 1	1 1 1 0 1 1 1 1	0 1 1 1 0 1 1 0	
\$36 \$22 \$05 \$01 \$28 \$01 \$02 \$14 \$07 \$18 \$05	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 0 1 1 1 1 1	1 1 1 0 1 1 1 1 1	0 1 1 1 0 1 1 0 1 1	

Number of Carcasses Remaining						
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4	
S18	1	1	0	0	0	
S28	1	0	0	0	0	
S04	1	0	0	0	0	
S11	1	1	1	1	0	
Total	4	2	1	1	0	

Using the scavenger removal results presented in Table 3, and the equation provided by the MNRF, the seasonal scavenger removal rates for raptors have been determined as follows:

ScWinter1 =
$$(10 + 9 + 9 + 9) / (10 + 10 + 9 + 9)$$

= 37 / 38
= **0.97**
ScSpring/
Summer/Fall = $(12 + 11 + 11 + 9) / (12 + 12 + 11 + 11)$
= 43 / 46
= **0.93**
ScWinter2 = $(2 + 1 + 1 + 0) / (4 + 2 + 1 + 1)$
= 4 / 8
= **0.50**

The above scavenger removal rates represent the proportion of raptor carcasses still remaining from one visit to the next. These values generally represent very low scavenging activity in the first winter (Winter 1; January through April) as well as the Spring/Summer/Fall. However, in the second winter (i.e. Winter 2; November-December), scavenging of raptors was much higher. The above raptor scavenging removal rates will be used to calculate the estimated raptor mortality rates in Section 7.0.

4.0 Searcher Efficiency Trial Results

Searcher efficiency rates at the Amherst Island WP during the 2019 monitoring season were moderate in the spring season, but increased to very high in the summer and fall seasons. Results of the monthly searcher efficiency trials are summarized in Table 4. Details on the searcher and tester, species, distance and direction from turbine, habitat, substrate, visibility class, UTM coordinates, and whether the carcass was found or scavenged have been provided in Appendix III.

Table 4. Results of Searcher Efficiency Trials at the Amherst Island WP (2019)

Searcher	Carcasses Found	Carcasses Placed	Carcasses Scavenged	Searcher Efficiency	Proportion of Turbines Searched
Spring 2019					
Searcher B	12	20	0	0.60	0.79
Searcher D ¹	N/A	N/A	N/A	0.60	0.03
Searcher E	9	15	0	0.60	0.18
Summer 2019					
Searcher B	18	22	3	0.95	0.75
Searcher E	12	15	0	0.80	0.08
Searcher F ¹	N/A	N/A	N/A	0.88	0.06
Searcher G ¹	N/A	N/A	N/A	0.88	0.11
Fall 2019					
Searcher B	20	20	0	1.00	0.94
Searcher G ¹	N/A	N/A	N/A	1.00	0.06

These searchers searched on no more than four (4) dates in the identified season and therefore could not be properly tested for searcher efficiency following MNRF guidelines (i.e. seven (7) search days are required for proper testing in two (2) visibility classes as no more than three (3) carcasses can be placed at a time). In these circumstances, the average result obtained by the other regular searchers in each month was used for these searchers.

Based on the information collected during detailed searcher efficiency trials and the equations recommended by the MNRF, overall searcher efficiency (SeO) was calculated for each of the monitoring months as follows:

$$Se = \frac{\text{number of test carcasses found}}{\text{number of test carcasses placed} - \text{number of carcasses scavenged}}$$

$$SeO = Se_A(\text{proportion of turbines searched}) + Se_B(\text{proportion of turbines searched})...$$

$$SeO_{\text{Spring}} = 0.60 (0.79) + 0.60 (0.03) + 0.60 (0.18) = \textbf{0.60}$$

$$SeO_{\text{Summer}} = 0.95 (0.75) + 0.80 (0.08) + 0.88 (0.06) + 0.88 (0.11) = \textbf{0.93}$$

$$SeO_{\text{Fall}} = 1.00 (0.94) + 1.00 (0.06) = \textbf{1.00}$$

These searcher efficiency values represent moderate to high searcher efficiency rates, largely due to the additional search effort and steps to keep the search areas in low visibility classes (i.e. clear and more easily searched) to increase the accuracy of the estimated mortality rate. These values will be used to calculate the estimated avian and bat mortality rates in Sections 6.0 and 8.0.

5.0 Proportion of Area Searched

Visibility class mapping was completed every month from May to October within the 50m search radius of each of the 10 subset turbines in order to reflect any changes in groundcover and resulting visibility classes. In addition, visibility class mapping was completed as often as necessary in the winter months to characterize the remaining turbines in the project which contributed to the estimate of raptor mortality, resulting in mapping completed once in Winter 1 and once in Winter 2 for all turbines. All visibility class maps have been provided in Appendix VII.

Visibility class mapping was used in combination with GIS software to determine the specific area and sizes of each of the applicable visibility classes identified with the turbine search areas. During the 2019 monitoring program, NRSI biologists searched all areas of visibility class 1 and 2 during the months of May through November, which is reflected in the proportion of area searched (Ps) calculated for all 10 turbines during each of those monitoring months, as shown in Table 5. During the winter months, all visibility classes were searched, with the exception of some unsearchable areas including woodlands, watercourses or other large obstacles. These values will be used to calculate the estimated avian, raptor and bat mortality rates in Sections 6.0, 7.0, and 8.0, respectively.

Table 5. Proportion of Area Searched at the Amherst Island WP (2019)

Month	Total Searched Area (m²)	Number of Turbines Searched Regularly	Total Search Radius (m²)	Proportion of Area Searched (Ps)
January	203,939	26	204,100	1.00
February	203,939	26	204,100	1.00
March	203,939	26	204,100	1.00
April	78,500	10	78,500	1.00
May	76,375	10	78,500	0.97
June	76,799	10	78,500	0.98
July	67,051	10	78,500	0.85
August	67,094	10	78,500	0.85
September	72,836	10	78,500	0.93
October	77,997	10	78,500	0.99
November	78,093	10	78,500	0.99
December	203,939	26	204,100	1.00

6.0 Avian Mortality Results

6.1 Avian Mortalities

During the 2019 mortality monitoring period at the Amherst Island WP, NRSI biologists found 28 bird mortalities within the 50m radius of the monitoring subset of 10 turbines between May and October. The majority of the mortalities that could be identified to the species level were confirmed to be small landbirds or shorebirds, generally representing a variety of common species for this area of the province. The most commonly observed mortalities were of Red-eyed Vireo (*Vireo olivaceus*) (n=4), Wilson's Snipe (*Gallinago delicata*) and Killdeer (*Charadrius vociferous*) (n=3 each). Three (3) bird mortalities could not be identified to the species level due to advanced decomposition and/or scavenging activity, but were identified as passerine species (i.e. non-raptors).

A list of avian mortalities observed during the carcass searches has been provided in Appendix IV.

6.2 Temporal Distribution of Avian Mortalities

Bird mortalities were generally observed throughout the year, although the greatest number of mortalities was observed in the spring (May/June), with the greatest number of mortalities specifically documented in May (n=7). The distribution of avian mortalities by date can be seen in Figure 1.

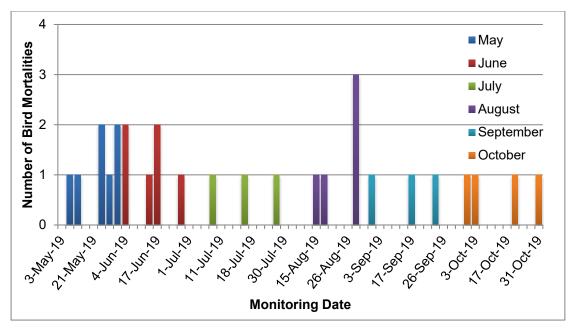


Figure 1. Bird Mortalities Observed by Date at the Amherst Island WP (2019)

6.3 Spatial Distribution of Avian Mortalities

Avian mortalities were observed at all 10 subset turbines and were relatively evenly distributed across turbines (see Figure 2 below), ranging from one (1) at multiple turbines to five (5) at S28. Details regarding each avian mortality, including date, time, location, and species, are summarized in Appendix IV and turbine maps identifying the location of each observed mortality have been provided in Appendix VI.

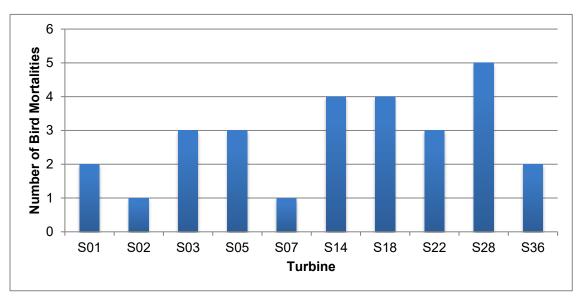


Figure 2. Bird Mortalities Observed by Turbine at the Amherst Island WP (2019)

6.4 Corrected (Estimated) Avian Mortality

In accordance with the *Bird and Bird Habitats: Guidelines for Wind Power Projects* (OMNR 2011b), estimated avian mortality rates have been presented by individual turbines or turbine group. Since searcher efficiency and scavenger removal rates have been collected specifically for the 10-turbine subset for birds, NRSI is presenting estimated mortality rates by this same turbine group.

Based on the field observations at the Amherst Island WP, NRSI biologists have compiled the searcher efficiency trial results, scavenger removal trial results, proportion of area searched, and direct mortality observations into an equation that will be used to estimate the total avian mortality at the Amherst Island WP in 2019. The equation recommended by the MNRF is found below:

C = c / (Se*Sc*Ps)

C: Corrected (Estimated) Mortality Rate

c: actual observed mortalities Se: overall searcher efficiency

Sc: proportion of remaining carcasses

Ps: proportion of area searched

Using the equation and variables described above, the estimated avian mortality rates by month have been presented below:

C_{May}	= 7 / (0.60*0.83*0.97) = 7 / 0.4831 = 14.49 birds = 1.45 birds/turbine (0.51 birds/MW)
C_June	= 6 / (0.60*0.83*0.98) = 6 / 0.4880 = 12.30 birds = 1.23 birds/turbine (0.43 birds/MW)
C_{July}	= 3 / (0.93*0.87*0.85) = 3 / 0.6877 = 4.36 birds = 0.44 birds/turbine (0.15 birds/MW)
C _{August}	= 5 / (0.93*0.87*0.85) = 5 / 0.6877 = 7.27 birds = 0.73 birds/turbine (0.25 birds/MW)
Cseptember	= 3 / (1.00 *0.79*0.93) = 3 / 0.7347 = 4.08 birds = 0.41 birds/turbine (0.14 birds/MW)
C _{October}	= 4 / (1.00*0.79*0.99) = 4 / 0.7821 = 5.11 birds = 0.51 birds/turbine (0.18 birds/MW)

Using the appropriate variables and equations recommended by the MNRF, the corrected (estimated) avian mortality at the Amherst Island WP in 2019 was calculated. Table 6 shows the monthly estimated mortality rates as well as the overall estimated avian mortality rate at the Amherst Island WP, as calculated by turbine group.

Table 6. Corrected Bird Mortality Rates Based on Mortality Monitoring at the Amherst Island WP (2019)

Month (2019)	Observed Avian Mortalities	Corrected Mortality (birds/turbine)	Corrected Mortality (birds/MW)
May	7	1.45	0.51
June	6	1.23	0.43
July	3	0.44	0.15
August	5	0.73	0.25
September	3	0.41	0.14
October	4	0.51	0.18
TOTAL	28	4.77	1.66

Based on the information collected during the 2019 post-construction monitoring period, the anticipated impact of this facility on birds is characterized by an estimated mortality rate of **4.77 birds/turbine/year** (1.66 birds/MW/year), as calculated by turbine group.

6.5 Mortalities Documented Near Significant Bird Habitats

Based on the proximity of the project to several significant bird habitats, additional consideration is required for turbines within 120m of any significant bird habitat to evaluate potential effects to nearby habitats. Table 7 below outlines the turbines located within 120m of significant bird habitats, the number of total bird mortalities documented at those turbines, and the total number of habitat-specific bird mortalities documented. Bird Significant Wildlife Habitats within 120m of the Amherst Island WP are shown on Map 2.

Table 7. Bird Mortalities Documented at Turbines within 120m of Significant Bird Habitat

Habitat Name	Turbines Within 120m ¹	Total Bird Mortalities	Target Bird Mortalities ²	
Landbird Migratory Stopover Area Migratory Songbirds and Raptors, April-May, August-October				
ML1	S03 , S09	4	1	
ML2	S05	3	1	
ML3	S36	2	2	

Habitat Name	Turbines Within 120m ¹	Total Bird Mortalities	Target Bird Mortalities ²	
ML4	S02, S07, S14, S18, S26	10	6	
ML5	S26	0	0	
Marsh Bird Breeding Habitat Marsh Bird Indicator Species, May-June				
MBB1	S36	2	0	
Woodland Area-sensitive Bird Breeding Habitat Woodland Area-sensitive Indicator Species, Breeding Bird Period, Late May – Early July				
ABB1	S03 , S09	3	0	
Open Country Bird Breeding Habitat Open Country Indicator Species, Breeding Bird Period, Late May – Early July				
OCB2	S03 , S05 , S09, S11, S16, S20, S34	7	0	
OCB3	S01 , S22 , S04, S29, S31	5	0	
OCB4	S31	0	0	
OCB5	S36 , S19, S21, S37	5	0	
OCB6	S02 , S07 , S14 , S27, S37	6	0	
OCB7	\$18 , \$13, \$26, \$30	5	0	
OCB8	S28	5	0	
Shrub/Early Successional Bird Breeding Habitat Shrub/Early Successional Indicator Species, Breeding Bird Period, Late May – Early July				
SSB4	S07 , S18 , S13	5	0	
SSB5	S22	3	0	

^{1:} Turbines in bold font are those searched twice-weekly from May to October for bird mortalities.

No target species (i.e. indicator species during the appropriate significant seasonality for the Significant Wildlife Habitat) mortalities were documented at any turbines within 120m of significant Marsh Bird Breeding Habitat, Woodland Area-sensitive Bird Breeding Habitat, Open Country Bird Breeding Habitat, or Shrub/Early Successional Bird Breeding Habitat. However, some mortalities of migratory landbirds were documented during migration at turbines located within 120m of significant Landbird Migratory Stopover Areas, including:

- ML1: One (1) migratory raptor during the migratory period across the two (2) turbines located within 120m of the habitat (American Kestrel, Falco sparverius, May 21);
- ML2: One (1) migratory songbird during the migratory period at the one (1) turbine located within 120m of the habitat (Red-eyed Vireo, October 1);
- ML3: Two (2) migratory songbirds during the migratory period at the one (1) turbine located within 120m of the habitat (Palm Warbler, Setophaga palmarum, October 3 and Golden-crowned Kinglet, Regulus satrapa, October 31); and

^{2:} Target species are indicator species that are found during the appropriate seasons, as defined by the DRAFT Significant Wildlife Habitat Ecoregion 6E Criterion Schedule (OMNR 2012), which have been used to determine significance of habitats during pre-construction surveys.

ML4: Six (6) migratory songbirds during the migratory period across the five (5) turbines located within 120m of the habitat (Warbler sp., May 10; American Redstart, Setophaga ruticilla, May 31; Purple Martin, Progne subis, August 15; Bobolink, Dolichonyx oryzivorus, August 19; and two (2) Cedar Waxwings, Bombycilla cedrorum, August 29).

Overall, no more than six (6) target bird mortalities were observed at any turbine within 120m of a Significant Wildlife Habitat.

7.0 Raptor Mortality Results

7.1 Raptor Mortalities

Mortality searches for raptors were conducted once weekly in January, February, March, and December at all 26 turbines. In addition, searches were conducted twice weekly in conjunction with avian and bat mortality searches from May through October and once weekly in April and November at the subset of 10 turbines. These surveys resulted in the observation of three (3) raptor mortalities at the Amherst Island WP, including one (1) mortality of each of Peregrine Falcon (*Falco peregrinus*), Rough-legged Hawk (*Buteo lagopus*) and American Kestrel.

Raptor mortalities were documented in January (n=2) and May (n=1), and were each observed at a different turbine, including one (1) at each of S03, S04 and S05.

Of the three (3) raptor mortalities documented by NRSI biologists during the 2019 monitoring season, two (2) of these, Peregrine Falcon and Rough-legged Hawk, are provincially-tracked species in Ontario; however, the Natural Heritage Information Centre (NHIC) specifically notes that only breeding occurrences of each species are to be tracked (MNRF 2019). Since both mortalities were documented in January, well outside the breeding season, these occurrences have been considered to represent untracked records of these species and have therefore been considered the same as untracked raptor mortalities in the calculation of mortality estimates below.

A list of raptor mortalities observed during the carcass searches has been provided in Appendix IV, and turbine maps identifying the location of each observed mortality have been provided in Appendix VI.

7.2 Corrected (Estimated) Raptor Mortality

Using an assumed searcher efficiency value of 1.00 along with the compiled seasonal scavenger removal trial results for raptors, the proportion of area searched for January and May respectively (the months when raptor mortalities occurred), and direct mortality observations, the estimated raptor mortality rate is as follows:

 $C_{January}$ = 2 / (1.00*0.97*1.00) = 2 / 0.9700 = **2.06 raptors**

```
= 2.06 raptors / 26 turbines = 0.08 raptors/turbine
= 2.06 raptors / 74.3MW = 0.03 raptors/MW

C<sub>May</sub>
= 1 / (1.00*0.93*0.97) = 1 / 0.9021 = 1.11 raptors
= 1.11 raptors / 10 turbines = 0.11 raptors/turbine
= 1.11 raptors / 28.58MW = 0.04 raptors/MW
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Based on the information collected during the 2019 post-construction monitoring period, the anticipated impact of this facility on raptors is characterized by an estimated mortality rate of **0.19 raptors/turbine/year** (0.07 raptors/MW/year).

7.3 Monthly Raptor Surveys

Monthly mortality searches for raptors were conducted from May to November at the turbines which are not included in the subset of 10 turbines regularly monitored during that period. These monthly searches resulted in no additional raptor mortalities documented at the Amherst Island WP.

7.4 Mortalities Documented Near Significant Raptor Habitats

Based on the proximity of the project to significant raptor wintering area habitat, additional consideration is required for turbines within 120m of any significant bird habitat to evaluate potential effects to nearby habitats. Table 8 outlines the number of raptor mortalities documented at each turbine found within 120m of significant raptor habitat at the Amherst Island WP in 2019.

Table 8. Raptor Mortalities Documented at Turbines within 120m of Significant Raptor Habitat

Habitat Name	Turbines Within 120m ¹	Total Documented Raptor Mortalities	Target Raptor Mortalities ²	
Raptor Wintering Area Habitat Overwintering Raptors, January -March, November-December				
RWA2	S03 , S05 , S09, S11, S16, S20, S34	2	0	
RWA3	S01 , S22 , S04, S29, S31	1	1	
RWA4	S31	0	0	
RWA5	S36 , S19, S21, S37	0	0	
RWA6	S02 , S07 , S14 , S18 , S13, S26, S27, S30, S37	0	0	
RWA7	\$28 , \$26, \$33	0	0	

^{1.} Turbines in bold font are those searched once-weekly in April, twice-weekly from May to October, and once-weekly in November for raptor mortalities.

2: Target species are indicator species that are found during the appropriate seasons, as defined by the DRAFT Significant Wildlife Habitat Ecoregion 6E Criterion Schedule (OMNR 2012), which have been used to determine significance of habitats during pre-construction surveys.

Only one (1) target raptor mortality (i.e. an indicator species during the appropriate season) was documented at the Amherst Island WP. This observation was a Roughlegged Hawk found on January 15, 2019, which is during the seasonality associated with the significant raptor wintering area (RWA3).

8.0 Bat Mortality Results

8.1 Bat Mortalities

During the 2019 mortality monitoring period at the Amherst Island WP, NRSI biologists documented 35 bat mortalities within the 50m radius of the subset of 10 turbines searched. In addition, one (1) live Eastern Red Bat (*Lasiurus borealis*) and one (1) live Silver-haired Bat (*Lasionycteris noctivagans*) were encountered while completing mortality monitoring at the subset of 10 turbines. Neither bat showed any visible signs of injury and both appeared to behave normally. As a result, the bats were moved outside of the 50m search radius and placed on nearby trees. In the case of the Eastern Red Bat, a biologist returned to the relocation site the following day to check on the Eastern Red Bat and noted the bat was not present. Upon placing on a nearby tree, the Silverhaired Bat flew away immediately. As these bats are assumed to have recovered, they have not been included in the calculation of estimated mortality rates below.

Bat mortalities observed by NRSI biologists represented five (5) different species, including the resident species Big Brown Bat (*Eptesicus fuscus*) and Little Brown Myotis (*Myotis lucifugus*), as well as all three (3) long-distance migratory species; Hoary Bat, Eastern Red Bat, and Silver-haired Bat. The most abundant species observed was Eastern Red Bat (n=10), followed by Big Brown Bat (n=9), Hoary Bat (n=9), Silver-haired Bat (n=6) and Little Brown Myotis (n=1). Observed mortalities of the three (3) migratory bat species combine to represent 71% of all documented mortalities.

A detailed examination of bat mortalities at the Amherst Island WP is included in the following sections. Detailed information regarding each bat mortality observed during carcass searches has been provided in Appendix V.

8.2 Temporal Distribution of Bat Mortalities

Bat mortalities were observed throughout the monitoring period between late May and mid- to late September, but were most commonly observed during July (n=10) and August (n=17), which combined to account for 77% of all bat mortalities. No more than two (2) bat mortalities were documented on a given search day (see Figure 3).

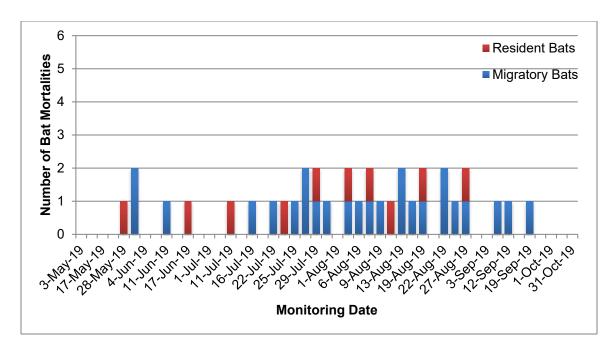


Figure 3. Bat Mortalities Observed by Date at the Amherst Island WP (2019)

Patterns of migratory bat mortalities appear to be generally consistent with the expected migratory time periods for these species, with increases in migratory bat mortalities during the mid- to late-summer. Overall, bat mortality was most commonly observed during the months of July and August, corresponding to the onset of the volant period for juvenile bats (July) and the start of the summer swarming and fall migration periods for bats (late July and August).

8.3 Spatial Distribution of Bat Mortalities

Bat mortalities were observed at nine (9) of the 10 subset turbines at the Amherst Island WP in 2019. There were no bat mortalities observed at S22. The number of mortalities observed at the remaining nine (9) turbines varied, ranging from one (1) mortality at S28 to seven (7) mortalities at S05 and S36 (Figure 4).

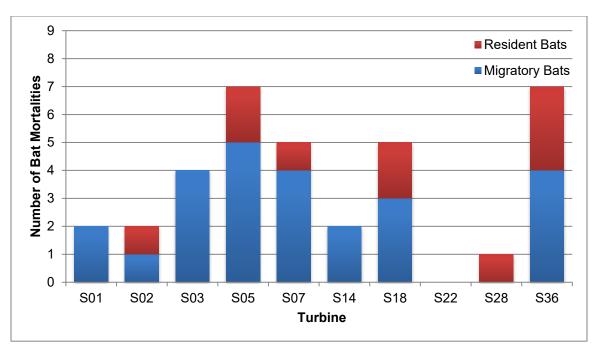


Figure 4. Bat Mortalities Observed by Turbine at the Amherst Island WP (2019)

Distance and direction of bat mortalities from each of the turbine bases were also documented for each observed mortality. Bat mortalities were found throughout the area searched by NRSI biologists, ranging in distance from 1m to 49m from the turbine base, and averaging a distance of approximately 27m from the turbine base. The overall distribution of mortalities by distance class can be seen in Figure 5. Maps identifying the locations of each observed mortality by turbine are included in Appendix VI.

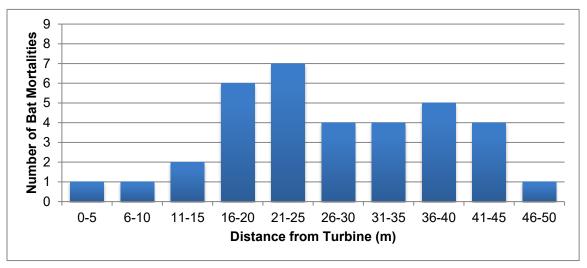


Figure 5. Bat Mortalities Observed by Distance from Turbine at the Amherst Island WP (2019)

8.4 Corrected (Estimated) Bat Mortality

Based on the field observations at the Amherst Island WP, NRSI biologists have compiled the appropriate searcher efficiency trials, scavenger removal trials, proportion of area searched, and direct mortality values in an equation that will be used to estimate the total bat mortality at the Amherst Island WP in 2019. The equation recommended by the MNRF is found below:

C = c / (Se*Sc*Ps)

C: Corrected (Estimated) Mortality Rate

c: actual observed mortalities Se: overall searcher efficiency

Sc: proportion of remaining carcasses

Ps: proportion of area searched

Using the equation and variables described above, the estimated bat mortality rates by month have been presented below:

= 3 / (0.60*0.83*0.97) = 3 / 0.4831 = 6.21 bats C_{Mav} **= 0.62 bats/turbine** (0.22 bats/MW) = 2 / (0.60*0.83*0.98) = 2 / 0.4880 = 4.10 bats C_{June} **= 0.41 bats/turbine** (0.14 bats/MW) = 10 / (0.93*0.87*0.85) = 10 / 0.6877 =**14.54 bats** C_{Julv} **= 1.45 bats/turbine** (0.51 bats/MW) = 17 / (0.93*0.87*0.85) = 17 / 0.6877 = 24.72bats C_{August} **= 2.47 bats/turbine** (0.87 bats/MW) = 3 / (1.00*0.79*0.93) = 3 / 0.7347 = 4.08 batsC_{September} **= 0.41 bats/turbine** (0.14 bats/MW) = 0 / (1.00*0.79*0.99) = 0 / 0.7900 = 0.00 bats Coctober **= 0.00 bats/turbine** (0.00 bats/MW)

Using the appropriate variables and recommended equations provided by the MNRF, NRSI has determined the corrected (estimated) bat mortality of the Amherst Island WP

in 2019. Each of the corrected monthly rates and the corrected annual mortality rate for the Amherst Island WP can be seen in Table 9.

Table 9. Corrected Bat Mortality Rates Based on Mortality Monitoring at the Amherst Island WP (2019)

Month (2019)	Observed Bat Mortalities	Corrected Mortality (bats/turbine)	Corrected Mortality (bats/MW)
May	3	0.62	0.22
June	2	0.41	0.14
July	10	1.45	0.51
August	17	2.47	0.87
September	3	0.41	0.14
October	0	0.00	0.00
TOTAL	35	5.36	1.88

Based on the information collected during the 2019 post-construction monitoring period, the anticipated impact of this facility on bats is characterized by a corrected mortality rate of **5.36 bats/turbine/year** (1.88 bats/MW/year).

9.0 Mortality Thresholds and Notifications

In accordance with the appropriate MNRF guidelines, project approval conditions, and other commitments made as part of the monitoring program, several mortality thresholds and notification requirements for the Amherst Island WP have been established. The status of each threshold and confirmation of notifications, where applicable, have been described in the following sections.

9.1 Annual Bird Mortality

The annual bird mortality threshold for the Amherst Island WP is 14 birds/turbine/year, calculated by individual turbine or turbine group. Based on an estimated rate of 4.77 birds/turbine/year, as calculated by turbine group, the Amherst Island WP remains below this threshold. Since the results are below the established threshold, no notification is required.

9.2 Annual Raptor Mortality

The annual raptor mortality threshold for the Amherst Island WP is 0.2 raptors/turbine/year (or 0.1 raptors/turbine/year for provincially tracked raptors). Based on an estimated rate of 0.19 raptors/turbine/year, and no mortalities of provincially tracked raptors during their tracked seasons, the Amherst Island WP remains below these thresholds. Since the results are below the established thresholds, no notification is required.

9.3 Annual Bat Mortality

The annual bat mortality threshold for the Amherst Island WP is 10 bats/turbine/year. Based on an estimated rate of 5.36 bats/turbine/year, the Amherst Island WP remains below this threshold. Since the results are below the established threshold, no notification is required.

9.4 Significant Bird Mortality Event

Significant bird mortality events have been defined by the MNRF as single-day mortality events with 10 or more birds at any one turbine or 33 or more birds (including raptors) at multiple turbines. Neither of these single-day mortality events was noted at the Amherst

Island WP during the 2019 monitoring year. As no significant bird mortality event occurred, no notification is required.

9.5 Bird Mortality Documented Near Significant Bird Habitats

As identified in the EEMP for the Amherst Island WP (Stantec 2013), bird mortality at turbines located within 120m of significant bird habitats should also be considered separately from project-wide mortality rates. No target bird mortalities (i.e. indicator species during the appropriate seasons within 120m of identified habitats) were documented at turbines within 120m of significant Marsh Bird Breeding Habitat, Woodland Area-sensitive Bird Breeding Habitat, Open Country Bird Breeding Habitat, or Shrub/Early Successional Bird Breeding Habitat. At the significant Landbird Migratory Stopover Area habitats, target bird mortality was not documented to be greater than six (6) target birds at turbines within 120m of any individual significant habitat in 2019, ranging from zero (0) target birds at the one (1) turbine within 120m of ML5 to a combined six (6) target bird mortalities at the five (5) turbines within 120m of ML4.

In addition, mortality of target overwintering raptors was limited to a single target mortality, a Rough-legged Hawk documented on January 15th within 120m of significant raptor overwintering area RWA3.

Based on the observed results within 120m of the applicable Significant Wildlife Habitats, there has not been significant mortality of target birds at turbines within 120m of the applicable habitats. As such, no notification is required.

9.6 Species at Risk Mortality Event

Any Species at Risk (SAR; MECP 2019) mortality documented during post-construction mortality monitoring at the Amherst Island WP requires formal notification to the MNRF and MECP within 24 hours (or next business day) of a confirmed species identification. In accordance with this requirement, a notification was sent to the MNRF and MECP within 24 hours (or next business day), following a confirmed identification of any SAR mortality at the Amherst Island WP.

10.0 Summary and Conclusions

NRSI was retained to conduct post-construction monitoring at the operational Amherst Island WP. The Amherst Island WP consists of 26 wind energy generating turbines, with a total nameplate capacity of 74.3MW.

Post-construction monitoring at the Amherst Island WP in 2019 included bird, bat and raptor mortality monitoring, and the corresponding searcher efficiency trials, scavenger removal trials, and visibility class mapping required to calculate estimated mortality rates. These surveys were conducted to assess the potential impacts of this wind energy generating facility on local and migratory birds and bats.

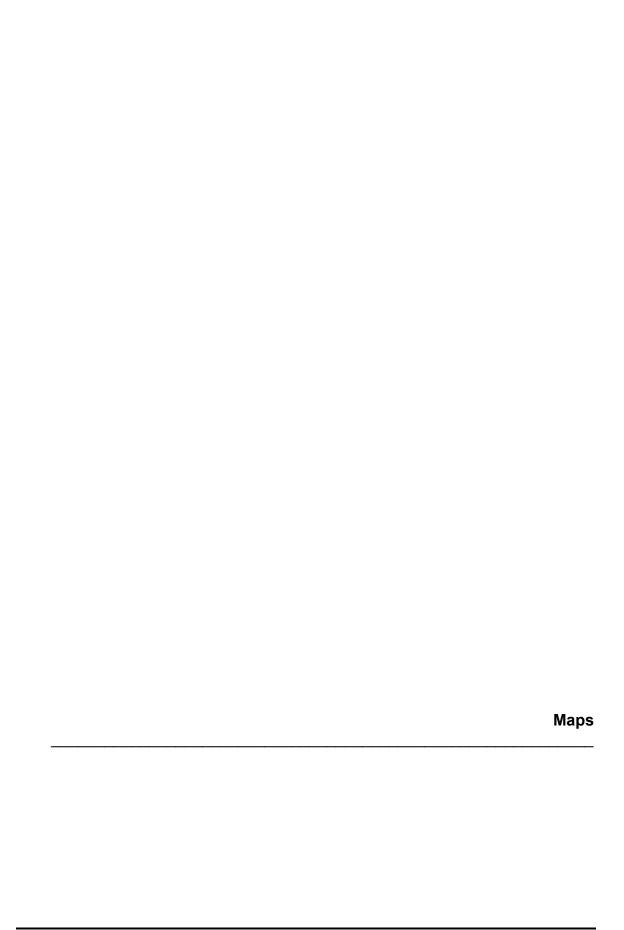
A total of 28 avian mortalities were documented at the Amherst Island WP during the 2019 monitoring period. Based on the observed avian mortalities in 2019, the potential impact of this facility was largely associated with common migratory songbirds. Given the number of observed avian mortalities, searcher efficiency rates, scavenger removal rates, proportion of area searched, and the equation recommended by the MNRF, a corrected (estimated) avian mortality rate of **4.77 birds/turbine/year** (1.66 birds/MW/year), as calculated by turbine group, has been determined for the Amherst Island WP. This estimated mortality rate is below the provincial threshold level of 14 birds/turbine/year established by the MNRF guidelines. No significant bird mortality events of 10 or more birds at any one turbine or 33 or more birds (including raptors) at multiple turbines on a single survey date were observed during the monitoring program in 2019.

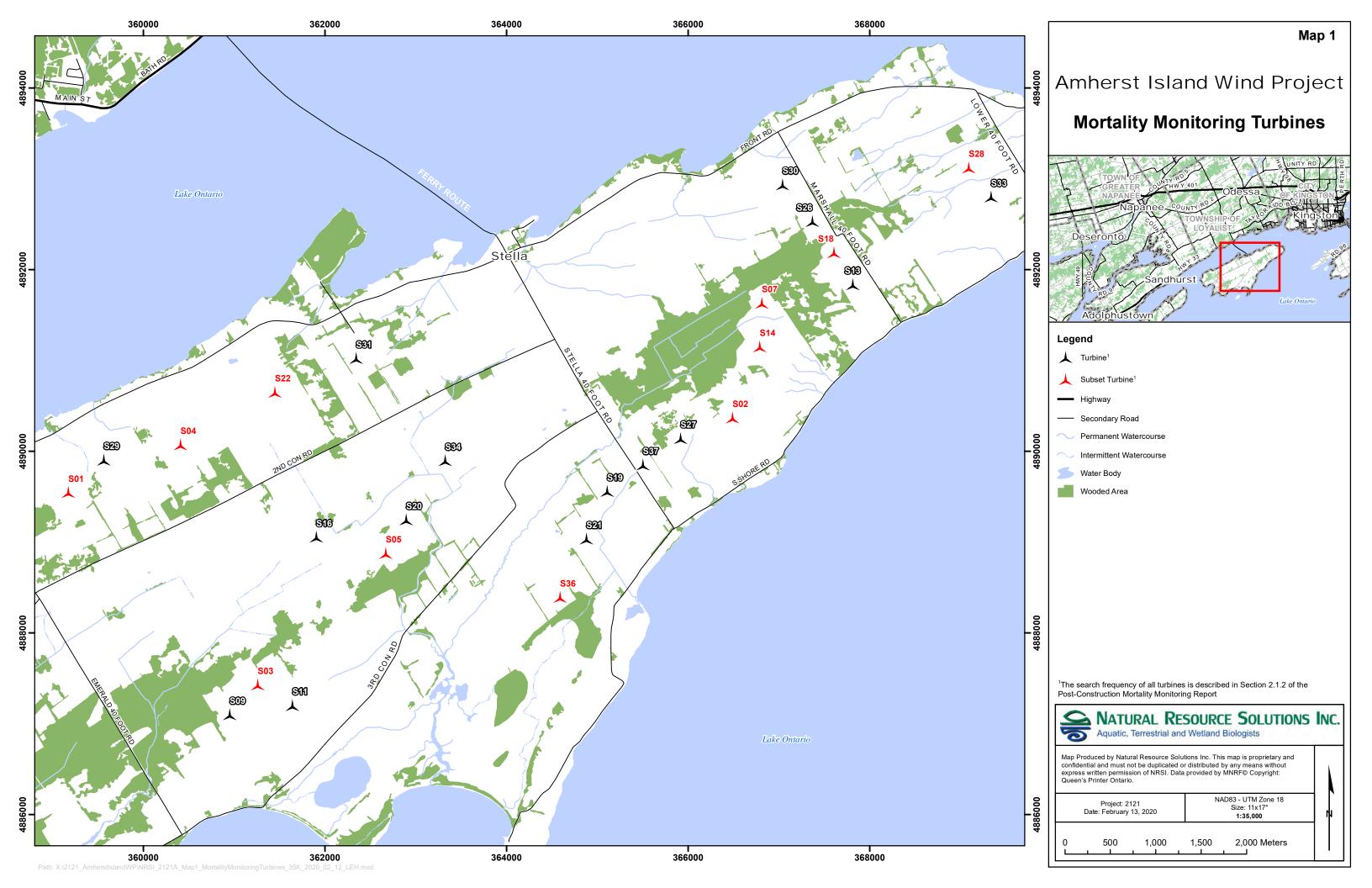
Three (3) raptor mortalities were documented at the Amherst Island WP during the 2019 monitoring period. Based on the observed raptor mortalities, a corrected (estimated) raptor mortality rate of **0.19 raptors/turbine/year** (0.07 raptors/MW/year) has been determined for the Amherst Island WP. This raptor mortality rate is below the provincial threshold level of 0.2 raptors/turbine/year established by the MNRF guidelines. No mortalities of provincially tracked raptors were observed during applicable seasons in which observations are tracked.

A total of 35 bat mortalities were documented during the 2019 mortality monitoring period at the Amherst Island WP. Migratory bat species were the most commonly observed mortalities at the project. Based on the observed bat mortalities, searcher efficiency rates, scavenger removal rates, proportion of area searched, and equations recommended by the MNRF, a corrected (estimated) bat mortality rate of **5.36** bats/turbine/year (1.88 bats/MW/year) has been determined for the Amherst Island WP. This estimated bat mortality rate is below the provincial threshold level of 10 bats/turbine/year established by the MNRF guidelines.

11.0 References

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Appendi		
Appendi		
Post-construction Monitoring Data Shee	Appendi Post-construction Monitoring Data Shee	

Bird and Bat Mortality Search Summary

Date (dd/mm/yy)://	Observer(s):	Project Name:	Project No:
Start Time (24hrs):hrs	Dog Used	Y N Days	Since Last Search (i.e. Mon to Thurs = 3 days):days
WEATHER Temp:°C Visibility: High Medium Low	Cloud Cover: % Precip: None Rain Fog	Wind Speed: Weather Comments: _ Significant Weather before visit?_	
COMMENTS (ex. wildlife notes, lar	ndowner interactions, turbine maintenance	unsearchable areas, etc.)	

SEARCH RESULTS

Sched	luled So	earch	Mortality Results.	Enter "None" if no mort	alities	found.										
Turbine #	Start Time	End Time	Sample ID (PROJ#- DDMMYY-TXX-	Species Found	Bat FA	Sex (M/F)	UT	ГМ	Dist. from Turbine	Dir. from Turbine	СС	Est. Time Since Death	Injuries	Substrate/Habitat	VC	Photo No.(s)
#	(24hr)	(24hr)	Mortality No.)		(mm)	(101/1)	Easting	Northing	(m)	(°)		(hrs)				140.(3)
			_													
																·

CC = Condition Codes: I: Injured or Dying, F: Fresh, E: Early Decomposition, M: Moderate Decomposition, A: Advanced Decomposition, C: Complete Decomposition, S: Scavenged

Injuries: Describe any injuries to the bird carcass (e.g. none observed, broken neck, broken left wing, decapitated, laceration etc.)

Substrate/Habitat Types: The material upon which the carcass was found (ex. gravel, soy, corn, open soil, mud, standing water, concrete etc.)

VC = Visibility Class Codes: Class 1: >90% bare ground, <15cm tall Class 2: >25% bare ground, <15cm tall Class 3: < 25% bare ground, <25% >30cm tall Class 4: little or no bare ground, >25% >30cm tall

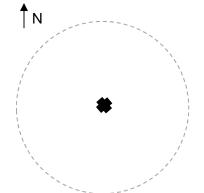
FA (mm) = Forearm Length (mm): Measure the length of the leading edge of the wing between the wrist and the elbow (mm)

Scavenger Removal Data Form

Project Name: _____ Project #: _____

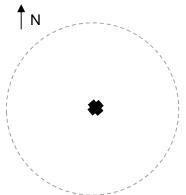
Visit #	Day	Date	Obs.	Temp (°C)	Wind Speed	Wind Direction	Precip.	Visibility	Cloud Cover (%)	Cloud Height
0	0									
1										
2										
3										
4										

Turbine No	Specimen 1:	Species Visibility Class:		Dir:	UTM:
	Specimen 2:	Species Visibility Class:	Dist:	Dir:	UTM:



			Specimen 1			Specimen 2	
Day	Time	Present	Signs of Scavenging	Photo	Present	Signs of	Photo
		Fieseiii	Scavenging	No.(s)	Fieseni	Signs of Scavenging	No.(s)

Turbine No	-	Species Visibility Class:		Dir:	UTM:
	Specimen 2:	Species Visibility Class:	Dist: Notes:	Dir:	UTM:



			Specimen 1			Specimen 2	
Day	Time	Present	Signs of	Photo	Present	Signs of	Photo
		Fieseiii	Scavenging	No.(s)	Fieseiii	Scavenging	No.(s)

Sear	cher Eff	iciency D	ata Form			Project Name:				Proj	ect #:
Date:		-	Time:	_hrs				Se	earcher:	Placed By	:
Condi	tion of Ca	rcasses:	Fresh Tha	awed	C	Carcasses marked	(and how)?_				
WEAT	ΓHER										
		°C	*Wind Spe	eed:	. V	Vind Direction (fro	m):	Visibility	: High Medium	Low	
Cloud	Cover (%):	Cloud Hei	ight: High	Medium I	Low	Precipit	ation: Rain Fo	og Snow None		
Additio	onal Weat	her or Othe	r Comments: _								
	Time Placed (24hr)	Turbine #	Species	Distance From Turbine	Direction from Turbine	Habitat/ Substrate	Visibility Class	l	JTM	Found By Searcher (Y/N)	Found After Search (Y/N)
1	, ,										
2											
3											
4											
5											
6											
7											
8											
9											
10											
hard to	walk; 9 light		nage; 10 tree uproo				ove; 5 small tree	s sway; 6 large branc	hes move; 7 whole tree	s in motion; 8 twigs	break off and
N∱											
	1	2	3		4	5	6	7	8	9	10

1	2	3	4	5	6	7	8	9	10
x	x	x	x	x	x	x	x	x	x
T#									

Visibility Class Map

Project Name:	Project #:	Turbine #:	Degree of Slope	degrees	Slope Orientation	(e.g. SSW)
Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Width:	 N	Photo Numbers (from turbine bat Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility class)		Date (DD/MM/YY):/_ Observer: Monthly/Seasonal Linear Transect Width:	
50m 40m 30m 20m 10m		Habitat Description:	50m 40m 30m 20m	10m		ral Habitat Description
	VISIBILITY CLASSES	000/ hana	estation < 45 and tall			
		≥ 90% bare ground; veg			_	
	Class 2	≥ 25% bare ground; veg	getation ≤ 15cm tall			
	Class 3	≤ ∠5% bare ground; less	s than 25% of veg. > 30cm tall			
	Class 4	∟ittle or no bare ground;	more than 25% of veg. > 30cm tall			
	Not Searchable	Dense shrubs, woods, o	or other unsearchable habitats			

Appendix Scavenger Removal Trial Resu

Appendix II 2121B Amherst Island WP 2019 Scavenger Removal Trial Results

Small Birds and Bats Trials

Spring (May/June)

Carcass	Touchin	Outsite	Distance from	Direction from	UTM (Zo	one 18T)	Visibility	T4 D	Dete	Carcass	Simo of Consuming	T
Number	Turbine	Species	Turbine Base (m)	Turbine Base (°)	Easting	Northing	Class	Test Day	Date	Present	Signs of Scavenging	Tester
								Day 0	3-May-19	Y	Carcass placed	Searcher B
								Day 4	7-May-19	Υ	None	Searcher B
1	S01	Ruby-crowned Kinglet	34	110	359207	4889539	1	Day 7	10-May-19	Υ	None	Searcher E
		,						Day 11	14-May-19	Y	None	Searcher E
								Day 14	17-May-19	Y	None	Searcher E
								Day 0	3-May-19	Y	Carcass placed	Searcher E
								Day 4	7-May-19	Y	None	Searcher E
2	S05	Hoary Bat	18	130	362685	4888871	1	Day 7	10-May-19	Y	None	Searcher I
		,						Day 11	14-May-19	Y	None	Searcher I
								Day 14	17-May-19	Y	None	Searcher I
								Day 14	3-May-19	Ÿ	Carcass placed	Searcher E
								Day 4	7-May-19	Y	None None	Searcher I
3	S07	Hoary Bat	27	15	366812	4891668	2	Day 7	10-May-19	Ÿ	None	Searcher E
Ü	007	riodiy Bat	2,	10	000012	4001000	_	Day 11	14-May-19	Y	None	Searcher I
								Day 14	17-May-19	Y	None	Searcher I
			†				-	Day 14 Day 0	3-May-19	Y	Carcass placed	Searcher
								Day 0	7-May-19	Y	None	Searcher
										Y		
4	S14	American Woodcock	46	25	366806	4891200	1	Day 7	10-May-19	Y	None	Searcher
								Day 11	14-May-19	N	Carcass removed, only a few feathers remain	Searcher I
								Day 14	17-May-19	N	No further signs	Searcher I
								Day 0	3-May-19	Υ	Carcass placed	Searcher
								Day 4	7-May-19	Υ	None	Searcher
5 S28	White-throated Sparrow	6	285	369024	4893122	1	Day 7	10-May-19	Υ	None	Searcher	
		wnite-throated Sparrow						Day 11	14-May-19	Υ	None	Searcher
								Day 14	17-May-19	Υ	None	Searcher
								Day 0	4-Jun-19	Υ	Carcass placed	Searcher
								Day 3	7-Jun-19	N	Carcass removed	Searcher
6	S02	Blackburnian Warbler	15	90	366504	4890372	2	Day 7	11-Jun-19	N	-	Searcher
								Day 9	13-Jun-19	N	-	Searcher
								Day 13	17-Jun-19	N	-	Searcher
								Day 0	4-Jun-19	Y	Carcass placed	Searcher
								Day 3	7-Jun-19	N	Carcass removed	Searcher
7	S03	Veery	23	330	361238	4887449	2	Day 7	11-Jun-19	N	-	Searcher
		,					_	Day 9	13-Jun-19	N	-	Searcher I
								Day 13	17-Jun-19	N	_	Searcher
								Day 0	4-Jun-19	Y	Carcass placed	Searcher
								Day 3	7-Jun-19	Ý	None	Searcher
8	S18	Hoary Bat	49	310	367564	4892219	2	Day 7	11-Jun-19	Y	None	Searcher
0	0.0	riodiy bat		0.10	007004	1002210	-	Day 7	13-Jun-19	N N	Carcass removed	Searcher
								Day 13	17-Jun-19	N N	Galcass lellioved	Searcher
	l I		<u> </u>	<u> </u>		l I	l I	Day 13	4-Jun-19	Y	- Carcass placed	Searcher I
									7-Jun-19	<u>ү</u> Ү		
9	S22	Eastern Red Bat	2	175	361430	4890649	1	Day 3		Y	None	Searcher
ð	322	Eastern Neu Dat		175	301430	4030049	'	Day 7	11-Jun-19	<u> Ү</u> Ү	None	Searcher
								Day 9	13-Jun-19	Y	None	Searcher
								Day 13	17-Jun-19		None	Searcher
								Day 0	4-Jun-19	Y	Carcass placed	Searcher
40	000		00	005	004576	400007:		Day 3	7-Jun-19	Y	Feathers only	Searcher
10	S36	American Robin	33	225	364572	4888371	2	Day 7	11-Jun-19	N	Feathers gone	Searcher I
								Day 9	13-Jun-19	N	-	Searcher
				I	l	l	l	Day 13	17-Jun-19	N	_	Searcher

Summer (July/August)

Carcass			Distance from	Direction from	UTM (Z	one 18T)	Visibility			Carcass		
Number	Turbine	Species	Turbine Base (m)	Turbine Base (°)	Easting	Northing	Class	Test Day	Date	Present	Signs of Scavenging	Tester
					Lusung	Horamig		Day 0	4-Jul-19	Y	Carcass placed	Searcher B
								Day 4	8-Jul-19	N	Carcass removed	Searcher B
1	S02	Tree Swallow	25	275	366464	4890369	1	Day 7	11-Jul-19	N	-	Searcher B
								Day 11	15-Jul-19	N	-	Searcher B
								Day 14	18-Jul-19	N	-	Searcher B
								Day 0	4-Jul-19	Υ	Carcass placed	Searcher B
								Day 4	8-Jul-19	N	Carcass removed	Searcher B
2	S18	Ruby-crowned Kinglet	19	65	367621	4892207	1	Day 7	11-Jul-19	N	•	Searcher B
								Day 11	15-Jul-19	N	-	Searcher B
								Day 14	18-Jul-19	N	-	Searcher B
								Day 0	4-Jul-19	Y	Carcass placed	Searcher B
_								Day 4	8-Jul-19	Y	None	Searcher B
3	S36	Silver-haired Bat	36	265	364553	4888384	1	Day 7	11-Jul-19	Y	None	Searcher B
								Day 11	15-Jul-19	Y	None	Searcher B
								Day 14	18-Jul-19	Y	None	Searcher B
								Day 0	4-Jul-19	Y	Carcass placed	Searcher E
4	S07	Tree Swallow	42	225	366786	4897602	1	Day 4	8-Jul-19 11-Jul-19	Y	None	Searcher E
4	307	Tree Swallow	42	223	300700	4097002	'	Day 7 Day 11	15-Jul-19	Y	None None	Searcher E Searcher B
								Day 14	18-Jul-19	Y	None	Searcher B
								Day 14	4-Jul-19	Y	Carcass placed	Searcher E
								Day 4	8-Jul-19	N	Carcass placed Carcass removed	Searcher E
5	S14	Hoary Bat	33	40	366808	4891190	2	Day 7	11-Jul-19	N	Carcass removed	Searcher E
Ü	0	rioury But			000000	1001100	-	Day 11	15-Jul-19	N	- -	Searcher B
								Day 14	18-Jul-19	N		Searcher B
								Day 14	1-Aug-19	Y	Carcass placed	Searcher B
								Day 3	4-Aug-19	Y	None	Searcher B
6	S28 Fox Sparrow	18	50	369106	4893135	2	Day 7	8-Aug-19	Y	None	Searcher B	
		•						Day 11	12-Aug-19	Y	None	Searcher B
								Day 14	15-Aug-19	N	Carcass removed	Searcher B
								Day 0	2-Aug-19	Y	Carcass placed	Searcher B
								Day 4	6-Aug-19	Υ	None	Searcher B
7	S01	Hoary Bat	32	20	359181	4889585	2	Day 7	9-Aug-19	Υ	None	Searcher B
								Day 11	13-Aug-19	Y	None	Searcher B
								Day 14	16-Aug-19	Υ	None	Searcher B
								Day 0	2-Aug-19	Υ	Carcass placed	Searcher B
								Day 4	6-Aug-19	Υ	None	Searcher B
8	S03	Hoary Bat	23	140	361273	4887423	1	Day 7	9-Aug-19	Υ	None	Searcher B
								Day 11	13-Aug-19	Υ	None	Searcher B
								Day 14	16-Aug-19	Υ	None	Searcher B
								Day 0	2-Aug-19	Y	Carcass placed	Searcher B
•	000	B	_		004:-:	400000		Day 4	6-Aug-19	Y	Moved slightly	Searcher B
9	S22	Black-and-white Warbler	8	25	361451	4890664	1	Day 7	9-Aug-19	Y	No further signs	Searcher B
								Day 11	13-Aug-19	Y	No further signs	Searcher B
								Day 14	16-Aug-19	Y	No further signs	Searcher B
								Day 0	9-Aug-19	Y	Carcass placed	Searcher B
10	S05	Chestnut-sided Warbler	49	70	362712	4888906	2	Day 4	13-Aug-19	Y	None	Searcher B
10	300	Onestrut-sided Warbier	49	10	302/12	4000900		Day 7 Day 11	16-Aug-19 20-Aug-19	Y N	None Carcass removed	Searcher B Searcher B
								Day 11		N N	Carcass removed	Searcher B Searcher B
			1			<u> </u>		Day 14 Day 0	23-Aug-19 15-Aug-19	Y	- Carcass placed	Searcher B
								Day 0	19-Aug-19	Y	Carcass placed None	Searcher B
11	S18	Blackburnian Warbler	40	45	367633	4892225	2	Day 4	22-Aug-19	Y	None	Searcher B
• • •	010	Didonbarrian Warbiel	40	70	00,000	7002220	_	Day 11	26-Aug-19	Y	None	Searcher B
								Day 11	29-Aug-19	Y	Wings remain	Searcher B
								Day 14 Day 0	15-Aug-19	Y	Carcass placed	Searcher B
								Day 0	19-Aug-19	Ý	None	Searcher B
12	S36	Hermit Thrush	44	335	364568	4888440	2	Day 7	22-Aug-19	Y	None	Searcher B
	200	Tioning Tillidon			55 7000	.555440	_	Day 11	26-Aug-19	Y	None	Searcher B
			ĺ			l		Day 14	29-Aug-19	Y	None	Searcher B

Fall (September/October)

arcass		0	Distance from	Direction from	UTM (Z	one 18T)	Visibility	- 45	D /	Carcass	0	
umber	Turbine	Species	Turbine Base (m)	Turbine Base (°)	Easting	Northing	Class	Test Day	Date	Present	Signs of Scavenging	Tester
								Day 0	3-Sep-19	Υ	Carcass placed	Searcher B
								Day 3	6-Sep-19	Υ	None	Searcher B
1	S01	Yellow-bellied Sapsucker	8	200	359171	4889544	2	Day 7	10-Sep-19	N	Carcass removed	Searcher B
								Day 10	13-Sep-19	N	-	Searcher B
								Day 14	17-Sep-19	N	-	Searcher B
								Day 0	3-Sep-19	Υ	Carcass placed	Searcher B
								Day 3	6-Sep-19	Υ	Scavenged, feathers only	Searcher B
2	S03	Blue Jay	36	50	361285	4887460	1	Day 7	10-Sep-19	Υ	No further signs	Searcher B
								Day 10	13-Sep-19	Υ	No further signs	Searcher B
								Day 14	17-Sep-19	Υ	No further signs	Searcher B
								Day 0	3-Sep-19	Y	Carcass placed	Searcher B
								Day 3	6-Sep-19	Y	None	Searcher B
3	S05	Hoary Bat	25	10	362669	4888906	2	Day 7	10-Sep-19	Y	None	Searcher B
								Day 10	13-Sep-19	Y	None	Searcher B
								Day 14	17-Sep-19	Υ	None	Searcher B
								Day 0	3-Sep-19	Y	Carcass placed	Searcher B
								Day 3	6-Sep-19	Y	None	Searcher B
4	S22	Silver-haired Bat	47	195	361453	4890610	1	Day 7	10-Sep-19	N	Carcass removed	Searcher B
								Day 10	13-Sep-19	N	-	Searcher B
								Day 14	17-Sep-19	N	-	Searcher B
								Day 0	5-Sep-19	Y	Carcass placed	Searcher B
								Day 4	9-Sep-19	Y	None	Searcher B
5	5 S36 Nashville Wa	Nashville Warbler	12	190	364591	4888388	1	Day 7	12-Sep-19	Y	None	Searcher B
								Day 11	16-Sep-19	N	Carcass removed	Searcher B
								Day 14	19-Sep-19	N	-	Searcher B
								Day 0	3-Oct-19	Y	Carcass placed	Searcher B
								Day 4	7-Oct-19	N N	Carcass removed	Searcher B
6	S02	Yellow-bellied Sapsucker	47	120	366536	4890360	2	Day 7	10-Oct-19	N	-	Searcher B
							_	Day 11	14-Oct-19	N	-	Searcher G
								Day 14	17-Oct-19	N	-	Searcher B
								Day 0	3-Oct-19	Y	Carcass placed	Searcher B
								Day 4	7-Oct-19	Y	None	Searcher B
7	S07	Blackburnian Warbler	19	165	366824	4891624	2	Day 7	10-Oct-19	Y	None	Searcher B
	00.	Bidonbarriidir (Varbio)			000021	100.02.	_	Day 11	14-Oct-19	Y	None	Searcher G
								Day 14	17-Oct-19	Y	None	Searcher B
	1							Day 0	3-Oct-19	Y	Carcass placed	Searcher B
			1					Day 4	7-Oct-19	Y	None	Searcher B
8	S14	Hoary Bat	31	295	366759	4891164	2	Day 7	10-Oct-19	Y	None	Searcher B
ŭ	0	riodiy Bat		200	000.00	.001101	_	Day 11	14-Oct-19	N	Carcass removed	Searcher G
								Day 11	17-Oct-19	N	- Carcass removed	Searcher B
-								Day 14 Day 0	3-Oct-19	Y	Carcass placed	Searcher B
			1					Day 4	7-Oct-19	N	Carcass placed Carcass removed	Searcher B
9	S18	Hoary Bat	9	50	367617	4892196	1	Day 4 Day 7	10-Oct-19	N N	Carcass removed	Searcher B
,	0.0	riodry Dat		00	307017	4002100	·	Day 11	14-Oct-19	N	-	Searcher G
			1					Day 11	17-Oct-19	N N	<u> </u>	Searcher B
				<u> </u>		l	l I			Y		Searcher B
			1					Day 0 Day 4	3-Oct-19 7-Oct-19	Y	Carcass placed None	Searcher B Searcher B
10	S28	Chestnut-sided Warbler	30	150	369121	4893119	1			Y		
10	320	Chestilut-sided warbler	30	150	309121	4093119	'	Day 7	10-Oct-19		None	Searcher B
	l		1					Day 11	14-Oct-19	Y	None	Searcher G Searcher B
								Day 14	17-Oct-19	Y	Carcass moved	_

Raptor Trials

Winter 1 (January-April)

Carcass		01	Distance from	Direction from	UTM (Zo	one 18T)	Visibility			Carcass		
Number	Turbine	Species	Turbine Base (m)	Turbine Base (°)	Easting	Northing	Class	Test Day	Date	Present	Signs of Scavenging	Tester
								Day 0	11-Jan-19	Y	Carcass placed	Searcher A
								Day 6	17-Jan-19	Υ	None	Searcher A
1	S30	Red-tailed Hawk	37	315	367004	4892950	1	Day 14	25-Jan-19	Υ	None	Searcher A
								Day 20	31-Jan-19	Y	None	Searcher A
								Day 28	8-Feb-19	Y	None	Searcher A
								Day 0	17-Jan-19	Υ	Carcass placed	Searcher A
								Day 8	25-Jan-19	Y	None	Searcher A
2	S33	Red-tailed Hawk	18	114	369355	4892802	1	Day 14	31-Jan-19	Υ	None	Searcher A
								Day 22	8-Feb-19	Υ	None	Searcher A
								Day 29	15-Feb-19	Υ	None	Searcher A
								Day 0	25-Jan-19	Y	Carcass placed	Searcher A
								Day 6	31-Jan-19	Υ	None	Searcher A
3	S13	Turkey Vulture	30	275	367783	4891835	1	Day 14	8-Feb-19	Υ	None	Searcher A
								Day 21	15-Feb-19	Υ	None	Searcher A
								Day 28	22-Feb-19	Υ	None	Searcher A
								Day 0	30-Jan-19	Y	Carcass placed	Searcher A
								Day 7	6-Feb-19	Υ	Carcass moved slightly	Searcher A
4	S34	Red-tailed Hawk	7	14	363332	4859898	1	Day 15	14-Feb-19	Υ	No further signs	Searcher A
								Day 20	19-Feb-19	Υ	No further signs	Searcher A
								Day 27	26-Feb-19	Υ	No further signs	Searcher A
								Day 0	8-Feb-19	Υ	Carcass placed	Searcher A
								Day 6	14-Feb-19	Υ	None	Searcher A
5	S19	Turkey Vulture	47	76	365149	4889584	2	Day 12	20-Feb-19	Υ	None	Searcher A
								Day 19	27-Feb-19	Υ	None	Searcher A
								Day 26	6-Mar-19	Υ	None	Searcher A
								Day 0	8-Feb-19	Υ	Carcass placed	Searcher A
								Day 6	14-Feb-19	Y	None	Searcher A
6	S19	Red-tailed Hawk	32	302	365071	4889567	2	Day 12	20-Feb-19	N	Carcass removed	Searcher A
								Day 19	27-Feb-19	N	-	Searcher A
								Day 26	6-Mar-19	N	-	Searcher A
								Day 0	14-Feb-19	Y	Carcass placed	Searcher A
								Day 6	20-Feb-19	Y	None	Searcher A
7	S27	Red-tailed Hawk	50	125	365958	4890113	1	Day 13	27-Feb-19	Y	Carcass moved slightly	Searcher A
								Day 20	6-Mar-19	Y	No further signs	Searcher A
							<u> </u>	Day 28	14-Mar-19	Y	No further signs	Searcher A
			ĺ					Day 0	20-Feb-19	Y	Carcass placed	Searcher A
								Day 7	27-Feb-19	Y	Carcass moved slightly	Searcher A
8	S09	Turkey Vulture	14	35	360952	4887120	1	Day 14	6-Mar-19	Y	No further signs	Searcher A
			ĺ					Day 22	14-Mar-19	Y	Carcass moved slightly	Searcher A
								Day 29	21-Mar-19	Y	No further signs	Searcher A
			ĺ					Day 0	26-Feb-19	Y	Carcass placed	Searcher A
•	000	T 1 1/1	50	400	050506	400000		Day 7	5-Mar-19	Y	None	Searcher A
9	S29	Turkey Vulture	50	190	359563	4889860	1	Day 15	13-Mar-19	Y	None	Searcher A
			ĺ			Ì		Day 22	20-Mar-19	Y	None	Searcher A
								Day 29	27-Mar-19	Y	None	Searcher A
			1					Day 0	5-Mar-19	Y	Carcass placed	Searcher A
40	040	B 11 7 111 1	50	0.40	004005	400000-		Day 8	13-Mar-19	Y	None	Searcher A
10	S16	Red-tailed Hawk	50	248	361863	4889035	1	Day 15	20-Mar-19	Y	None	Searcher A
			1					Day 22	27-Mar-19	Y	None	Searcher A
			1	I			l	Day 38	12-Apr-19	Υ	None	Searcher B

Spring/Summer/Fall (May-October)

		l (May-October)			LITM /7	one 18T)						
Carcass Number	Turbine	Species	Distance from Turbine Base (m)	Direction from Turbine Base (°)		1	Visibility Class	Test Day	Date	Carcass Present	Signs of Scavenging	Tester
					Easting	Northing	0.000					
								Day 0 Day 4	3-May-19 7-May-19	Y	Carcass placed None	Searcher B Searcher B
								Day 4 Day 7	10-May-19	Y	None	Searcher B
1	S36	Mallard	41	175	364611	4888360	2	Day 11	14-May-19	Y	Carcass partially eaten	Searcher B
								Day 14	17-May-19	N N	Carcass removed, some feathers remain.	Searcher B
								Day 0	3-May-19	Υ	remain. Carcass placed	Searcher B
								Day 4	7-May-19	Ÿ	None	Searcher B
2	S22	Turkey Vulture	27	215	361426	4890637	1	Day 7	10-May-19	Y	None	Searcher B
		,						Day 11	14-May-19	Y	None	Searcher B
								Day 14	17-May-19	Υ	None	Searcher B
								Day 0	4-Jun-19	Υ	Carcass placed	Searcher B
								Day 3	7-Jun-19	Υ	None	Searcher B
3	S05	Turkey Vulture	14	200	362669	4888867	1	Day 7	11-Jun-19	Y	None	Searcher E
								Day 10	14-Jun-19	Υ	None	Searcher E
								Day 14	17-Jun-19	Y	None	Searcher E
								Day 0	4-Jun-19	Y	Carcass placed	Searcher B
4	S01	Mallard	38	285	359135	4889559	2	Day 4 Day 7	7-Jun-19 11-Jun-19	Y Y	None Some feathers moved	Searcher B Searcher E
-	501	wallalu	30	200	000100	4000000	_	Day 11	14-Jun-19	Y	No further signs	Searcher E
								Day 11	17-Jun-19	Y	No further signs No further signs	Searcher E
						ĺ		Day 14	4-Jul-19	Y	Carcass placed	Searcher E
								Day 4	8-Jul-19	Y	Carcass moved	Searcher E
5	S28	Red-tailed Hawk	43	115	369136	4893117	2	Day 7	11-Jul-19	N	Carcass removed	Searcher E
								Day 11	15-Jul-19	N	-	Searcher B
								Day 14	18-Jul-19	N	-	Searcher B
								Day 0	4-Jul-19	Υ	Carcass placed	Searcher E
								Day 4	8-Jul-19	Υ	Carcass moved	Searcher E
6	S01 Ma	Mallard	25	205	359167	4889526	1	Day 7	11-Jul-19	Y	None	Searcher E
								Day 11	15-Jul-19	Y	None	Searcher B
								Day 14	18-Jul-19	Y	None	Searcher B
								Day 0	1-Aug-19	Y Y	Carcass placed	Searcher B
7	S02	Red-tailed Hawk	8	35	366495	4890380	1	Day 4 Day 7	4-Aug-19 8-Aug-19	<u>ү</u> Ү	None None	Searcher B Searcher B
,	302	rteu-taileu i lawk	0	33	300433	4030300	'	Day 11	12-Aug-19	Y	None	Searcher B
								Day 14	15-Aug-19	Y	None	Searcher B
								Day 0	1-Aug-19	Y	Carcass placed	Searcher B
								Day 4	4-Aug-19	Y	None	Searcher B
8	S14	Turkey Vulture	46	120	366833	4891136	2	Day 7	8-Aug-19	Υ	None	Searcher B
								Day 11	12-Aug-19	Υ	None	Searcher B
								Day 14	15-Aug-19	N	Carcass removed	Searcher B
								Day 0	5-Sep-19	Υ	Carcass placed	Searcher B
								Day 4	9-Sep-19	Υ	None	Searcher B
9	S07	Mallard	45	250	366776	4891608	2	Day 7	12-Sep-19	Υ	Skin and feathers gone around the neck	Searcher B
								Day 11	16-Sep-19	Υ	No further signs	Searcher B
								Day 14	19-Sep-19	Υ	No further signs	Searcher B
								Day 0	5-Sep-19	Y	Carcass placed	Searcher B
								Day 4	9-Sep-19	Y	None	Searcher B
10	S18	Red-tailed Hawk	18	185	367592	4892185	1	Day 7 Day 11	12-Sep-19 16-Sep-19	Y Y	None Carcass moved, wings/skeleton remain	Searcher B Searcher B
								Day 14	19-Sep-19	Y	No further signs	Searcher B
								Day 14	4-Oct-19	Ÿ	Carcass placed	Searcher B
								Day 3	7-Oct-19	Y	None	Searcher B
11	S05	Turkey Vulture	25	330	362655	4888905	1	Day 6	10-Oct-19	Υ	None	Searcher B
		-						Day 10	14-Oct-19	Υ	None	Searcher G
						<u> </u>		Day 13	17-Oct-19	Υ	None	Searcher B
-								Day 0	4-Oct-19	Υ	Carcass placed	Searcher B
								Day 3	7-Oct-19	Υ	None	Searcher B
12	S22	Red-tailed Hawk	36	355	361442	4890694	2	Day 6	10-Oct-19	Y	None	Searcher B
								Day 10	14-Oct-19	Y	None	Searcher G
	1		1	l		l		Day 13	17-Oct-19	Υ	None	Searcher B

Winter 2 (November-December)

Carcass	Turbine	Species	Distance from	Direction from	UTM (Zo	one 18T)	Visibility	Test Day	Date	Carcass	Signs of Scavenging	Tester
Number	Turbine	Species	Turbine Base (m)	Turbine Base (°)	Easting	Northing	Class	Test Day	Date	Present	Signs of Scavenging	rester
								Day 0	14-Nov-19	Y	Carcass placed	Searcher B
								Day 7	21-Nov-19	Υ	None	Searcher B
1	S18	Turkey Vulture	28	55	367321	4892216	1	Day 14	28-Nov-19	N	Carcass removed	Searcher B
								Day 22	6-Dec-19	N	-	Searcher B
								Day 29	13-Dec-19	N	-	Searcher B
								Day 0	14-Nov-19	Υ	Carcass placed	Searcher B
								Day 7	21-Nov-19	N	Carcass removed	Searcher B
2	2 S28	Turkey Vulture	7	340	369085	4893134	2	Day 14	28-Nov-19	N	-	Searcher B
								Day 22	6-Dec-19	N	-	Searcher B
								Day 29	13-Dec-19	N	-	Searcher B
								Day 0	3-Dec-19	Y	Carcass placed	Searcher B
								Day 6	9-Dec-19	N	Carcass removed	Searcher B
3	S04	Mallard	18	95	360428	4890076	2	Day 14	17-Dec-19	N	-	Searcher B
l								Day 19	22-Dec-20	N	-	Searcher B
								Day 30	2-Jan-20	N	-	Searcher B
								Day 0	13-Dec-19	Υ	Carcass placed	Searcher B
	4 S11							Day 5	18-Dec-19	Y	None	Searcher B
4		Turkey Vulture	49	160	361674	4887167	1	Day 9	22-Dec-19	Υ	None	Searcher B
4	311	ruikey vulture	49	100	301074	4007107	'	Day 20	2-Jan-20	Υ	None	Searcher B
		•	49					Day 27	9-Jan-20	N	Carcass removed, canid paw prints in the snow	Searcher B

Annandiy III	
Appendix III Searcher Efficiency Trial Results	

Appendix III 2121B Amherst Island Wind Project 2019 Searcher Efficiency Trial Results

Spring 2019 Searcher Efficiency Trial

Date	Searcher	No.	Turbine	Species	Distance	Direction (°)	General Habitat	Visibility	UTN	I (18T)	Found	Scavenged
Date	Seal Cilei	NO.	Turbine	Species	(m)	Direction ()	General Habitat	Class	Easting	Northing	(Y/N)	(Y/N)
7/May/19	Searcher B	1	S02	Hoary Bat	36	190	Bare soil	1	366483	4890337	Υ	-
7/May/19	Searcher B	2	S36	White-throated Sparrow	25	30	Gravel	1	364599	4888422	Υ	-
10/May/19	Searcher B	3	S07	Veery	20	20	Grass	2	366816	4891665	N	N
10/10lay/19	Searcher B	4	S28	Hoary Bat	6	75	Gravel	1	369099	4893128	N	N
		5	S03	Yellow-bellied Sapsucker	39	290	Grass	2	361216	4887438	Υ	-
16/May/19	Searcher B	6	S01	Golden-crowned Kinglet	47	180	Bare soil	1	359171	4889503	N	N
		7	S22	Eastern Red Bat	43	40	Grass	2	361455	4890703	N	N
		8	S18	Hoary Bat	5	5	Gravel	1	367611	4892202	Υ	-
24/May/19	Searcher B	9	S28	American Robin	28	310	Weeds	2	369083	4893145	Υ	-
		10	S02	Hoary Bat	14	90	Weeds	2	366498	4890372	N	N
		11	S01	Fox Sparrow	25	250	Weeds	2	359149	4889533	Υ	-
4/Jun/19	Searcher B	12	S22	Hoary Bat	40	145	Gravel	1	361473	4890624	Υ	-
		13	S05	Yellow-bellied Sapsucker	12	280	Weeds	2	362652	4888879	Υ	-
		14	S14	Yellow-bellied Sapsucker	30	20	Weeds	2	366794	4891190	Υ	=
17/Jun/19	Searcher B	15	S07	Fox Sparrow	47	290	Weeds	2	366763	4891641	Υ	-
		16	S02	Hoary Bat	38	180	Bare soil	1	366494	4890335	Υ	-
		17	S14	Hoary Bat	48	30	Grass	2	366805	4891205	N	N
24/Jun/19	Searcher B	18	S28	Tree Swallow	14	50	Bare soil	1	369103	4893134	N	N
		19	S18	Yellow-bellied Sapsucker	46	320	Grass	2	367574	4892227	Υ	=
27-Jun-19	Searcher B	20	S02	Hoary Bat	27	275	Bare soil	1	366462	4890378	N	N

Spring 2019 Searcher Efficiency Trial Continued

Dete	0	N-	Touching	Outsites	Distance	Di(0)	0	Visibility	UTM	(18T)	Found	Scavenged
Date	Searcher	No.	Turbine	Species	(m)	Direction (°)	General Habitat	Class	Easting	Northing	(Y/N)	(Y/N)
		1	S22	Fox Sparrow	41	200	Weeds	2	361428	4890620	Υ	-
13-Jun-19	Searcher E	2	S01	Hoary Bat	5	120	Gravel	1	359180	4889550	N	N
		3	S36	Black-and-white Warbler	24	250	Bare soil	1	364546	4888396	N	N
		4	S05	Yellow Warbler	37	335	Weeds	2	362656	4888915	N	N
17-Jun-19	Searcher E	5	S22	Hoary Bat	17	270	Gravel	1	361429	4890652	Υ	-
		6	S01	Yellow-bellied Sapsucker	43	210	Weeds	2	359173	4889508	Υ	-
		7	S36	Hoary Bat	17	60	Grass	2	364603	4888411	Υ	-
20-Jun-19	Searcher E	8	S03	Tree Swallow	36	295	Grass	2	361225	4887447	Υ	-
		9	S01	Nashville Warbler	48	200	Gravel	1	359189	4889510	Υ	-
		10	S05	Ruby-crowned Kinglet	24	135	Gravel	1	362690	4888882	N	N
24-Jun-19	Searcher E	11	S03	Hoary Bat	14	95	Gravel	1	361273	4887443	N	N
		12	S36	Hermit Thrush	35	210	Weeds	2	364557	4888419	Υ	-
		13	S05	Hoary Bat	27	185	Grass	2	362663	4888856	Y	-
27-Jun-19	Searcher E	14	S22	Yellow-bellied Sapsucker	5	40	Gravel	1	361455	4890660	Υ	-
		15	S03	Tree Swallow	49	95	Gravel	1	361302	4887436	N	N

Summer 2019 Searcher Efficiency Trial

Date	Casushau	No.	Turbine	Cuesias	Distance	Direction (9)	General Habitat	Visibility	UTN	I (18T)	Found	Scavenged
Date	Searcher	NO.	Turbine	Species	(m)	Direction (°)	General Habitat	Class	Easting	Northing	(Y/N)	(Y/N)
		1	S36	Yellow-bellied Sapsucker	34	50	Weeds	2	364619	4888415	Υ	-
8-Jul-19	Searcher B	2	S02	Hoary Bat	26	245	Gravel	1	366465	4890359	Υ	-
		3	S18	Nashville Warbler	3	140	Concrete	1	367612	4892190	Υ	-
9-Jul-19	Searcher B	4	S22	Hoary Bat	48	50	Weeds	2	361478	4890692	Υ	-
9-Jul-19	Searcher B	5	S05	House Sparrow	24	20	Gravel	1	362678	4888905	Υ	-
		6	S02	Hoary Bat	7	25	Weeds	2	366494	4890381	Υ	-
11-Jul-19	Searcher B	7	S02	Hermit Thrush	35	245	Gravel	1	366463	4890349	Υ	-
		8	S36	Fox Sparrow	17	280	Weeds	2	346567	4888394	Υ	-
12-Jul-19	Searcher B	9	S01	Hoary Bat	16	115	Gravel	1	359192	4889550	Υ	-
12-Jul-19	Searcher B	10	S03	Tree Swallow	41	30	Weeds	2	361280	4887485	Υ	-
		11	S18	Baltimore Oriole	41	320	Grass	2	367573	4892222	N	Υ
15-Aug-19	Searcher B	12	S28	Nashville Warbler	20	240	Grass	2	369077	4893114	Υ	-
		13	S02	Silver-haired Bat	37	190	Bare Soil	1	366498	4890338	N	N
		14	S03	Blue-headed Vireo	32	120	Gravel	1	361286	4887423	Υ	-
16-Aug-19	Searcher B	15	S01	Hoary Bat	12	265	Grass	2	359167	4889544	N	Υ
		16	S22	Tree Swallow	42	110	Bare Soil	1	361491	4890660	N	Υ
		17	S18	Blue Jay	27	180	Bare Soil	1	367603	4892165	Υ	-
26-Aug-19	Searcher B	18	S07	Yellow-bellied Sapsucker	43	50	Grass	2	366833	4891680	Υ	-
		19	S36	Silver-haired Bat	9	260	Bare Soil	1	364583	4888394	Υ	-
		20	S05	Hoary Bat	33	100	Weeds	2	362699	4888876	Υ	-
27-Aug-19	Searcher B	21	S22	Black-and-white Warbler	12	220	Gravel	1	361440	4890647	Υ	-
		22	S01	Hoary Bat	42	300	Weeds	2	359127	4889549	Υ	-

Date	Caarabar	N-	Turbine	Cassias	Distance	Divertion (%)	General Habitat	Visibility	UTM	I (18T)	Found	Scavenged
Date	Searcher	No.	Turbine	Species	(m)	Direction (°)	General Habitat	Class	Easting	Northing	(Y/N)	(Y/N)
		1	S07	Fox Sparrow	46	255	Grass	2	366768	4891616	Υ	-
4-Jul-19	Searcher E	2	S14	Hoary Bat	5	40	Gravel	1	366798	4891161	Υ	=
		3	S28	Yellow Warbler	27	125	Gravel	1	369116	4893115	Υ	=
		4	S22	Yellow-bellied Sapsucker	14	90	Grass	2	361461	4890657	Υ	=
5-Jul-19	Searcher E	5	S01	Hoary Bat	39	210	Weeds	2	359164	4889514	N	N
		6	S01	Black-and-white Warbler	9	30	Gravel	1	359178	4889559	N	N
		7	S07	Hoary Bat	37	215	Gravel	1	366787	4891606	Υ	-
8-Jul-19	Searcher E	8	S14	Yellow-bellied Sapsucker	12	160	Weeds	2	366796	4891147	Υ	=
		9	S28	Wilson's Warbler	27	60	Weeds	2	369119	4893129	Υ	=
		10	S03	Hoary Bat	41	295	Grass	2	361218	4887448	Υ	=
9-Jul-19	Searcher E	11	S03	Yellow-bellied Sapsucker	5	40	Gravel	1	361261	4887427	Υ	=
		12	S01	Hermit Thrush	32	155	Gravel	1	359188	4889523	Υ	=
		13	S07	White-throated Sparrow	46	220	Grass	2	366783	4891599	N	Ν
11-Jul-19	Searcher E	14	S14	Wilson's Warbler	24	40	Gravel	1	366810	4891179	Υ	=
		15	S28	Hoary Bat	13	100	Gravel	1	369104	4893124	Y	-

Fall 2019 Searcher Efficiency Trial

Date	0	NI-	Touching	Omerica	Distance	Di(0)	0	Visibility	UTM	1 (18T)	Found	Scavenged
Date	Searcher	No.	Turbine	Species	(m)	Direction (°)	General Habitat	Class	Easting	Northing	(Y/N)	(Y/N)
		1	S14	Hoary Bat	16	50	Gravel	1	366801	4891171	Υ	-
5-Sep-19	Searcher B	2	S02	Fox Sparrow	44	155	Grass	2	366505	4890334	Υ	-
		3	S36	Blue-headed Vireo	42	285	Bare Soil	1	364553	4888416	Υ	-
		4	S28	American Robin	22	225	Weeds	2	369084	4893112	Υ	-
12-Sep-19	Searcher B	5	S14	Hoary Bat	37	320	Weeds	2	366762	4891185	Υ	-
		6	S07	Hermit Thrush	7	340	Gravel	1	366808	4891647	Υ	-
		7	S22	Silver-haired Bat	21	150	Gravel	1	361458	4890642	Υ	-
13-Sep-19	Searcher B	8	S01	Blue-headed Vireo	43	300	Weeds	2	359132	4889571	Υ	-
		9	S05	White-throated Sparrow	12	320	Gravel	1	362660	4888891	Υ	-
24-Sep-19	Searcher B	10	S03	Hoary Bat	35	140	Grass	2	361285	4887411	Υ	-
		11	S22	Hoary Bat	19	130	Gravel	1	361460	4890646	Υ	-
4-Oct-19	Searcher B	12	S01	Yellow-bellied Sapsucker	28	200	Weeds	2	359165	4889524	Υ	-
		13	S03	Wilson's Warbler	39	95	Gravel	1	361293	4887414	Υ	-
		14	S36	Fox Sparrow	45	20	Gravel	1	364600	4888444	Υ	-
17-Oct-19	Searcher B	15	S02	Hoary Bat	9	300	Weeds	2	366479	4890378	Υ	-
		16	S07	Yellow-bellied Sapsucker	25	145	Weeds	2	366831	4891619	Υ	-
21-Oct-19	Searcher B	17	S28	Hoary Bat	46	240	Grass	2	369074	4893083	Υ	-
21-001-19	Searcher B	18	S18	Ruby-crowned Kinglet	38	60	Gravel	1	367623	4892232	Υ	-
24-Oct-19	Searcher B	19	S14	Nashville Warbler	34	350	Grass	2	366768	4891183	Υ	-
24-061-18	Searcher B	20	S05	Hoary Bat	49	60	Gravel	1	362691	4888928	Υ	-

Annendiy IV	
Appendix IV Avian Mortalities	

Visibility Class: 1 ≥90% bare ground, vegetation ≤15cm tall

2 ≥25% bare ground, vegetation ≤15cm tall

3 ≤25% bare ground, ≤25% of vegetation is >30cm tall 4 little or no bare ground, ≥ 25% of vegetation is >30cm tall E Early decomposition M Moderate decomposition

A Advanced decomposition

C Complete Decomposition

S Scavenged

F Freshly dead

Condition Code: I Injured or dying

																			S	Scavenged		
Date	Turbine	Start Time	End Time	Dog Used (Y/N)	Days Since Last Search	Temp.	Cloud Cover (%)	Precipitation	Wind Speed (Beaufort Scale)	Wind Direction	Species	Sample ID	Sex (M/F/U)	Easting	Northing	Distance from Turbine (m)	Direction from Turbine (°)	Condition Code	Estimated Time Since Death (hrs)	Observed Injuries	Substrate/ Habitat	Visibility Class
7-May-19	S03	8:30	9:00	N	4	12	100	Rain	3	WSW	European Starling	2121B-070519-S03-01	U	361244	4887445	14	335	E	96	Only one wing and a leg found	Bare soil	1
10-May-19	S14	14:40	15:10	N	3	12	100	Rain	4	sw	Warbler sp.	2121B-100519-S14-01	U	366756	4891175	37	290	Е	48	Laceration and broken wing	Bare soil	1
24-May-19	S01	9:25	9:55	N	3	12	80	None	2	s	Red-eyed Vireo	2121B-240519-S01-01	U	359218	4889532	49	130	F	6	Broken neck	Bare soil	1
24-May-19	S22	10:10	10:40	N	3	12	80	None	2	s	Bay-breasted Warbler	2121B-240519-S02-02	М	361471	4890666	28	80	Е	48	Broken wing and leg, laceration on left side	Bare soil	1
28-May-19	S22	8:15	8:45	N	4	10	100	Rain	4	ENE	Swainson's Thrush	2121B-280519-S22-01	U	361483	4890669	38	85	Е	24	Broken neck	Bare soil	1
31-May-19	S22	15:25	15:55	N	3	12	30	None	2	NE	Magnolia Warbler	2121B-310518-S22-01	F	361433	4890626	35	220	М	48	Laceration on left side	Bare soil	1
31-May-19	S14	16:50	17:20	N	3	12	30	None	2	NE	American Redstart	2121B-310518-S14-01	М	366830	4891153	39	110	Α	72	Body lacerations	Bare soil	1
4-Jun-19	S03	11:40	12:10	N	4	9	90	None	4	s	Wilson's Snipe	2121B-040619-S03-01	U	361218	4887450	46	310	F	6	Broken neck	Grass	2
4-Jun-19	S14	12:26	12:56	N	4	14	99	None	4	ssw	Wilson's Snipe	2121B-040619-S14-01	U	366827	4891158	35	70	E	48	None apparent	Bare soil	2
13-Jun-19	S28	13:15	13:45	N	2	12	100	None	4	SSE	Swallow sp.	2121B-130619-S28-01	U	369046	4893121	45	230	F	24	Only the tail found	Bare soil	1
17-Jun-19	S28	13:10	13:40	N	4	21	10	None	2	SE	Red-eyed Vireo	2121B-170619-S28-01	U	369110	4893118	20	120	Α	720	None apparent	Gravel	1
17-Jun-19	S02	15:45	16:15	N	4	21	10	None	2	SE	Wilson's Snipe	2121B-170619-S02-01	U	366478	4890337	38	210	F	10	Broken neck	Bare soil	1
27-Jun-19	S14	15:30	16:00	N	3	27	20	None	4	ssw	Tree Swallow	2121B-270619-S14-01	U	366759	4891139	42	240	s	48	Only wings remain	Grass	2
9-Jul-19	S05	12:25	13:05	N	4	25	5	None	3	ssw	Tree Swallow	2121B-090719-S05-01	J	362708	4888901	42	60	F	24	Laceration on left leg	Gravel	1
16-Jul-19	S05	10:55	11:35	N	4	26	30	None	4	SSE	Killdeer	2121B-160719-S05-02	U	362625	4888885	40	290	Α	240	Feathers only	Weeds	2
29-Jul-19	S18	6:55	7:35	N	4	26	20	None	3	ssw	Killdeer	2121B-290719-S18-01	U	367571	4892211	38	285	E	72	Broken neck	Weeds	2
15-Aug-19	S18	9:30	10:10	N	3	20	0	None	3	E	Purple Martin	2121B-150819-S18-01	J	367602	4892198	2	340	F	24	Lacerated abdomen	Gravel	1
19-Aug-19	S07	15:25	16:05	N	4	25	50	None	4	sw	Bobolink	2121B-190819-S07-02	F or J	366805	4891672	35	355	F	24	None apparent	Weeds	2
29-Aug-19	S18	8:10	8:50	N	3	22	75	None	4	sw	Cedar Waxwing	2121B-290819-S18-01	М	367629	4892190	22	105	E	24	Lower half missing, upper body in two parts	Gravel	1
29-Aug-19	S18	8:10	8:50	N	3	22	75	None	4	sw	Cedar Waxwing	2121B-290819-S18-02	М	367623	4892190	19	115	F	24	Broken neck	Gravel	1
29-Aug-19	S28	9:10	9:50	N	3	22	75	None	4	sw	Bobolink	2121B-290819-S28-01	F or J	369099	4893125	11	120	F	4	None apparent	Gravel	1
2-Sep-19	S28	8:05	8:45	N	4	20	100	Rain	2	w	Passerine sp.	2121B-020919-S28-01	U	369125	4893143	34	50	s	72	Only a wing found	Grass	2
17-Sep-19	S03	10:50	11:30	N	4	12	10	None	2	Е	Killdeer	2121B-170919-S03-01	U	361247	4887480	43	0	М	96	Broken neck	Grass	2
24-Sep-19	S01	12:30	13:10	N	4	18	40	None	1-2	NW	Red-eyed Vireo	2121B-240919-S01-01	U	359190	4889576	25	35	F	24	Cracked skull	Grass	2
1-Oct-19	S05	7:05	7:45	N	4	20	100	Rain	2	SW	Red-eyed Vireo	2121B-011019-S05-01	U	362669	4888886	1	10	F	24	Broken neck	Concrete	1
3-Oct-19	S36	14:55	15:35	N	3	8	100	Rain	4	E	Palm Warbler	2121B-031019-S36-01	U	364554	4888404	41	240	F	24	Laceration on neck, broken left wing	Grass	2
21-Oct-19	S28	13:00	13:30	N	4	6	100	Fog	2	N	Ruby-crowned Kinglet	2121B-211019-S28-01	U	369117	4893123	22	80	E	42	Broken neck	Gravel	1
31-Oct-19	S36	10:15	10:45	N	3	12	100	Rain	4	s	Golden-crowned Kinglet	2121B-311019-S36-01	М	364511	4888408	36	290	F	24	Broken left wing	Grass	2

2019 Raptor Mortalities

Date	Turbine	Start Time	End Time	Dog Used (Y/N)	Days Since Last Search	Temp.	Cloud Cover (%)	Precipitation	Wind Speed (Beaufort Scale)	Wind Direction	Species	Sample ID	Sex (M/F/U)	Easting	Northing	Distance from Turbine (m)	Direction from Turbine (°)	Condition Code	Estimated Time Since Death (hrs)	Observed Injuries	Substrate/ Habitat	Visibility Class
2-Jan-19	S05	11:45	12:05	N	<30	-8	0	None	3	NNE	Peregrine Falcon	2121B-020119-S05-01	М	362698	4888916	45	40	Е	24	None apparent	Gravel	1
15-Jan-19	S04	11:02	11:22	N	6	-1	100	Snow	2	wsw	Rough-legged Hawk	2121B-150119-S04-01	U	360399	4890072	10	263	s	96	Only one leg remains	Gravel	1
21-May-19	S03	8:15	8:45	N	4	16	10	None	4	NW	American Kestrel	2121B-210519-S01-01	М	361305	4887443	49	75	S	72	Decapitated	Gravel	1

Appendix \ Bat Mortalitie:		
Bat Mortalities	 	

Visibility Class: 1 ≥90% bare ground, vegetation ≤15cm tall

2 ≥25% bare ground, vegetation ≤15cm tall

3 ≤25% bare ground, ≤25% of vegetation is >30cm tall

4 little or no bare ground, ≥ 25% of vegetation is >30cm tall

Condition Code: I Injured or dying

F Freshly dead

E Early decomposition

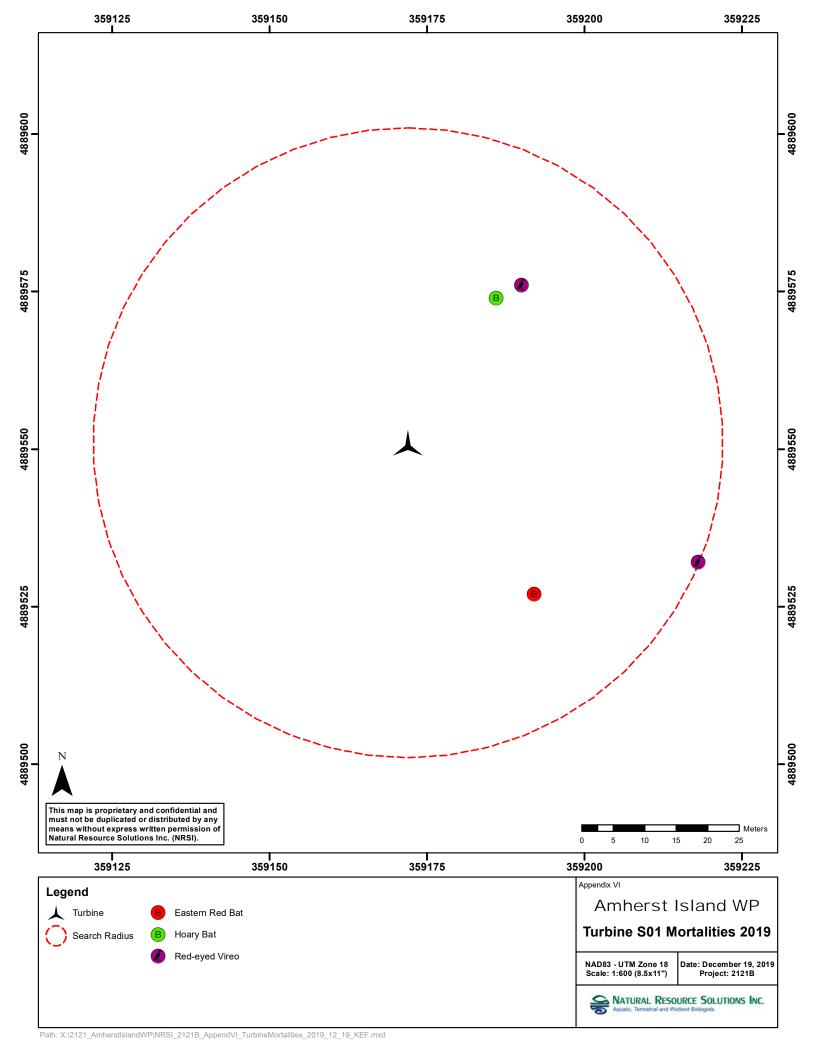
M Moderate decomposition A Advanced decomposition

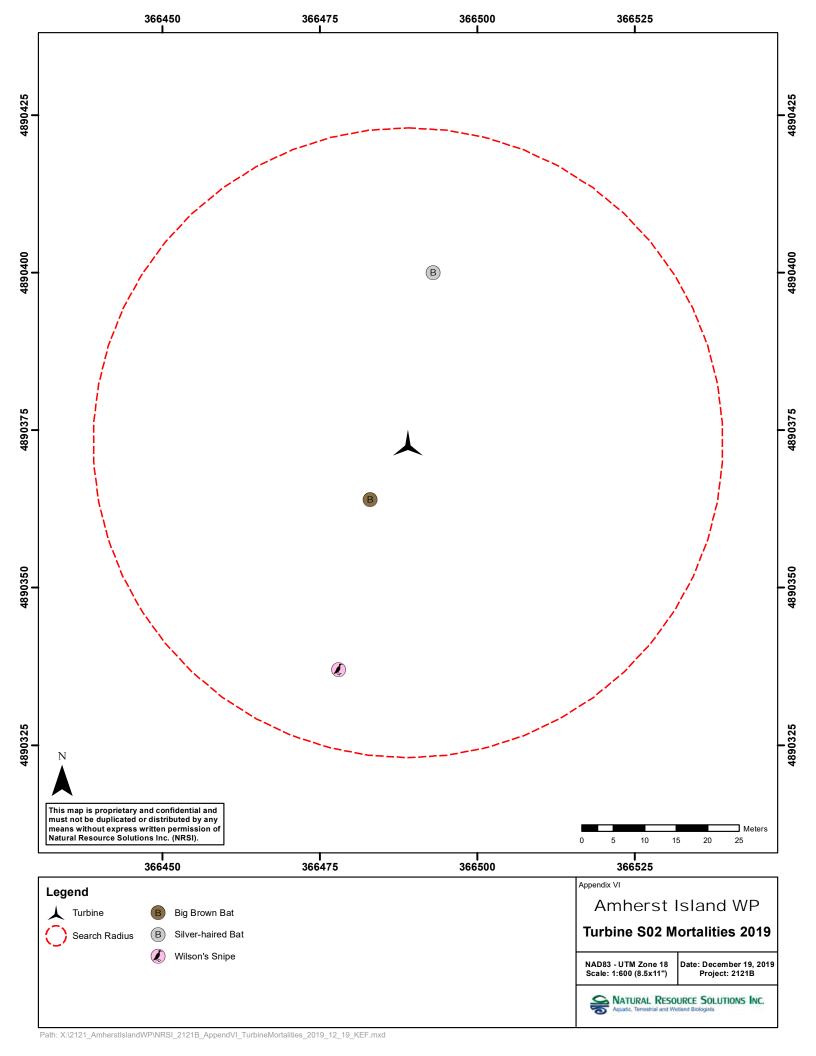
C Complete Decomposition

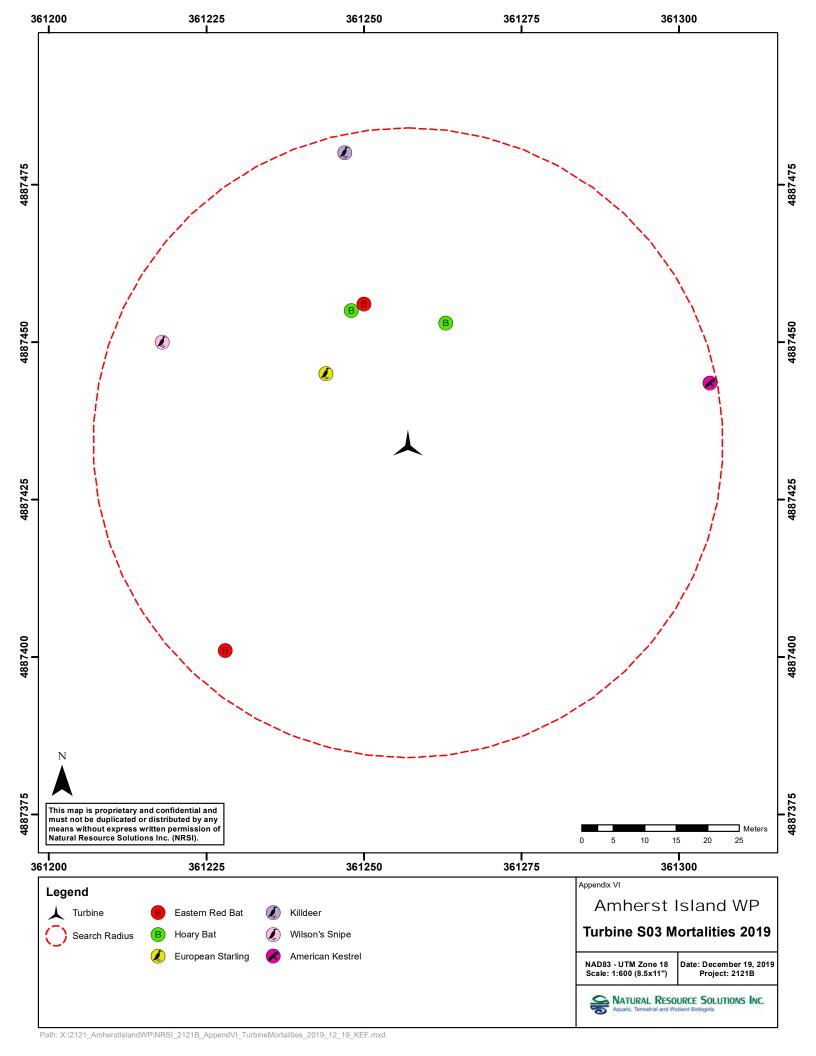
S Scavenged

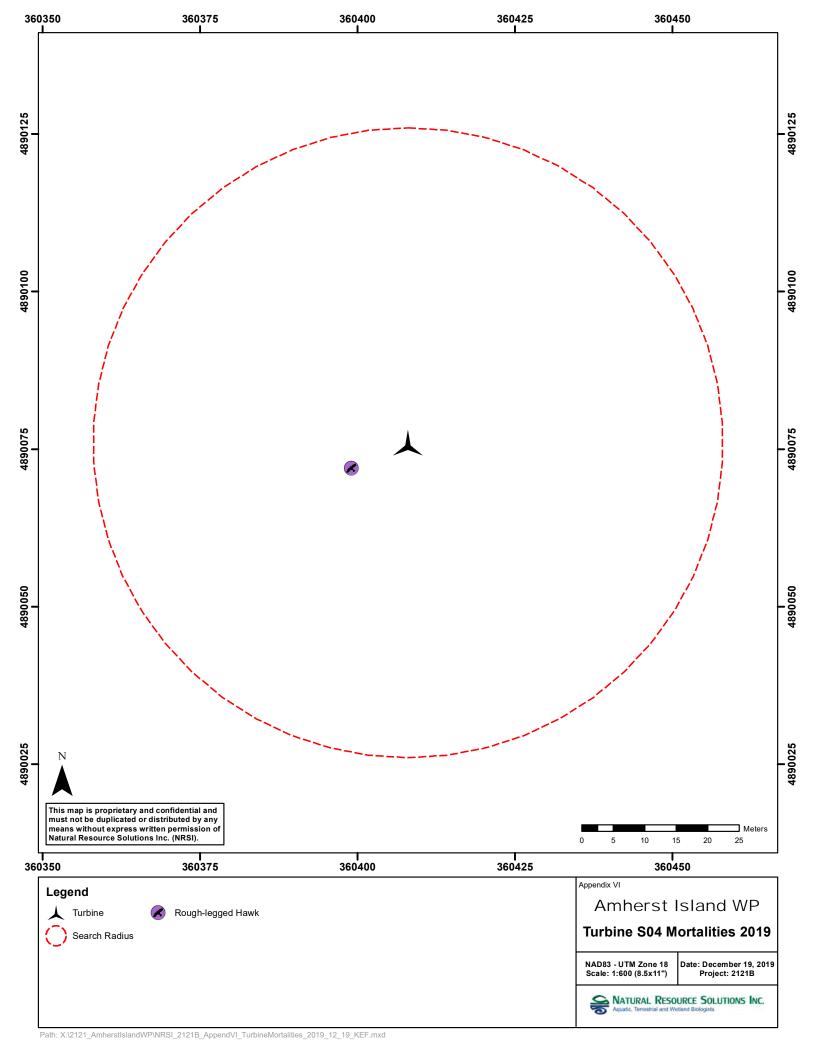
Date	Turbine	Start Time	End Time	Dog Used (Y/N)	Days Since Last Search	Temp.	Cloud Cover (%)	Precipitation	Wind Speed (Beaufort Scale)	Wind Direction	Species	Sample ID	Bat FA (mm)	Sex (M/F/U)	Easting	Northing	Distance from Turbine (m)	Direction from Turbine (°)	Condition Code	Estimated Time Since Death (hrs)	Observed Injuries	Substrate/ Habitat	Visibility Class
28-May-19	S18	12:10	12:40	N	4	10	100	Rain	4	ENE	Big Brown Bat	2121B-280519-S18-02	44	U	367603	4892166	31	180	E	36	None apparent	Bare soil	1
31-May-19	S18	13:30	14:00	N	3	12	30	None	2	NE	Silver-haired Bat	2121B-310519-S18-01	41	U	367607	4892222	27	15	М	60	None apparent	Gravel	1
31-May-19	S18	13:30	14:00	N	3	12	30	None	2	NE	Silver-haired Bat	2121B-310519-S18-02	40	U	367574	4892195	36	290	E	36	None apparent	Bare soil	1
11-Jun-19	S01	16:00	16:30	N	4	17	50	None	4	NW	Eastern Red Bat	2121B-110619-S01-01	39	U	359192	4889527	31	140	M-A	>72	None apparent	Gravel	1
17-Jun-19	S02	15:45	16:15	N	4	21	10	None	2	SE	Big Brown Bat	2121B-170619-S02-02	43	U	366483	4890364	8	245	F	16	Laceration right side	Gravel	1
11-Jul-19	S36	11:45	12:25	N	3	25	100	None	3	SSE	Big Brown Bat	2121B-110719-S36-01	45	U	364557	4888398	29	275	E	36	None apparent	Weeds	2
16-Jul-19	S05	10:55	11:35	N	4	26	30	None	4	SSE	Hoary Bat	2121B-160719-S05-01	59	U	362658	4888896	22	340	F	12	None apparent	Gravel	1
22-Jul-19	S07	9:50	10:30	N	4	20	100	Rain	3	NE	Hoary Bat	2121B-220719-S07-01	52	U	366832	4891643	21	75	F	11	None apparent	Gravel	2
23-Jul-19	S05	7:55	8:35	N	4	21	0	None	1	N	Big Brown Bat	2121B-230719-S05-01	45	U	362695	4888884	24	80	E	84	Laceration to throat	Gravel	1
25-Jul-19	S36	8:50	9:30	N	3	25	25	None	4	ssw	Hoary Bat	2121B-250719-S36-01	50	U	364593	4888416	17	25	F	10	Broken right wing	Gravel	1
26-Jul-19	S03	10:05	10:45	N	3	24	0	None	2	s	Hoary Bat	2121B-260719-S03-01	51	U	361263	4887453	18	15	F	12	Hole in left side of skull	Bare soil	1
26-Jul-19	S03	10:05	10:45	N	3	24	0	None	2	S	Hoary Bat	2121B-260719-S03-02	51	U	361248	4887455	20	355	F	12	Both forearms broken	Gravel	1
29-Jul-19	S28	8:00	8:40	N	4	26	20	None	3	ssw	Big Brown Bat	2121B-290719-S28-01	40	U	369106	4893121	19	110	s	10	Only the head found	Gravel	1
29-Jul-19	S36	11:30	12:10	N	4	26	20	None	3	ssw	Eastern Red Bat	Not collected	41	U	364597	4888395	7	105	- 1	N/A	Alive, no injuries observed	Weeds	2
29-Jul-19	S36	11:30	12:10	N	4	26	20	None	3	ssw	Eastern Red Bat	2121B-290719-S36-02	37	U	364629	4888388	41	130	F	12	None apparent	Grass	2
30-Jul-19	S05	8:15	8:55	N	3	24	30	None	4	sw	Hoary Bat	2121B-300719-S05-01	53	U	362689	4888879	20	105	E	36	Broken neck	Gravel	1
5-Aug-19	S07	8:55	9:35	N	4	26	0	None	4	ssw	Big Brown Bat	2121B-050819-S07-01	43	U	366807	4891625	17	220	E	36	Broken back of skull	Gravel	1
5-Aug-19	S14	9:40	10:20	N	4	26	0	None	4	ssw	Eastern Red Bat	2121B-050819-S14-01	40	U	366821	4891178	36	70	F	11	Broken right wing	Gravel	1
6-Aug-19	S03	11:45	12:25	N	4	30	5	None	2	ssw	Eastern Red Bat	2121B-060819-S03-01	34	U	361228	4887401	44	225	E	36	None apparent	Grass	2
8-Aug-19	S36	12:20	13:00	N	3	25	80	None	3	sw	Eastern Red Bat	2121B-080819-S36-01	38	U	364590	4888413	12	15	F	12	Broken right wing	Gravel	1
8-Aug-19	S36	12:20	13:00	N	3	25	80	None	3	sw	Big Brown Bat	2121B-080819-S36-02	48	U	364590	4888396	1	110	М	60	None apparent	Gravel	1
9-Aug-19	S03	12:00	12:40	N	3	22	10	None	4	wsw	Eastern Red Bat	2121B-090819-S03-01	39	U	361250	4887456	24	350	E	36	None apparent	Gravel	1
12-Aug-19	S18	10:10	10:50	N	4	24	30	None	4	ssw	Big Brown Bat	2121B-120819-S18-01	42	U	367624	4892186	22	105	Е	36	None apparent	Gravel	1
13-Aug-19	S05	8:00	8:40	N	4	24	40	None	2	NE	Hoary Bat	2121B-130819-S05-01	54	U	362677	4888920	38	10	F	10	Broken right wing, lacerated abdomen	Bare soil	1
13-Aug-19	S01	10:40	11:20	N	4	24	40	None	2	NE	Hoary Bat	2121B-130819-S05-01	53	U	359186	4889574	24	45	F	12	Broken left wing	Grass	2
15-Aug-19	S18	9:30	10:10	N	3	20	0	None	3	E	Silver-haired Bat	2121B-150819-S18-02	39	U	367574	4892193	31	270	F	11	None apparent	Bare soil	1
19-Aug-19	S36	12:20	13:00	N	4	25	50	None	4	sw	Eastern Red Bat	2121B-190819-S36-01	41	U	364612	4888394	24	90	Α	132	None apparent	Bare soil	1
19-Aug-19	S36	12:20	13:00	N	4	25	50	None	4	sw	Big Brown Bat	2121B-190819-S36-02	46	М	364586	4888441	41	355	Е	36	None apparent	Gravel	1
22-Aug-19	S14	11:15	11:55	N	3	18	90	None	3	w	Hoary Bat	2121B-220819-S14-01	51	М	366821	4891184	38	60	F	12	None apparent	Gravel	1
22-Aug-19	S07	12:20	13:00	N	3	18	90	None	3	w	Eastern Red Bat	2121B-220819-S07-01	38	М	366861	4891639	49	80	F	12	Broken forearm	Bare soil	1
23-Aug-19	S05	9:35	10:15	N	3	12	0	None	3	N	Eastern Red Bat	2121B-230819-S05-01	41	F	362679	4888910	28	30	F	11	Broken left wing	Gravel	1
27-Aug-19	S05	9:05	9:45	N	4	22	100	None	5	s	Little Brown Myotis	2121B-270819-S05-01	37	U	362646	4888921	43	335	Е	36	Broken left wing	Bare soil	1
27-Aug-19	S05	9:05	9:45	N	4	22	100	None	5	s	Silver-haired Bat	2121B-270819-S05-02	41	U	362706	4888877	35	105	F	10	None apparent	Grass	2
5-Sep-19	S07	12:00	12:40	N	3	20	10	None	2	sw	Eastern Red Bat	2121B-050919-S07-01	38	U	366782	4891615	36	230	F	8	Broken right wing	Grass	2
12-Sep-19	S02	13:00	13:40	N	3	15	90	None	4	Е	Silver-haired Bat	2121B-120919-S03-01	40	U	366493	4890400	27	15	М	60	None apparent	Grass	2
17-Sep-19	S22	9:00	9:40	N	4	12	10	None	2	Е	Silver-haired Bat	Not collected	41	U	361461	4890666	17	60	I	N/A	Alive, no injuries observed	Grass	2
19-Sep-19	S07	11:00	11:40	N	3	20	20	None	2	sw	Silver-haired Bat	2121B-190919-S07-01	42	U	366819	4891625	11	160	F	12	None apparent	Gravel	1

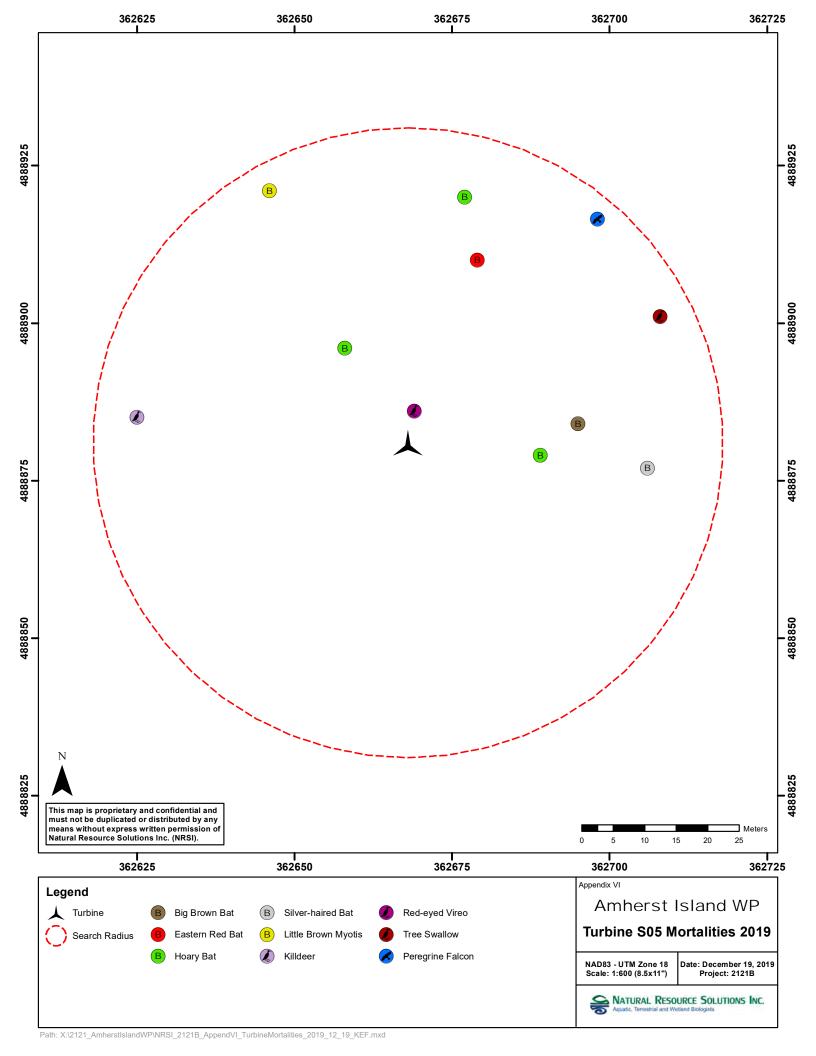
Appendix V Locations of Bird and Bat Mortalitie	
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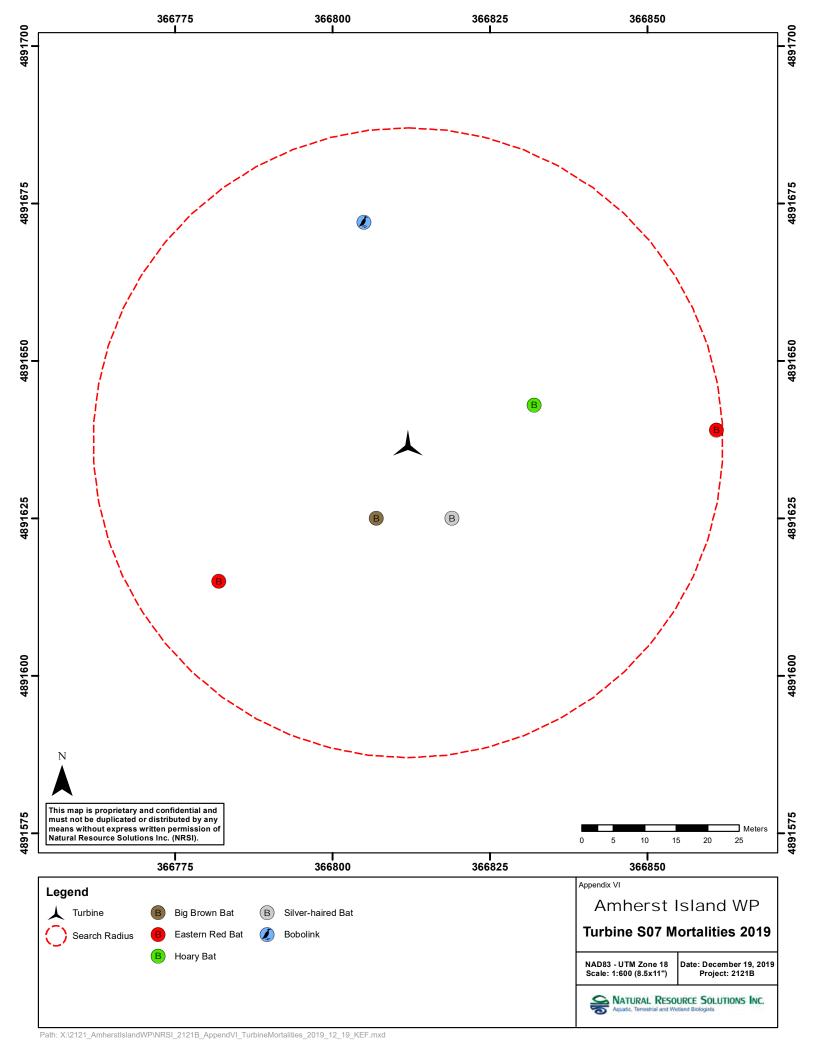


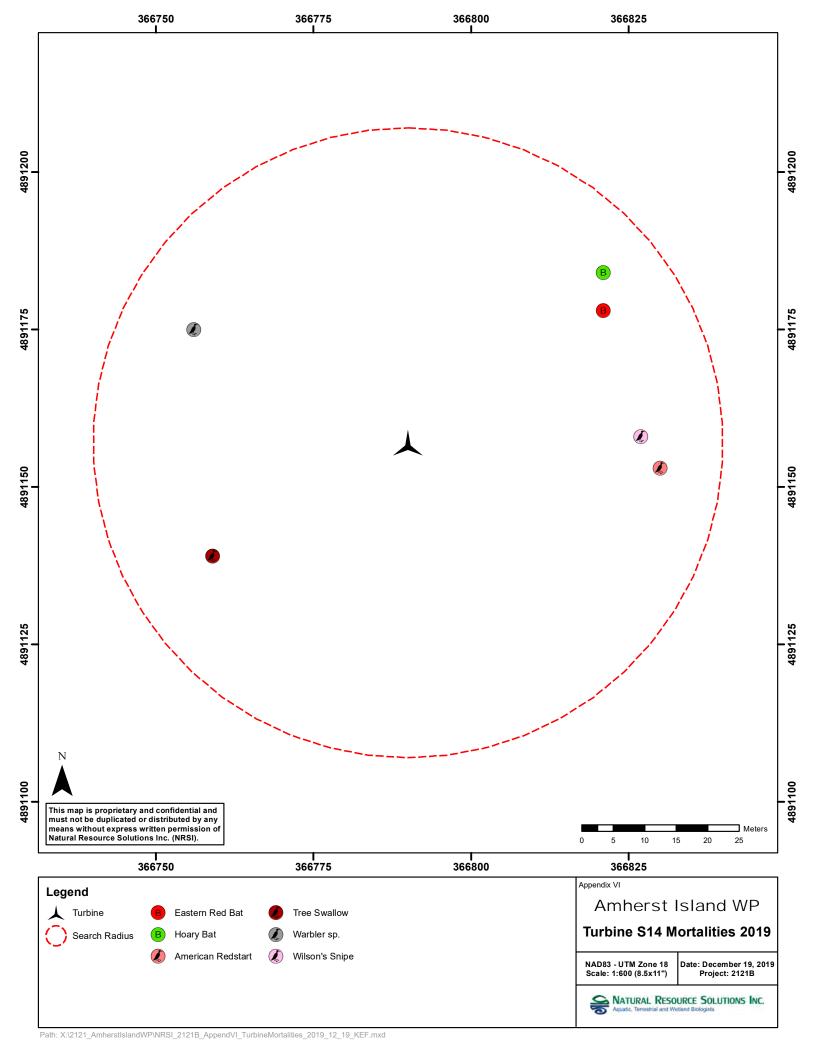


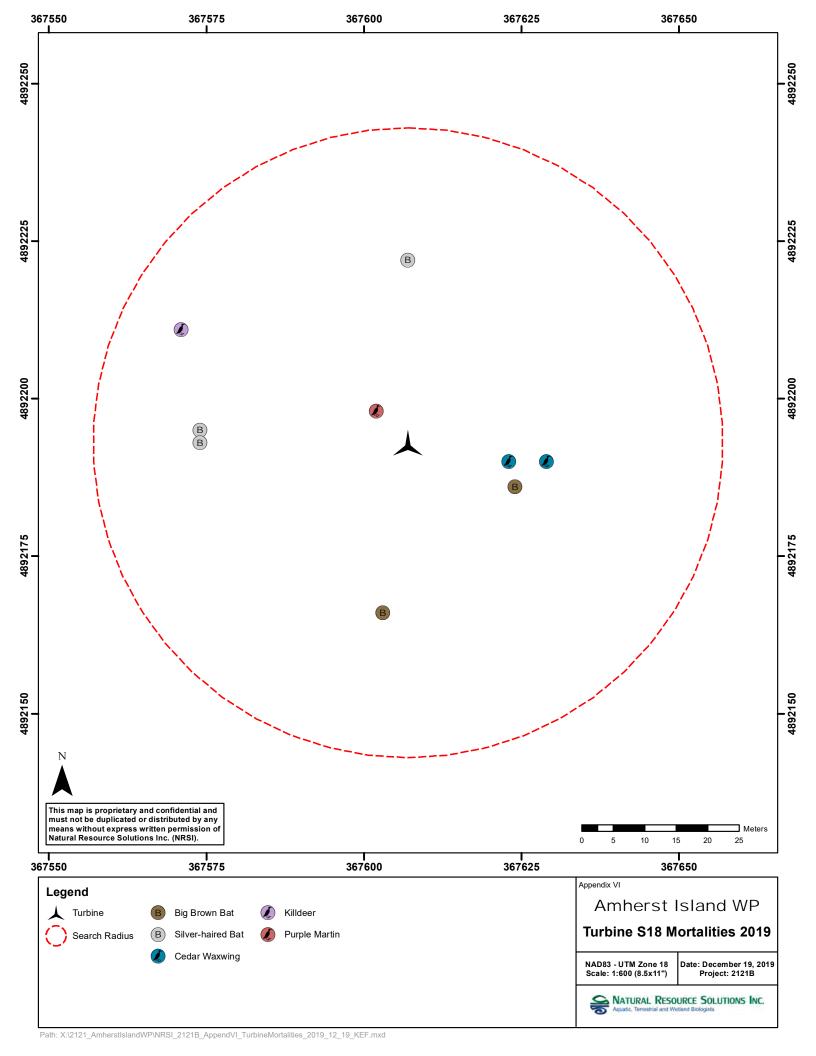


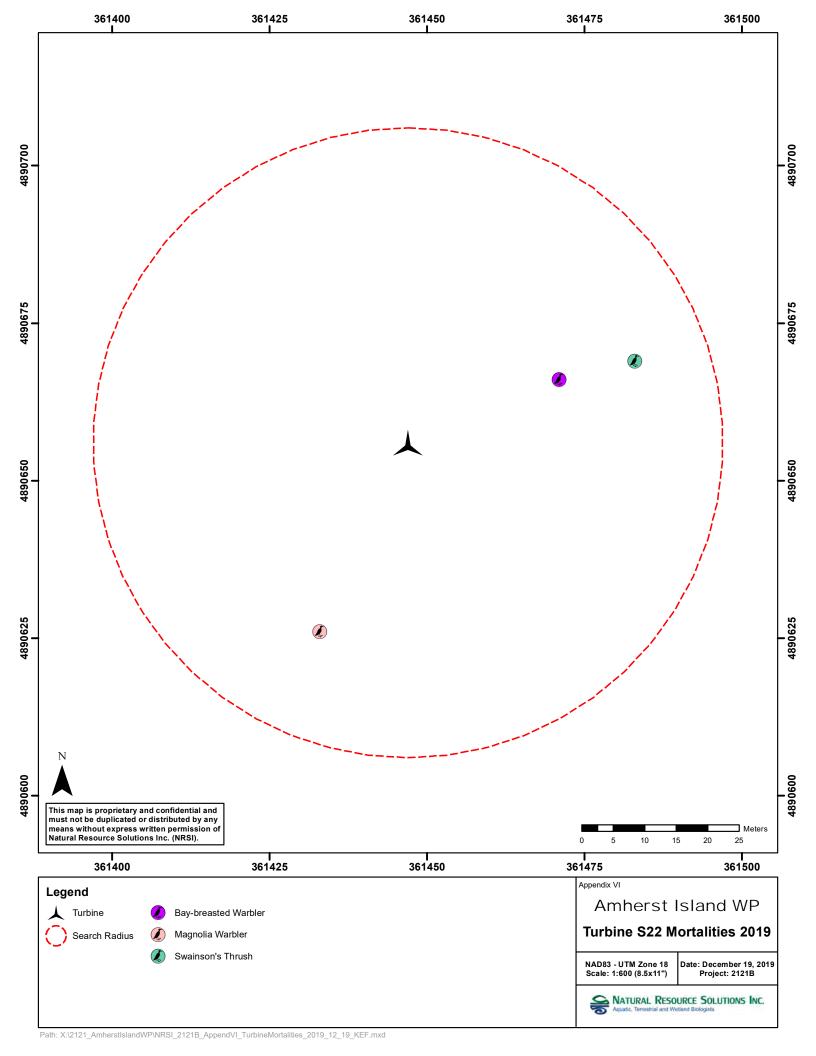


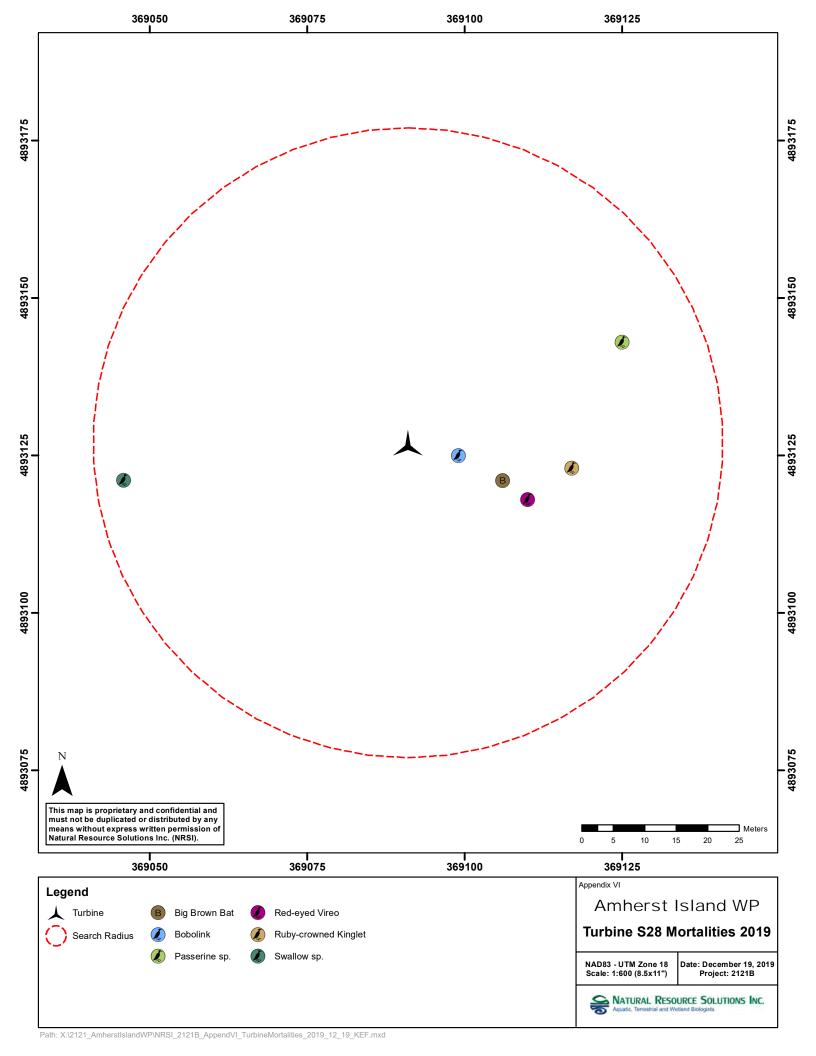


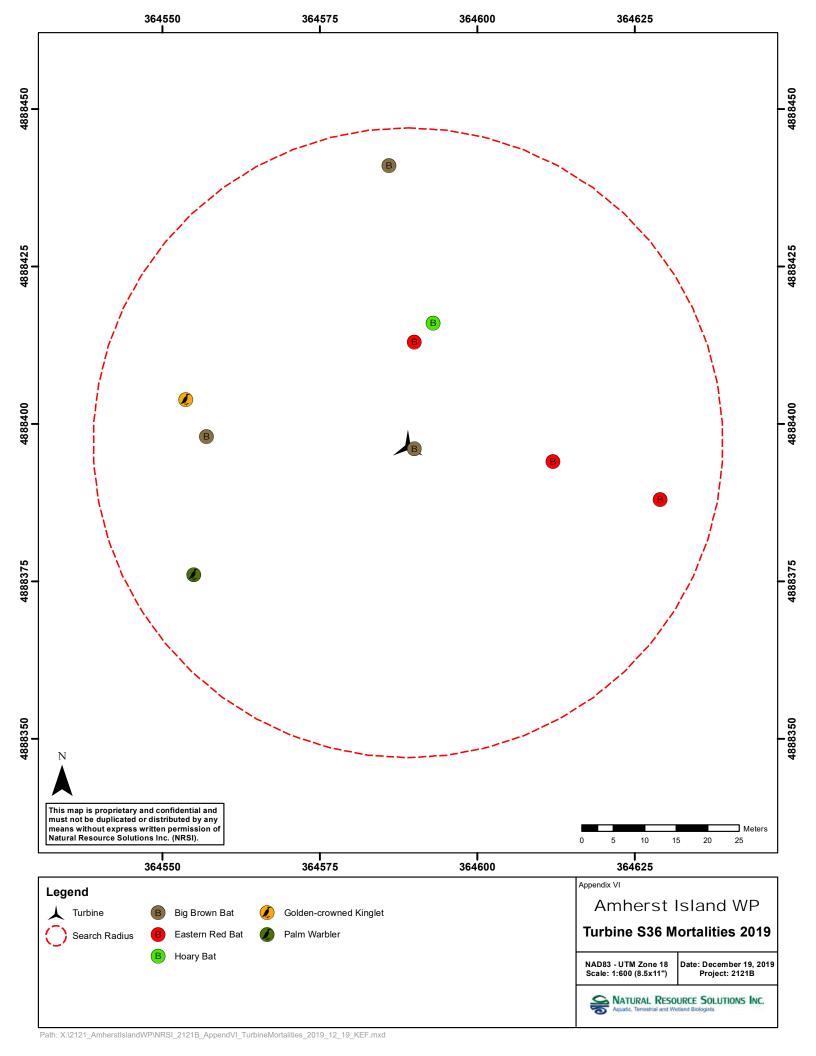












Appendix VII Visibility Class Mapping

Project Name: Amherst Tskind	₩ Project #: <u>2</u>	21A Turbine #: <u>5</u>	Degree of Slope deg	rees Slope Orientation (e.g. SSW)
Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): Observer: DAT Monthly/Seasonal Linear Transect Wid	 _ N	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
Jan and a second	7.7.		CONDITIONS	
bankan area		V2	REPRESENTATIVE	
1 1	(t.	Dresser & Trees		The state of the s
1 / / /			FOR ENTIRE 2019 WINTER 1 SEASON	The state of the s
In I feet	6.7	1 1	(JANUARY-MARCH)	The state of the s
LOS ACT	E VC			
& Ties / Concre	P. P.	soil 1		
11116	*			
50m 40m 30m 20m 00m		4	50m 40m 30m 20m 10m	*
	vc1			_ / / / / / /
1 1 1 1	Gravel			
\ vc1	- Comment	XXX	I I I I I I I I I I I I I I I I I I I	
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The state of	1		The state of the s	and the same of th
A		e.	The same of the sa	
	Gene	eral Habitat Description:	***************************************	General Habitat Description
	VISIBILITY CLASSES			
	Class 1	≥ 90% bare ground; veg	getation ≤ 15cm tall	
	Class 2 Class 3	≥ 25% bare ground; veg	etation ≤ 15cm tall s than 25% of veg. > 30cm tall	
	Class 4	Little or no bare ground	more than 25% of veg. > 30cm tall	
	Not Searchable	Dense shruhe woods	or other unsearchable habitats	

Project Name: Amherst Sand WP Project #: 21218 Turbine #: 501 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): ___/__/ Date (DD/MM/YY): 05/04 / 19 Facing North: Facing North: Facing East: Facing East: Observer: Observer: Shelby + Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: ___ Linear Transect Width: 5 40m 330m 50m Ceneral Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: Monthly/Seasonal Linear Transect Wi	Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer:Monthly/Seasonal Linear Transect Width:m
0m 40m 30m 20m 10m	90	50m 40m 30m 20m 10	General Habitat Desc
	VISIBILITY CLASSES Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
	Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	

Project Name: Amhard Island W.P. Project #: 21218 Turbine #: 501 Date (DD/MM/YY): 67/08/19 Photo Numbers (from turbine base) Facing North: 124749 Date (DD/MM/YY): 09/07/19 Photo Numbers (from turbine base) Facing North: Facing East: 2176 Facing East: Observer: Observer: MRI Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 40m 30m 20m 50m 30m 40iTi Savannah Meadow General Habitat Description: Treed VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall

≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Class 3

Class 4 Not Searchable

Project Name: Amharst Stander Project #: 21213 Turbine #: 561

held will free!	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 0109119 Observer: 0109119 Monthly/Seasonal Linear Transect Width; 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 241_10_119 Observer:
	50m 40m 30m 20m 10m	Story Store C	50m 40m 30m 20m 10m	General Habitat Descriptio

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Visibility Class Map Project Name: Project #: 201 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Date (DD/MM/YY): ___/__/_ Photo Numbers (from turbine base) Date (DD/MM/YY): 22112119 221228 Facing North: Facing North: Facing East: Facing East: Observer: 148 Observer: __ Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 5 **Conditions** Representative of entire 2019 Winter 2 Season (November & December). 20m 50m 40m 50m

≥ 90% bare ground; vegetation ≤ 15cm tall
- Lacin Call Containing State Call Call
≤ 25% bare ground, less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall
Little or no bare ground; more than 20% of vog
Dense shrubs, woods, or other unsearchable habitats

General Habitat Description:

General Habitat Description:

Project Name: Amherst Island	WP Project #: <u> </u>	urbine #: 502 Degree of Slope degre	es Slope Orientation (e.g. SSW)
Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): <u>ふる</u> / のえ Observer: <u>KM</u> # Monthly/Seasonal Linear Transect Width:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
- Company of the Comp	32.	CONDITIONS	
ger of the same		REPRESENTATIVE	
Jan	74.2	FOR ENTIRE 2019	The state of the s
Sar	20'1-	WINTER 1 SEASON -	and the same of th
Dalla		(January-MARCH)	
5 0'm 40m 30'm 20m 10m	nccessed 24	50m 40m 30m 20m 10m	
235	Vel Brite Soil		
***************************************	General Habitat	Description:	General Habitat Description
	VISIBILITY CLASSES		
	Class 1 ≥ 90% b	pare ground; vegetation ≤ 15cm tall	
	Class 2 ≥ 25% b	pare ground; vegetation ≤ 15cm tall	
	Class 3 ≤ 25% b	pare ground; less than 25% of veg. > 30cm tall	
		no bare ground; more than 25% of veg. > 30cm tall	
	Not Searchable Dense s	hrubs, woods, or other unsearchable habitats	

Project Name: Amherst Island Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 05/	Facing East: Facing South: Facing West:	Date (DD/MM/YY):// Observer:
50m 40m 30m 20m 10m	Monthly/Seasonal Linear Transect Width: _	5 m	Linear Transect Width:m
	VISIBILITY CLASSES Class 1 ≥ 9 Class 2 ≥ 2 Class 3 ≤ 2 Class 4 Litt	abitat Description: 10% bare ground; vegetation ≤ 15cm tall 15% bare ground; vegetation ≤ 15cm tall 15% bare ground; less than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall 15% bare ground; more than 25% of veg. > 30cm tall	General Habitat Description

Up + 1 5

Project Name: An hers Island IDP Project #: 20019 Turbine #: 502 Degree of Slope 11.75 degrees Slope Orientation 56 (e.g. SSW) Date (DD/MM/YY): (7/06/19 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 07/05/19 Facing North: Facing North: Facing East: Facing East: Observer: JYB Observer: Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width. Linear Transect Width: mud é grove Model 50m 30m 20m 40m -50m 40m 20m road LINT General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Class 4 Little or no bare ground; more than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Not Searchable

Project Name: Ambers Island w? Project #: 2008 Turbine #: 562

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 08 107 119 Observer:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 5/58/19 Observer: Monthly/Seasonal Linear Transect Width:m N
	General Habitat Description:	50m 40m 30m 20m 10m	General Habitat Description
	VISIBILITY CLASSES		

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Ambers Klond UP Project #: 21918 Turbine #: 50

50m 40m 30m 20m 10m (\$\sqrt{2}\) \qquad \q	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Width: M	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Width: M
General Habitat Description: General Habitat Description: General Habitat Description: CICI	Som 40m 30m 20m 10m (C) SCOS SCOS SCOS SCOS SCOS SCOS SCOS SC	50m 40m 30m 20m 10m

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: handerst Island UP Project #: 21218 Turbine #: 502

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 23/12/19 Observer:UB Monthly/Seasonal Linear Transect Width:N	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Conditions	Date (DD/MM/YY):/
50m 40m 30m 20m 1,0m	General Habitat Description	Representative of entire 2019 Winter 2 Season (November & December)	General Habitat Descrip
	VISIBILITY CLASSES Class 1 ≥ 90% bare ground Class 2 ≥ 25% bare ground Class 3 ≤ 25% bare ground	d; vegetation ≤ 15cm tall d; vegetation ≤ 15cm tall d; less than 25% of veg. > 30cm tall round; more than 25% of veg. > 30cm tall ods, or other unsearchable habitats	Pageof

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: Monthly/Seasonal Linear Transect Width: Date (DD/MM/YY): Monthly/Seasonal	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: Monthly/Seasonal Linear Transect Width: m
- Continue and a second		CONDITIONS	
1/2	Grasses	REPRESENTATIVE	
1 1		FOR ENTIRE 2019 WINTER 1 SEASON	
1-1-1		(JANUARY-MARCH)	
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VCI Access Row		-359	
m 40m 30m 20m 10m		90° 50m 40m 30m 20m (0m	
ive	VC Grave		
Com	ciete		///////////////////////////////////
VC		1059	
Grasses	Value / /		
			and the state of
	Show	And the second	
	, ,		

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 05/04/ Observer: Shelby H Monthly/Seasonal Linear Transect Width: 5	Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Monthly/S	/MM/YY)://
50m 40m 30m 20m 10m	General Habitat D	50m 40m 30m 20m 10m	General Habitat Descriptio
	Class 2 ≥ 25% bar Class 3 ≤ 25% bar Class 4 Little or no	re ground; vegetation ≤ 15cm tall re ground; vegetation ≤ 15cm tall re ground; less than 25% of veg. > 30cm tall to bare ground; more than 25% of veg. > 30cm tall rubs, woods, or other unsearchable habitats	

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Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer:		Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): DID IN Observer: Monthly/Seasonal Linear Transect Width: Monthly/Seas
50m 40m 30m 20m 10m	volet gravet	General Habitat Description:	50m 40m 30m 20m 10m	General Habitat Description
-	VISIBILITY CLASSES			
	Class 1 Class 2	≥ 90% bare ground; vege ≥ 25% bare ground; vege		
	Class 3 Class 4	≤ 25% bare ground; less	than 25% of veg. > 30cm tall more than 25% of veg. > 30cm tall	

Project Name: Andrest Island W.P. Project #: 2013 Turbine #: 503

Photo Numbers (from turbine base) Facing North: 143601 Facing East: 143602 Facing South: 143603 Facing West: 143604 (sketch habitat and visibility classes)	Observer:N Monthly/Seasonal Linear Transect Width:m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer:Monthly/Seasonal Linear Transect Width:m
JCZ GRASS VCZ GRASS	WEEDY VEG VC1 VC2 CRASS General Habitat Description: GPIA	50m 40m 30m 20m 10m	General Habitat Description

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Ambers | Sond we | Project #: 503

General Habitat Description: General Habitat Description: General Habitat Description:	Photo Numbers (from turbine base) Facing North: 100920 Facing East: 100920 Facing South: 100920 Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 10 109 19 Observer: Monthly/Seasonal Linear Transect Width: m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 24/10/19 Observer: JB Monthly/Seasonal Linear Transect Width: 5 m
	you acress cood	Vicarde grove	50m 40m 30m 20m 10m	Justice of McCorel of Grand

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

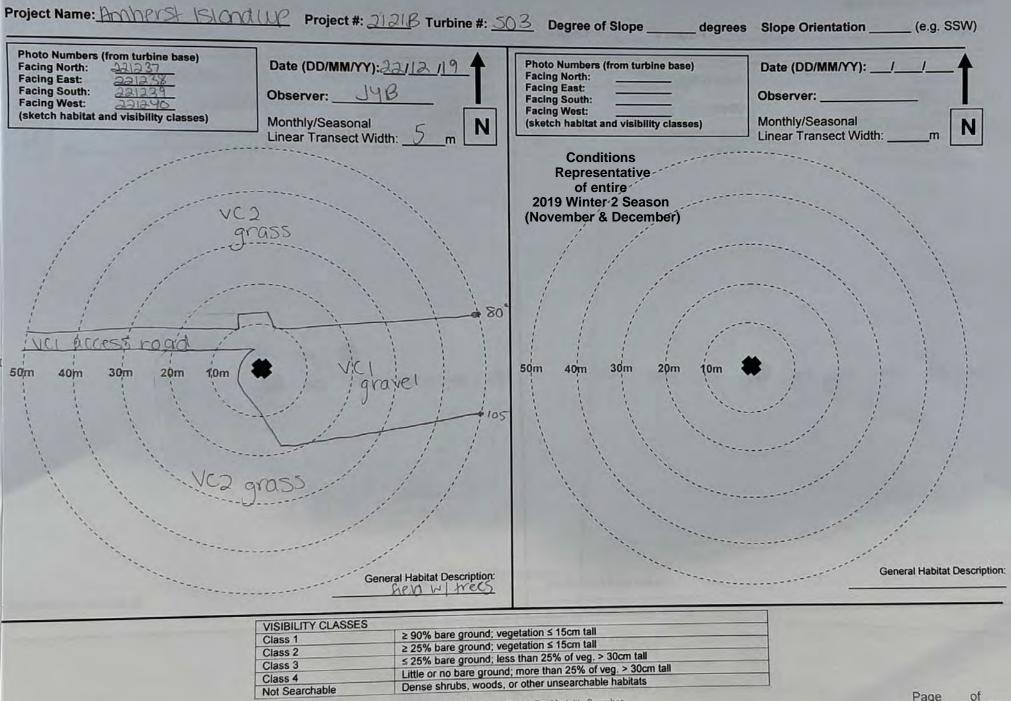


Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 102 Observer: BAH Monthly/Seasonal Linear Transect Width: 5	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
W/2 / Land	VCT. Grave	FOR ENTIRE ZOIG WINTER 1 SEASON (JANUARY-MARCH)	
50m 40m 30m 20m 10m	bare Soit		•
	Class 2 ≥ 25% Class 3 ≤ 25%	bare ground; vegetation ≤ 15cm tall bare ground; vegetation ≤ 15cm tall bare ground; vegetation ≤ 15cm tall bare ground; less than 25% of veg. > 30cm tall r no bare ground; more than 25% of veg. > 30cm tall	General Habitat Description

Project Name: Project #: Alale Turbine #: 504 Photo Numbers (from turbine base)
Facing North: Date (DD/MM/YY): 22112119 Photo Numbers (from turbine base) Date (DD/MM/YY): ___/ Facing East: 221220 Facing North: Facing South: 221221 Observer: JYB Facing East: Facing West: 221733 Facing South: Observer: (sketch habitat and visibility classes) **Facing West:** Monthly/Seasonal (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: 5 Linear Transect Width: 600 50m 50m 40m 30m 40m 30m 100 1200 General Habitat Descriptio General Habitat Description: Sold VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2

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≤ 25% bare ground; less than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Little or no bare ground; more than 25% of veg. > 30cm tall

Class 3

Class 4

Not Searchable

Page ___ of _

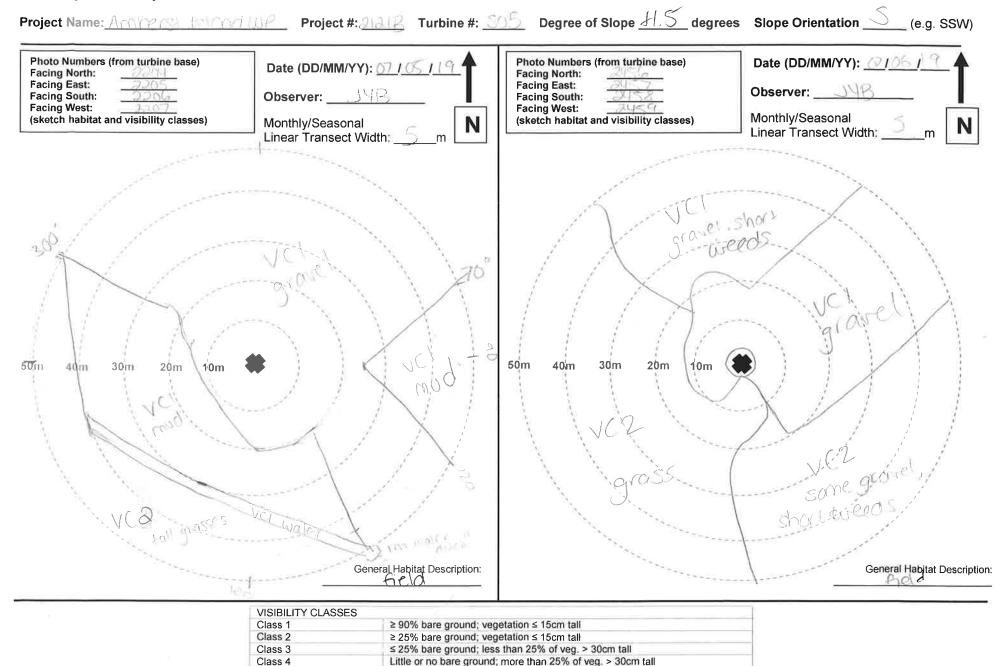
Project Name: Amherst Island		2121 Turbine #: 50		grees Slope Orientation (e.g. SSW)
Photo Numbers (from turbine base) Facing North: 279	Date (DD/MM/Y	Y): 11 / 02/19 🕈	Photo Numbers (from turbine base)	Date (DD/MM/YY)://
Facing North: 2792			Facing North: Facing East:	
Facing South: 2793	Observer: BA		Facing East.	Observer:
Facing West: 2794	OBSCIVEI: 1721		Facing West:	
(sketch habitat and visibility classes)	Monthly/Seasona	L N	(sketch habitat and visibility classes)	Monthly/Seasonal
	Linear Transect	Width:m		Linear Transect Width:m
7	************		CONDITIONS	and the same of th
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	OLC DOLL		WINTER 1 SEASON	
1 /		1 1	(JANUARY-MARCH)	The state of the s
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	Grave	1 /1		
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1 1 1 1 1 1 1				
	1011		1 1 1	
50m 40m 30m 20m 10m			50m 40m 30m 20m 10m	*
50m 40m 30m 20m 10m	16.1	1 1 1	50m 40m 30m 20m 10m	
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74.4	*	a series	14	· · · · · · · · · · · · · · · · · · ·
	-	**	7.4	Care at
	(Seneral Habitat Description:		General Habitat Descriptio

	VISIBILITY CLASSES		No.	
	Class 1	≥ 90% bare ground; veg	etation ≤ 15cm tall	
	Class 2	≥ 25% bare ground; veg	etation ≤ 15cm tall	
	Class 3	≤ 25% bare ground; less	than 25% of veg. > 30cm tall	
	Class 4	Little or no bare ground;	more than 25% of veg. > 30cm tall	
	Not Searchable	Dense shrubs, woods, o	r other unsearchable habitats	

Project Name: Amherst Island WP Project #: 21218 Turbine #: 805 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Date (DD/MM/YY): / / Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 05/04/19 Facing North: Facing North: Facing East: Facing East: Observer: Observer: Shelby H Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 40m 30m General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable Page ___ of _

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UP 0 + 3



Dense shrubs, woods, or other unsearchable habitats

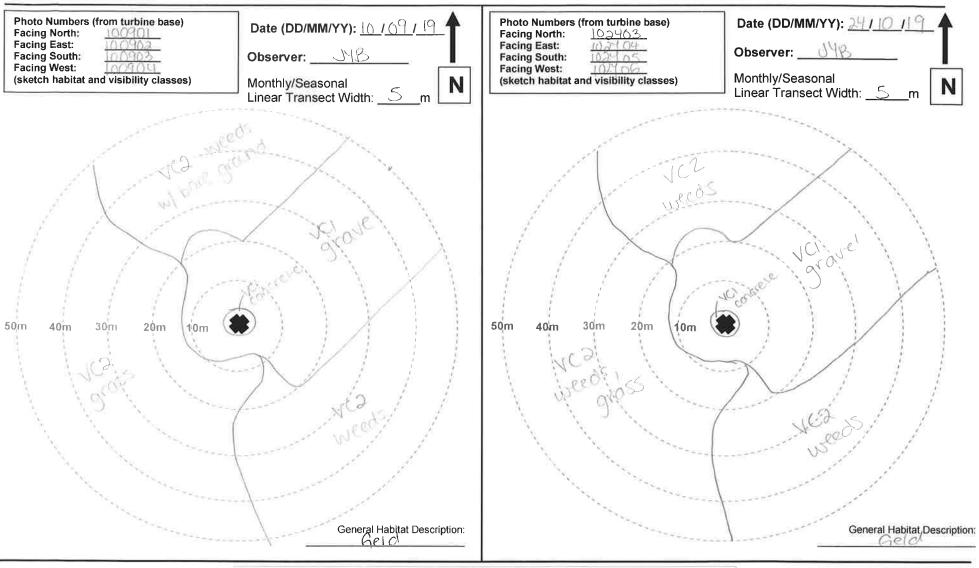
Not Searchable

Project Name: Amhers | Sond WP | Project #: 21218 Turbine #: 505

GRIO held	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 69 101 19 1 Observer: Monthly/Seasonal Linear Transect Width: M	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 9/08/19 Observer: Monthly/Seasonal Linear Transect Width: M
	we eds	General Habitat Description:		General Habitat Description

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Annie | Sos | Project #: 200 | Turbine #: Sos



VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 22/12/19 Observer: UHB Monthly/Seasonal Linear Transect Width: 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
1/1/5	35°	Conditions Representative of entire 2019 Winter 2 Season (November & December)	
0m 40m 30m 20m 10m	* 100 y 100	50m 40m 30m 20m 10m	•))))
	General Habitat Description:		General Habitat Descriptio
	Class 4 Little or no bare ground Not Searchable Dense shrubs, woods,	getation ≤ 15cm tall getation ≤ 15cm tall ss than 25% of veg. > 30cm tall d; more than 25% of veg. > 30cm tall or other unsearchable habitats Bird & Bat Mortality Searches	Page of

	Turbine #: Stan Degree of Slopedegrees Slope Orientation (e.g. SSW)
Photo Numbers (from turbine base) Facing North:3&\9 Date (DD/MM/YY): 0	Photo Numbers (from turbine base) Facing North: Date (DD/MM/YY)://
Facing East: 32%	Facing Fast:
Facing South: 3221 Observer: KMH	Facing South: Observer:
Facing West:	Facing West:
(sketch habitat and visibility classes) Monthly/Seasonal	(sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width
Linear Transect Width	:m Linear Transect Width:m
310° VC2 Crass	CONDITIONS REPRESENTATIVE
	FOR ENTIRE 2019
1 / 1	WINTER 1 SEASON
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V.C.I	(JANUARY-MARCH)
Bare	Sort V V V V V V V V V V V V V V V V V V V
280 VCI CANCIER (3m)	
Dem (3m)	
50m 40m 30m 20m 10m	† 50m 40m 30m 20m 10m
7 13 m	
1 1 11 1 1 1 1 1	
A A N NVCI	
Grave	
1	A A Transmitter of
7	The second secon
210° Gener	al Habitat Description: General Habitat Description:
1760	
VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≥ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats
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Project Name: Amherst Island WP Project #: 21218 Turbine #: 507 Degree of Slope _____ degrees Slope Orientation ____ (e.g. SSW) Date (DD/MM/YY): ___/ Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 05/04/19 Facing North: Facing North: Facing East: Facing East: Observer: Observer: Shelby H. Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: _ Linear Transect Width: 50m 40m 50m 40m 30m 110° (ciral General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Not Searchable Dense shrubs, woods, or other unsearchable habitats

ility Class Map

Project Name: Amboust | Stand | DP | Project #: 2002 | Turbine #: 507 Photo Numbers (from turbine base) Date (DD/MM/YY): 07/05/19 Photo Numbers (from turbine base) Date (DD/MM/YY): 07/06/9 Facing North: Facing North: Facing East: Facing East: Facing South: Observer: 048 Observer: ___N Facing South: Facing West: Facing West: (sketch habitat and visibility classes) Monthly/Seasonal Monthly/Seasonal (sketch habitat and visibility classes) Linear Transect Width: 05 Linear Transect Width: 50m 40m 30m 20m 50m 40'm 30m 20m 15 230 General Habitat Description: 210 General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 4 Little or no bare ground; more than 25% of veg. > 30cm tall Not Searchable Dense shrubs, woods, or other unsearchable habitats S:\Technical\Data Forms\Bird & Bat Mortality Searches Page ___ of ___

town +3

roject Name: Andrew W.P. Project #: 21218 Turbine #: 607 Degree of Slope 42 degrees Slope Orientation NE (e.g. SSW) Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 11/07/19 Date (DD/MM/YY): 5 108 119 Facing North: Facing North: 2700 Facing East: Facing East: Facing South: MRI Observer: Observer: JYB Facing South: Facing West: Facing West: (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: _ Monthly/Seasonal (sketch habitat and visibility classes) Linear Transect Width: 50m 40m 20m 50m 40m 30m 20m General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall

Little or no bare ground; more than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Class 4

Not Searchable

Project Name: Ambers Namue Project #: 21218 Turbine #: 507

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): 09 /09 /19 Observer: Monthly/Seasonal Linear Transect Width: 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): 491(0119) Observer: Monthly/Seasonal Linear Transect Width:
VC3 Weeds VC3 Weeds VC2 VC2 General Habitat Description:	50m 40m 30m 20m 10m General Habitat Description
VISIBILITY CLASSES	

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

Photo Numbers (from turbine base) Facing North: 22/225 Facing East: 23/225 Facing South: 23/227 Facing West: 23/228	Date (DD/MM/YY): 23112 119 Observer:	Facing East: Facing South: Facing West:	Date (DD/MM/YY):/ Observer: Monthly/Seasonal
(sketch habitat and visibility classes)	Monthly/Seasonal Linear Transect Width: 5 m	Conditions Representative of entire 2019 Winter 2 Season (November & December)	Linear Fransect Widut.
	Class 2 ≥ 25% bare Class 3 ≤ 25% bare Class 3 Little or no	e ground; vegetation ≤ 15cm tall e ground; vegetation ≤ 15cm tall e ground; less than 25% of veg. > 30cm tall b bare ground; more than 25% of veg. > 30cm tall ubs, woods, or other unsearchable habitats a\Data Forms\Bird & Bat Mortality Searches	Page of _

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Wid	Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Monthly/Seasonal
25 280	CONDITIONS REPRESENTATIVE FOR ENTIRE ZOIG WINTER 1 SEASON
VC3 Grasses	Mource 50m 40m 30m 20m 10m General Habitat Description:
VISIBILITY CLASSES Class 1 Class 2 Class 3 Class 4 Not Searchable	≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall Dense shrubs, woods, or other unsearchable habitats

Project Name: Project #: 2018 Turbine #: 509 Photo Numbers (from turbine base) Date (DD/MM/YY): 22/12/19 Facing North: Photo Numbers (from turbine base) 221210 Date (DD/MM/YY): ___/__ Facing East: Facing North: Facing East: Facing South: Facing South: 2212 12 Observer: J48 Observer: **Facing West:** (sketch habitat and visibility classes) Facing West: Monthly/Seasonal Monthly/Seasonal (sketch habitat and visibility classes) Linear Transect Width: 5 Linear Transect Width: 300 50m 40m 30m 50_m 40m General Habitat Description: General Habitat Description: hu lorest VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable Page of_ S:\Technical\Data Forms\Bird & Bat Mortality Searches

VC3 Grasses VC3 Grasses VC1 Birt/Ice 50m 40m 30m 20m nom 50m	REPRESENTATIVE FOR ENTIRE ZOIG
50m 40m 30m 20m 10m 50	WINTER 1 SEASON
VCI Tice General Habitat Description:	General Habitat Description
VISIBILITY CLASSES	and Affirm And
Class 1 ≥ 90% bare ground; vegetatio	OTI ≥ TOCTI (all
Class 2 ≥ 25% bare ground; vegetation	011≥ 10011 tall
Class 3 ≤ 25% bare ground; less than	1 25% of veg. > 30cm tall
Class 4 Little or no bare ground; more Not Searchable Dense shrubs, woods, or other	e man 25% of year > 30cm fall

Project Name: Amhers Island WP Project #: 2218 Turbine #: 511

Facing East: 22234 Facing South: 22235 Facing West: 22235	e (DD/MM/YY): 22/12/19 server: 148 http://seasonal ear Transect Width: 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY)://
50m 40m 30m 20m 10m S	access gross Ac	50m 40m 30m 20m 10m	General Habitat Description

VISIBILITY CLASSES	
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Class 3	≥ 25% bare ground; vegetation 25% of veg. > 30cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall
	Little or no bare ground; more than 25% of vog
Class 4	Dense shrubs, woods, or other unsearchable habitats
Not Searchable	Dense shrubs, woods, or other

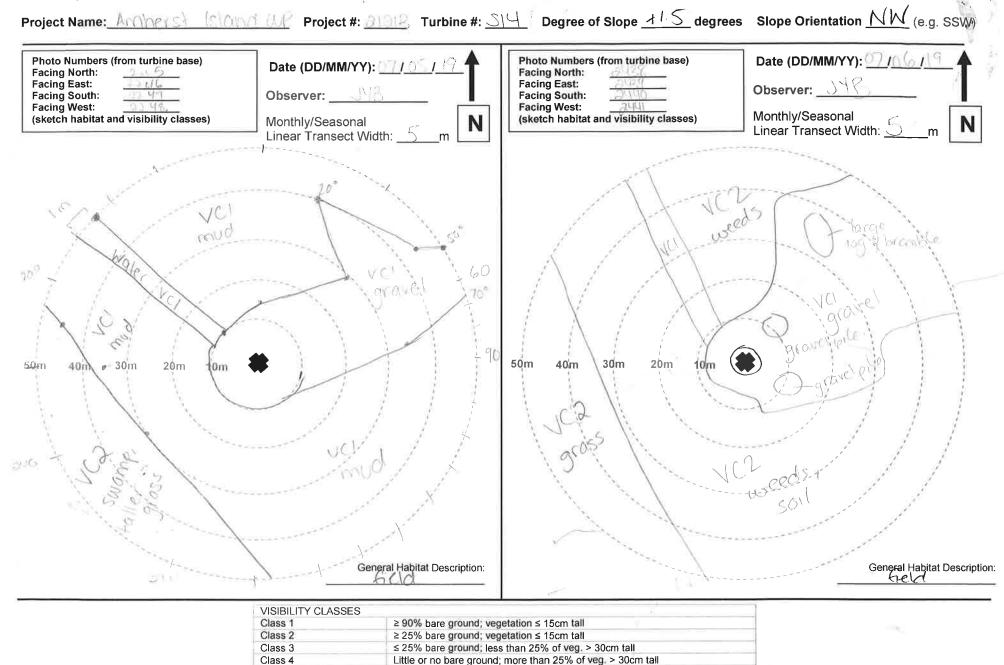
Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Cobserver: Monthly/So	75.5	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
and the same of th		CONDITIONS	
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VCI	San	REPRESENTATIVE	The state of the s
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i Snow	1 1	WINTER 1 SEASON	, , , , , , , , , , , , , , , , , , ,
	1 1	(JANUARY-MARCH)	
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0m 40m 30m 20m 10m		John John John John Lohn	
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Grasse	>		
1	General Habitat Description:		General Habitat Descripti
16	General Habitat Description.		
Kgo 10			
VISIBILITY CI	ASSES	andation < 15 am tall	
Class 1 Class 2	≥ 90% bare ground; ve ≥ 25% bare ground; ve	egetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; le	ss than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground	d; more than 25% of veg. > 30cm tall	
Not Searchab		or other unsearchable habitats	

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: Monthly/Seasonal Linear Transect Width:	Facing East: Facing South: Facing West: (control habitat and visibility cla	Observer:
50m 40m 30m 20m 10m		aral Habitat Description:	General Habitat Descripti
	VISIBILITY CLASSES Class 1 Class 2 Class 3 Class 4 Not Searchable	≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall Dense shrubs, woods, or other unsearchable habitats S:\Technical\Data Forms\Bird & Bat Mortality Searches	Page of _

Photo Numbers (from turbine base)		Photo Numbers (from turbine base)	Date (DD/MM/YY)://
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Facing East:	Observer: B	Facing East:	Observer:
Facing South:	Observer:Dr	Facing South: Facing West:	
(sketch habitat and visibility classes)	Monthly/Seasona	(sketch habitat and visibility classes)	Monthly/Seasonal
,	Linear Transect V	Vidth: 5 m N	Linear Transect Width:m
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garage and the second	7003	REPRESENTATIVE	
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			Company Unhited Decembris
		Seneral Habitat Description:	General Habitat Descriptio
			-
	VISIBILITY CLASSES		
	Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
	Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
	Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
	Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
	Not Searchable	Dense shrubs woods or other unsearchable habitats	

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 05/04/19 Observer: Shelby H Monthly/Seasonal Linear Transect Width: 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
50m 40m 30m 20m 10m	General Habitat Description:	50m 40m 3dm 20m 10m	General Habitat Description
	Class 4 Little or no bare ground Not Searchable Dense shrubs, woods,	getation ≤ 15cm tall getation ≤ 15cm tall gs than 25% of veg. > 30cm tall d; more than 25% of veg. > 30cm tall or other unsearchable habitats Bird & Bat Mortality Searches	Page of

down 12



Not Searchable

Dense shrubs, woods, or other unsearchable habitats

Project Name: And a St. D.P., Project #: 21218 Turbine #: SILt Date (DD/MM/YY): 6108119 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): [1 107/19 Facing North: Facing East: 2608 Facing North: Facing East: Observer: JVP Observer: MRI Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 40m 20m 40111 arass med Chou General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall

25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall

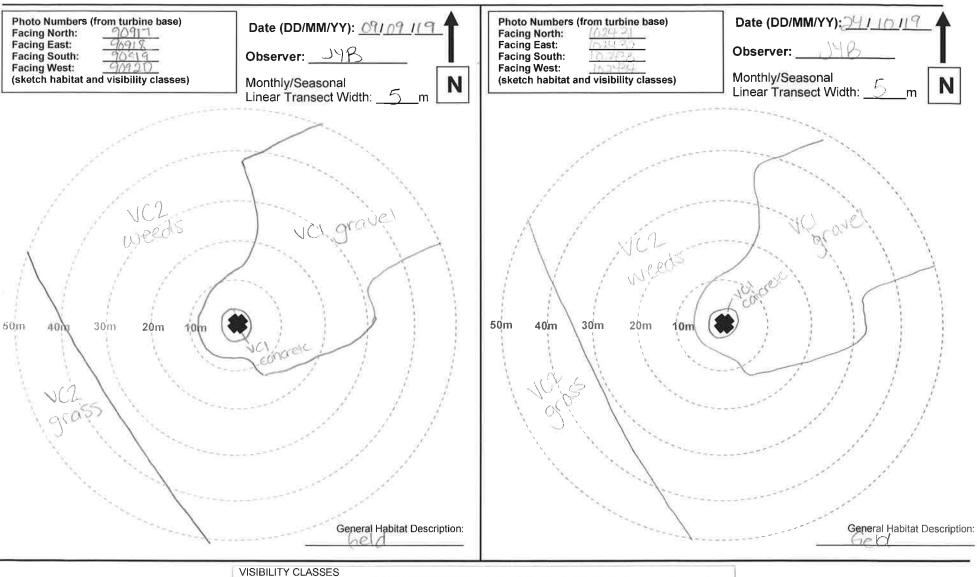
Dense shrubs, woods, or other unsearchable habitats

Class 3

Class 4

Not Searchable

Project Name: Amberst Island WP Project #: 21218 Turbine #: 514



VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Amhast Island WR Project #: 11218 Turbine #: 514 Photo Numbers (from turbine base)
Facing North:
Facing East: 231231 Date (DD/MM/YY): ___/_ Date (DD/MM/YY): 23,12,19 Photo Numbers (from turbine base) Facing North: Facing East: Observer: ___ J4B Observer: __ Facing South: 231231 Facing South: Facing West: 331233 Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: _5 **Conditions** Representative of entire 2019 Winter 2 Season (November & December) 30m 50m 20m 50m 40m General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 2 Little or no bare ground; more than 25% of veg. > 30cm tall Class 3 Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable Page of

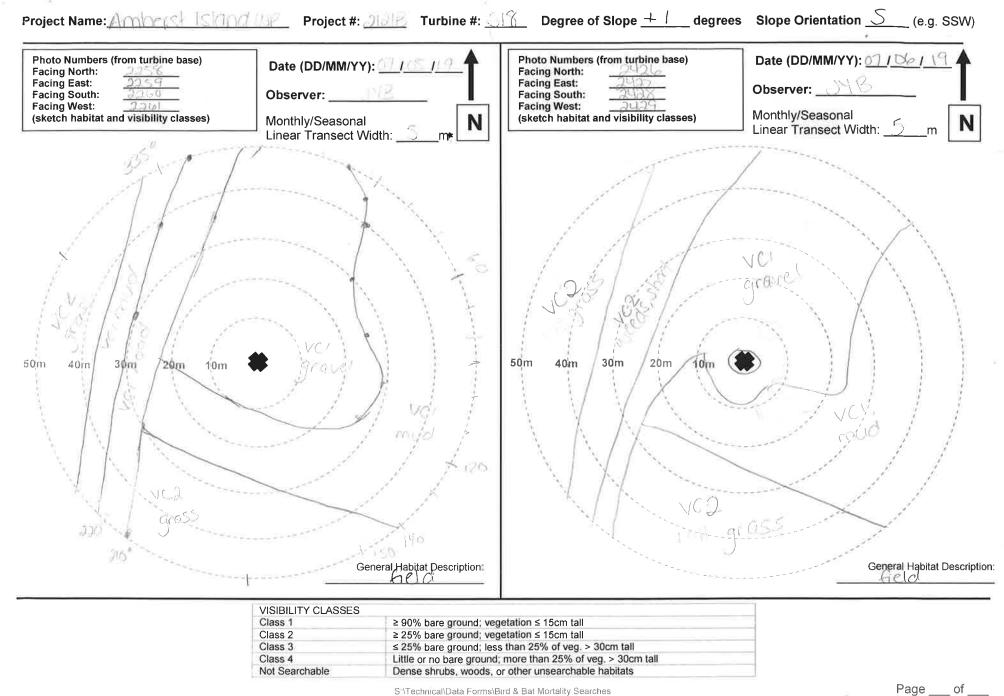
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Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/Y Observer: Monthly/Seasons Linear Transect	al NI	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
		and the same of th	CONDITIONS REPRESENTATIVE	
A property of the second		The state of	FOR ENTIRE 2019 WINTER 1 SEASON	
50m 40m 30m 20m 10m 2130 2160	1800	Show General Habitat Description:	(January-March) 50m 40m 30m 20m 10m	General Habitat Description
	VISIBILITY CLASSES		in the same of the	
	Class 1 Class 2	≥ 90% bare ground; ve ≥ 25% bare ground; ve	getation ≤ 15cm tall	
	Class 3	≤ 25% bare ground; les	s than 25% of veg. > 30cm tall	
	Class 4	Little or no bare ground	; more than 25% of veg. > 30cm tall	

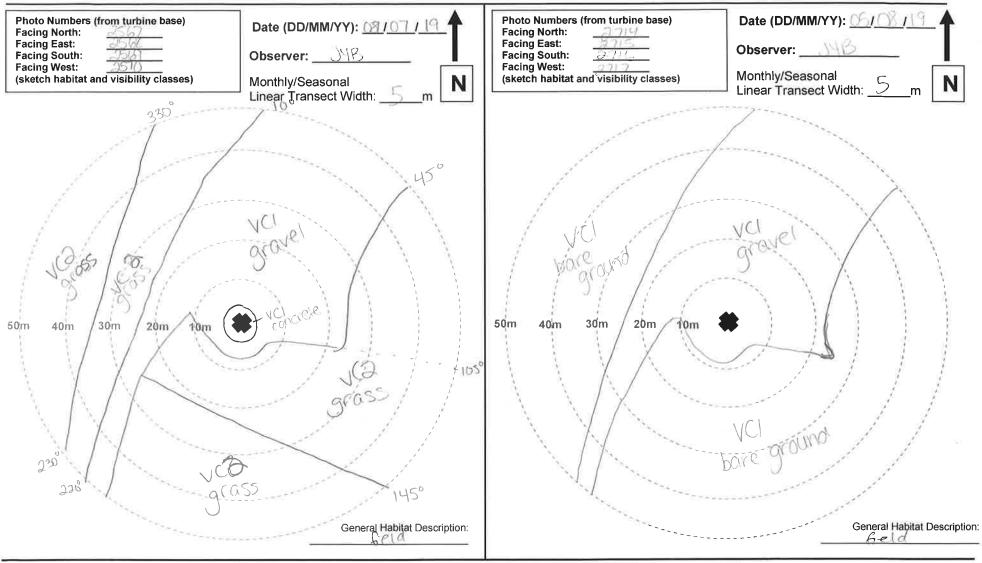
Project Name: Amherst Island WP Project #: 21218 Turbine #: 918 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Date (DD/MM/YY): ___/_ Photo Numbers (from turbine base) Date (DD/MM/YY): 05/04/19 Photo Numbers (from turbine base) Facing North: Facing North: Facing East: Observer: ____ Facing East: Observer: Shelby H Facing South: Facing South: **Facing West:** Monthly/Seasonal Facing West: (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: _ Linear Transect Width: widen 3dm 50m 40m 30m 50m 40m bare soi General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4

Not Searchable

Dense shrubs, woods, or other unsearchable habitats



Project Name: Annies Island und Project #: 2018 Turbine #: 518



VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Ambers is and the Project #: 200 Turbine #: 518 Date (DD/MM/YY): 241_10119 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 09 109 1 19 Facing North: 90903 Facing North: Facing East: Facing East: Observer: JYB Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal Linear Transect Width: (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: 50m 40m 30m 20m 50m 30m 40m 20m General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4

Dense shrubs, woods, or other unsearchable habitats

Not Searchable

VISIBILITY CLASSES	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 1	and wondstron S 10GH (dil
Class 2	
Class 3	
Class 4	Dense shrubs, woods, or other unsearchable habitats
Not Searchable	Dense stillos, woods,

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Page ___ of _

Visibility Class Map Project Name: Amherst Island wf Project #: 2124 Turbine #: 519 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Date (DD/MM/YY): ___/ Photo Numbers (from turbine base) Date (DD/MM/YY): 14 / 02 / 19 Facing North: Facing North: Facing East: Facing East: Observer: BAH Observer: Facing South: Facing South: Facing West: Facing West: (sketch habitat and visibility classes) Monthly/Seasonal (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width; 5 Linear Transect Width: CONDITIONS REPRESENTATIVE FOR ENTIRE 2019 VA WINTER 1 SEASON (JANUARY-MARCH) 50m 40m 30m 20m 50m 40m 30m General Habitat Description: General Habitat Description:

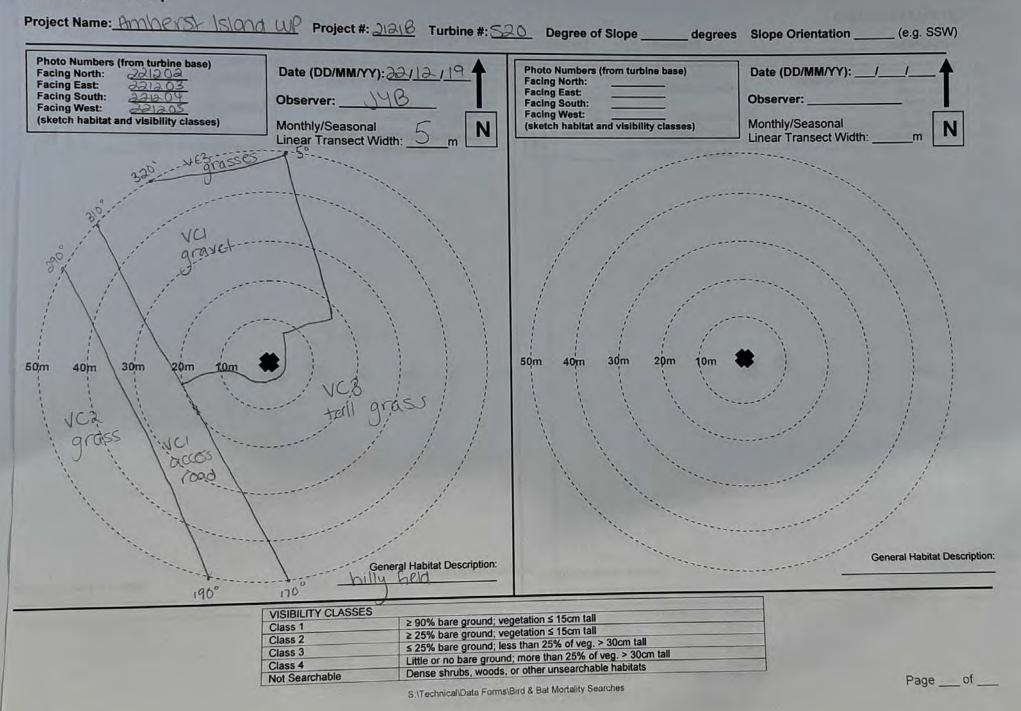
VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: Amherst Island WP Project #: 21218 Turbine #: 519

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 22/12/19 Observer:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):/ Observer: Monthly/Seasonal Linear Transect Width:m
Weds /	gravel		
50m 40m 30m 20m 10m	VC3 cuseds	50m 40m 30m 20m 10m	
260	General Habitat Description:	A STATE OF THE STA	General Habitat Descriptio
	Class 2 ≥ 25% bare ground,	vegetation ≤ 15cm tall vegetation ≤ 15cm tall less than 25% of veg. > 30cm tall und; more than 25% of veg. > 30cm tall ds, or other unsearchable habitats	Page of

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Project Name: Amherst Tskyrd WP Pro	ject #: <u>2121</u>	Degree of Slope degi	rees Slope Orientation (e.g. SSW)
Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Observer: Monthly/Se Linear Tra		Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): / / Observer: Monthly/Seasonal Linear Transect Width:m
Bure.	and the same of th	CONDITIONS	*****
Soil	***	REPRESENTATIVE	
vcl Grave	The state of the s	FOR ENTIRE 2019 WINTER 1 SEASON	
(S)	1 1 1	(JANUARY-MARCH)	
Bare Soil 50m 40m 30m 20m 10m Vol concre VC3 Grasses	AAAA	50m 40m 30m 20m 10m	*
	General Habitat Description:	**********	General Habitat Descriptio
VISIBILITY CL Class 1 Class 2 Class 3 Class 4 Not Searchabl	≥ 90% bare ground; veg ≥ 25% bare ground; veg ≤ 25% bare ground; less Little or no bare ground;	etation ≤ 15cm tall etation ≤ 15cm tall than 25% of veg. > 30cm tall more than 25% of veg. > 30cm tall r other unsearchable habitats	



Visibility Class Map Project Name: Amberst Island WP Project #: 2121 Turbine #: 521 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Facing North: 2807 Date (DD/MM/YY): 14 162 119 Photo Numbers (from turbine base) Date (DD/MM/YY): / Facing North: Facing East: Facing East: Observer: BAH Observer: Facing South: Facing South: Facing West: 1810 **Facing West:** Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: ___ Linear Transect Width: CONDITIONS REPRESENTATIVE FOR ENTIRE 2019 WINTER 1 SEASON (JANUARY-MARCH) Kl Concrete VC3 50m 40m 20m 50m 30m Grasses

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

General Habitat Description:

2100

205,0

General Habitat Description:

Project Name: Pmherst Islam UR Project #: 21218 Turbine #: 521

Photo Numbers (from turbine base) Facing North: 281245 Facing East: 231246 Facing South: 231247 Facing West: 231248	Date (DD/MM/YY): <u>28/12/19</u> A Observer: <u>148</u>	Photo Numbers (from turbine base) Facing North: Facing East: Facing South:	Date (DD/MM/YY)://
(sketch habitat and visibility classes)	Monthly/Seasonal Linear Transect Width: 5 m	Facing West: (sketch habitat and visibility classes)	Monthly/Seasonal Linear Transect Width:m
		popular and a second	
gravel			
1 / N/	-16/100	11/6	
50m 40m 30m 30m 10m	50000	50m 40m 30m 20m 10m	*)))
Waros III		The state of the s	= 1/1/1
The state of the s		The state of the s	
		A STATE OF THE STA	and the second of the second o
7	General Habitat Description:	200000000000000000000000000000000000000	General Habitat Desc
747)	VISIBILITY CLASSES		

VISIBILITY CLASSES	A Securial	
Class 1	> 90% bare ground; vegetation \$ 15cm tall	
D. A. C. S. C.	> 25% hare ground: vegetation ≤ 15cm tall	
Class 2	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 3	Little or no bare ground; more than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground, more than 25% of veg.	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	
NOI SealChable		

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY) Observer: Monthly/Seasonal Linear Transect W	Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
and the second s		CONDITIONS	
100 mm	102 Grasses	REPRESENTATIVE	and the same of th
A A A	/CX Masses	FOR ENTIRE 2019 WINTER 1 SEASON	The state of the s
A A ST		(JANUARY-MARCH)	The state of the s
50m 10m 30m 20m 10m) Ge	50m 40m 30m 20m 10n	General Habitat Descriptio
	VISIBILITY CLASSES Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
	Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY Observer: Shel Monthly/Seasonal Linear Transect W	by H.	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
50m 40m 30m 20m 10m	VCI aistel	H35° eneral Habitat Description:	50m 40m 30m 20m 10m	General Habitat Description
	VISIBILITY CLASSES	000/1	Charles a M.C Acil	
	Class 1 Class 2	≥ 90% bare ground; vege ≥ 25% bare ground; vege	etation < 15cm tall	
		ZOW Date dround: ved	ctation a rooth tall	
		< 25% hare ground; less	than 25% of year > 30cm tall	
	Class 3 Class 4	≤ 25% bare ground; less	than 25% of veg. > 30cm tall more than 25% of veg. > 30cm tall	

Project Name: Annherst Island (AP) Project #: 2008 Turbine #: 522 Degree of Slope Vientation NW (e.g. SSW) Date (DD/MM/YY): 67 106 1 9 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 07 105 119 Facing North: Facing North: Observer: ________B Facing East: Facing East: Facing South: Observer: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 2703 50m 50m 40m 30m 20m 40m 20m General Habitat Description: General Habitat Description: OL VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 4 Little or no bare ground; more than 25% of veg. > 30cm tall Not Searchable Dense shrubs, woods, or other unsearchable habitats

Project Name: Ambersk Island WP Project #: 2018 Turbine #: 522

Class 4 Not Searchable

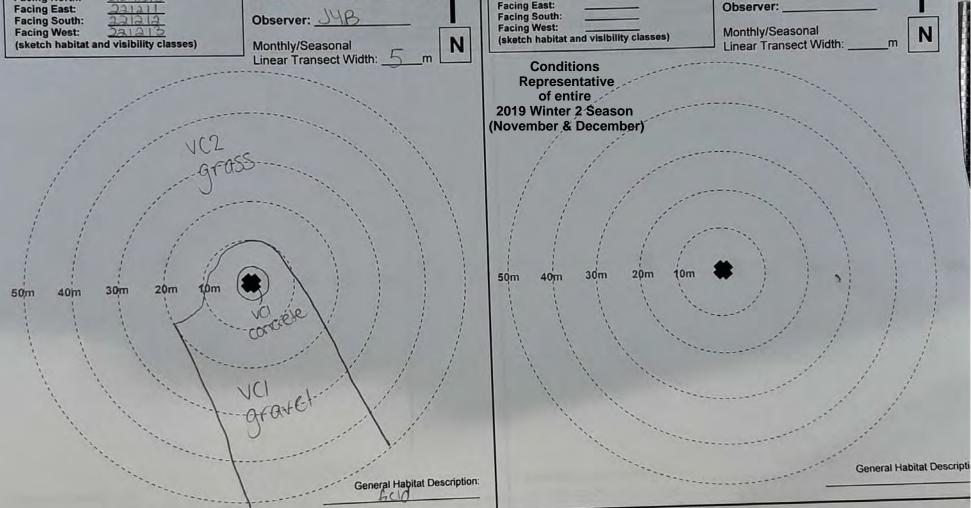
Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 09 107 1 19 Dbserver:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
50m 40m 30m 20m 10m	General Habitat Description:	50m 40m 30m 20m 10m	General Habitat Description
	SIBILITY CLASSES ass 1 ≥ 90% bare ground; ve	getation < 15cm tall	
CI	ass 2 ≥ 25% bare ground; ve	getation ≤ 15cm tall ss than 25% of veg. > 30cm tall	

Little or no bare ground; more than 25% of veg. > 30cm tall Dense shrubs, woods, or other unsearchable habitats

Project Name: Amberd Island UP Project #:<u>3(3(6)</u> Turbine #: <u>52</u>3 Date (DD/MM/YY): 29110119 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 10 109/19 Facing North: Facing North: Facing East: Facing East: Observer: Observer: <u>JYB</u> Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: 5 Linear Transect Width: 50m 40m 30m 20m 50m 40m 30m General Habitat Description:

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

General Habitat Description:



VISIBILITY CLASSES	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 1	
Class 2	
Class 3	
Class 4	Dense shrubs, woods, or other unsearchable habitats
Not Searchable	Dense shrubs, woods, or other unsearchasts

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Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: BAH Monthly/Seasonal Linear Transect Width: 5 m	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
Jan 1/12		CONDITIONS	
0,49652.5		REPRESENTATIVE -	
		FOR ENTIRE 2019	The state of the s
		WINTER 1 SEASON	
			The state of the s
		(January-MARCH)	
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0m 40m 30m 20m 10m	+9	50m 40m 30m 20m 10m	
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I I H A A	wel -		
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	VISIBILITY CLASSES	A STATE OF THE STA	General Habitat Description
	VISIBILITY CLASSES Class 1 ≥ 90% bare ground; v		General Habitat Description
	VISIBILITY CLASSES Class 1 ≥ 90% bare ground; v Class 2 ≥ 25% bare ground; v	regetation ≤ 15cm tall	General Habitat Description
	VISIBILITY CLASSES Class 1 ≥ 90% bare ground; v Class 2 ≥ 25% bare ground; v Class 3 ≤ 25% bare ground; v		General Habitat Description

Project Name: Project #: 21218 Turbine #: 526 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base)
Facing North: 231205 Date (DD/MM/YY): 23/ 12/19 Photo Numbers (from turbine base) Date (DD/MM/YY): ___/ Facing East: Facing North: Facing South: 2312 01 Facing East: Observer: JYB Facing West: 231208 Facing South: Observer: (sketch habitat and visibility classes) Facing West: Monthly/Seasonal (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: 5 Linear Transect Width: 180 50m 30m 1.0m 50m 30m General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable

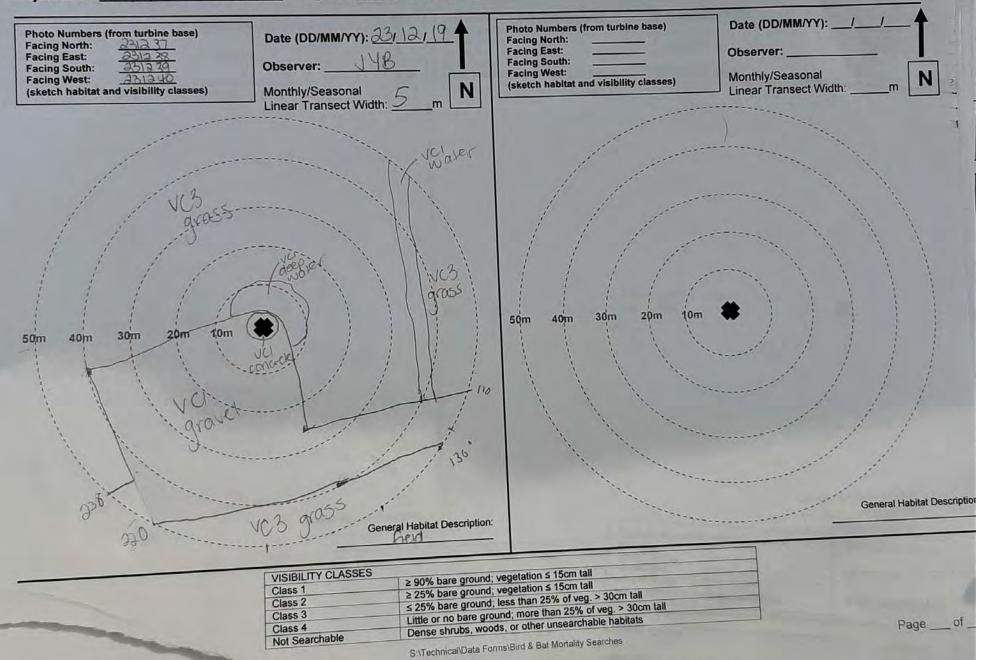
Visibility Class Map Project Name: Amherst Island WP Project #: 21214 Turbine #: 527 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): / Date (DD/MM/YY): 14 / 02/19 Facing North: Facing North: Facing East: Facing East: Observer: BAH Observer: Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: 5 Linear Transect Width: CONDITIONS REPRESENTATIVE FOR ENTIRE 2019 WINTER 1 SEASON (JANUARY-MARCH) 50m 50m 30m 20m Access Road

VISIBILITY CLASSES				
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall			
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall			
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall			
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall			
Not Searchable	Dense shrubs, woods, or other unsearchable habitats			

General Habitat Description:

General Habitat Description:

Project Name: Amhers Island WP Project #: 21218 Turbine #: 527



Facing North: 311 Facing East: 341 Facing South: 3413 Facing West: 3414	Date (DD/MM/YY): S	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West:	Date (DD/MM/YY):/
(sketch habitat and visibility classes)	Monthly/Seasonal Linear Transect Widt	(sketch habitat and visibility classes)	Monthly/Seasonal Linear Transect Width:m
		CONDITIONS	
1c2-	20°	REPRESENTATIVE	
Crass	Jum	FOR ENTIRE 2019 WINTER 1 SEASON	and the state of t
	1	(JANUARY-MARCH)	The state of the s
50m 40m 30m 20m 10m	much (m)	10 50m 40m 30m 20m 10	
VCI Barc Sail	- VCI Grines		
baro su		1300	
***************************************	Gene	al Habitat Description:	General Habitat Description
	VISIBILITY CLASSES	1 000% have a second or set all a set all a second or second or set all a second or set all a second or second or set all a second or set all a second or set all a second or second or set all a second or se	
	Class 1 Class 2	≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall	
	Class 3 Class 4	≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall	
	Not Searchable	Dense shrubs, woods, or other unsearchable habitats	Page of

Project Name: Amherst Island WP Project #: 21218 Turbine #: 528 Degree of Slope _____ degrees Slope Orientation ____ (e.g. SSW) Date (DD/MM/YY): / ___/_ Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 05/04/19 Facing North: Facing North: Facing East: Facing East: Observer: Observer: Shellow H Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 3dm 50m 30m General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Not Searchable Dense shrubs, woods, or other unsearchable habitats Page ___ of _ S:\Technical\Data Forms\Bird & Bat Mortality Searches

day 1

Project Name: Ambers 1900 UP Project #: 2018 Turbine #: 527 Degree of Slope 40.5 degrees Slope Orientation Date (DD/MM/YY): 07/06/ Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): / Facing North: Facing North: Observer: _ JAB Facing East: Facing East: Observer: ____ Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 40m 50m 30m 40m VC MINA 1300 General Habitat Description: General Habitat Description: 600 VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3

Class 4 Not Searchable Little or no bare ground; more than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Project Name: Autority W.P. Project #: 212.65 Turbine #: 528 Date (DD/MM/YY): OSION / 19 Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 11107119 Facing North: Facing North: 12411 Facing East: Facing East: Observer: ___ \\2 MRI Observer: Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: _5 Linear Transect Width: 280 50m 40m 50_m General Habitat Description: General Habitat Description: VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable

Project Name: Antres Island WE Project #: Turbine #: Sax

Some 40 in 30 m 20 m 10 m 30 m 20 m 20 m 20 m 20 m 20 m 20 m 2	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Width:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Date (DD/MM/YY): Observer: Monthly/Seasonal Linear Transect Width: M
VISIBILITY CLASSES	Some and some some some some some some some some	50m 40m 30m 20m 10m 30m 20m 30m 30m 20m 30m 30m 20m 30m 30m 30m 20m 30m 30m 30m 30m 30m 30m 30m 30m 30m 3

VISIBILITY CLASSES		
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall	
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall	
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall	
Not Searchable	Dense shrubs, woods, or other unsearchable habitats	

Project Name: And the Project #: 2018 Turbine #: 508 Degree of Slope _____ degrees Slope Orientation ____ (e.g. SSW) Photo Numbers (from turbine base) Date (DD/MM/YY): 23/12/19 Photo Numbers (from turbine base) Facing North: Facing East: Date (DD/MM/YY): / 23/22/ Facing North: Facing East: Observer: JYB Facing South: Observer: Facing South: Facing West: Facing West: (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Monthly/Seasonal (sketch habitat and visibility classes) Linear Transect Width: **Conditions** Representative of entire 2019 Winter 2 Season (November & December) 30m 50m 40m 30m General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall Class 1 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 2 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 3 Little or no bare ground; more than 25% of veg. > 30cm tall Class 4 Dense shrubs, woods, or other unsearchable habitats Not Searchable Page ___ of __ S:\Technical\Data Forms\Bird & Bat Mortality Searches

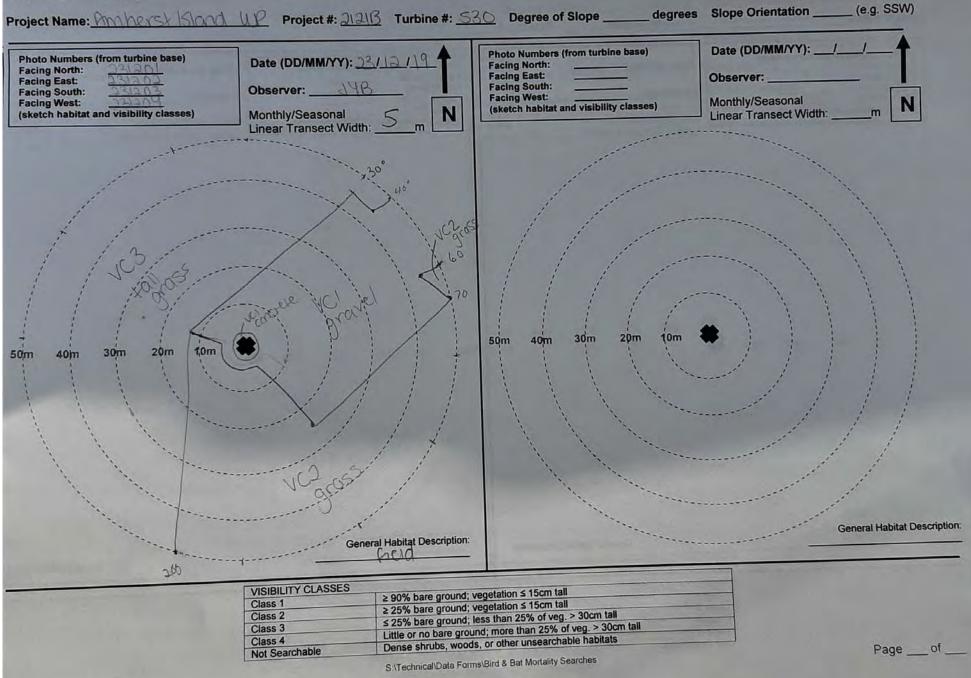
Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): Observer: BAH Monthly/Seasonal Linear Transect Wie		Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
VC1			CONDITIONS REPRESENTATIVE FOR ENTIRE ZOIG WINTER 1 SEASON (JANUARY-MARCH)	
Bare So. 50m 40m 40m 30m 20m 10m	VC1 Covered		50m 40m 30m 20m 10m	
235° ~>00	VCI Bue Soil	neral Habitat Description:	And the second	General Habitat Descriptio
	VISIBILITY CLASSES Class 1 Class 2 Class 3 Class 4 Not Searchable	Little or no bare ground;	etation ≤ 15cm tall etation ≤ 15cm tall than 25% of veg. > 30cm tall more than 25% of veg. > 30cm tall other unsearchable habitats	

Project Name: Amherst Island and Project #: 21216 Turbine #: 529

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 22 12 19 Observer:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
Adaptar and a second			
350	yc2 grass (pasture)	50m 40m 30m 20m 10m	•)
50m 40m 30m 20m 10m		The state of the s	
230	General Habitat Description	n:	General Habitat Desc
	VISIBILITY CLASSES Class 1 ≥ 90% bare group Class 2 ≤ 25% bare group Class 3 ≤ 25% bare group Class 3 Little or no bare group Class 4 Deeper shrubs, w	ad; vegetation ≤ 15cm tall ad; vegetation ≤ 15cm tall ad; vegetation ≤ 15cm tall ad; less than 25% of veg. > 30cm tall around; more than 25% of veg. > 30cm tall around; or other unsearchable habitats Forms\Bird & Bat Mortality Searches	Page

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Project Name: Amberst Island WE	Project #: <u>2/2/</u>	Turbine #: <u>530</u>	Degree of Slope degre	ees Slope Orientation (e.g. SSW)
Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 15 / Observer: BAH Monthly/Seasonal Linear Transect Width:		Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width: m
			CONDITIONS	
,			REPRESENTATIVE	
		600	FOR ENTIRE 2019 WINTER 1 SEASON	
			(JANUARY-MACK)	The first that the same of the
50m 40m 30m 20m 10m		+qo 50	m 40m 30m 20m 10m	General Habitat Description:
	VISIBILITY CLASSES	000/ 1	- 45 toll	
		90% bare ground; vegetati 25% bare ground; vegetati		
	Class 3 ≤	25% bare ground; less that	n 25% of veg. > 30cm tall	
	Class 4 Lif	ttle or no bare ground; mor	e than 25% of veg. > 30cm tall	
	Not Searchable De	ense shrubs, woods, or oth	er unsearchable habitats	
	S:	Technical\Data Forms\Bird &	Bat Mortality Searches	Page of



Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Monthly/Sea	Facing North Facing East: Facing Sout Facing West	t:	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
and the same of th	C,	ONDITIONS	
and the second second	200	EPRESENTATIVE	
And the second s	Fo	OR ENTIRE 2019 INTER 1 SEASON	
A GOVE	are) (JANUARY-MARCH)	The state of the s
50m 40m 30m 20m 10m	General Habitat Description:	1//	General Habitat Description:
VISIBILITY CLA Class 1	≥ 90% bare ground; vegetation ≤ 15cm ta	all	
Class 2	≥ 25% bare ground; vegetation ≤ 15cm ta	all	_
Class 3	≤ 25% bare ground; less than 25% of veg Little or no bare ground; more than 25% of	g. > 30cm tall of year > 30cm tall	-
Not Searchable	Dense shrubs, woods, or other unsearch		

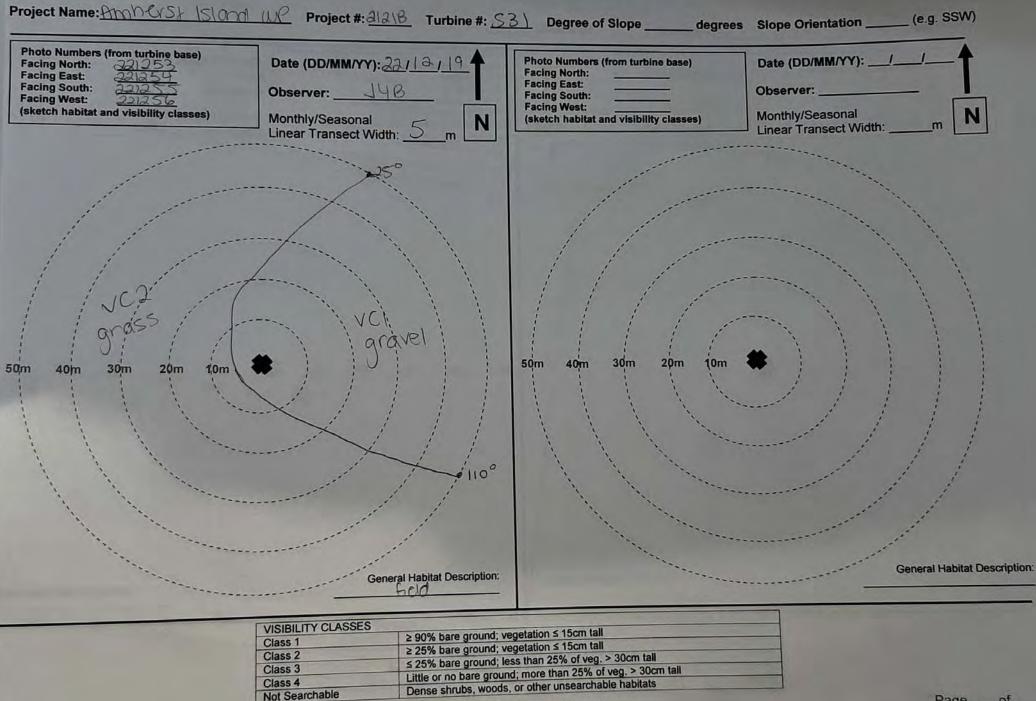


Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): Observer: KM- Monthly/Seasonal Linear Transect Wie	Facing East: Facing South: Facing West: (sketch habitat and visibility class	Observer:
2000	200	CONDITIONS	
VC3		REPRESENTATIVE	***************************************
Grass	VCI"	FOR ENTIRE ZOIL	
I store to	Bar S	WINTER 1 SEASO	N
A State of the state of	., 0000	(JANUARY-MARCH)	
35 July 20m 10m 30m 20m 10m 10m 10m 10m 10m 10m 10m 10m 10m 1	VCI Graver	eral Habitat Description:	General Habitat Description.
	VISIBILITY CLASSES Class 1 Class 2 Class 3 Class 4 Not Searchable	≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm tall Dense shrubs, woods, or other unsearchable habitats	
		S: Technical\Data Forms\Bird & Bat Mortality Searches	Page of_

Visibility Class Map Project Name: Amherst Island WP Project #: 21218 Turbine #: 533 Degree of Slope_ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Facing North: 231217 Date (DD/MM/YY): 23/12/19 Photo Numbers (from turbine base) Date (DD/MM/YY): ___/ Facing East: 23/218 Facing North: Facing East: Facing South: 231219 Observer: JYB Facing West: 331220 Observer: Facing South: (sketch habitat and visibility classes) Facing West: Monthly/Seasonal (sketch habitat and visibility classes) Monthly/Seasonal Linear Transect Width: Linear Transect Width: 50m 30m 20m 50m 40m 30m 20m General Habitat Description: General Habitat Description: VISIBILITY CLASSES ≥ 90% bare ground; vegetation ≤ 15cm tall

 VISIBILITY CLASSES

 Class 1
 ≥ 90% bare ground; vegetation ≤ 15cm tall

 Class 2
 ≥ 25% bare ground; vegetation ≤ 15cm tall

 Class 3
 ≤ 25% bare ground; less than 25% of veg. > 30cm tall

 Class 4
 Little or no bare ground; more than 25% of veg. > 30cm tall

 Not Searchable
 Dense shrubs, woods, or other unsearchable habitats

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY) Observer: BAB Monthly/Seasonal Linear Transect Wi	Facing East: Facing South: Facing West: (sketch habitat and visibili	Observer:
	The state of the s	CONDITION	u S
A section with		REPRESENT.	ATIVE
The second of	Road	For Entire Winter 1	Season
1 1 1		(January-1	(MECH)
50m 40m 30m 20m 100	So Access	50m 40m 30m	20m 10m 🗱
1 / / /	Concrete	$/// \langle \langle \langle \rangle \rangle $	
And the same of th	Ge	neral Habitat Description:	General Habitat Description
	VISIBILITY CLASSES Class 1 Class 2	≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall	
	Class 3 Class 4 Not Searchable	≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm Dense shrubs, woods, or other unsearchable habitats	tall

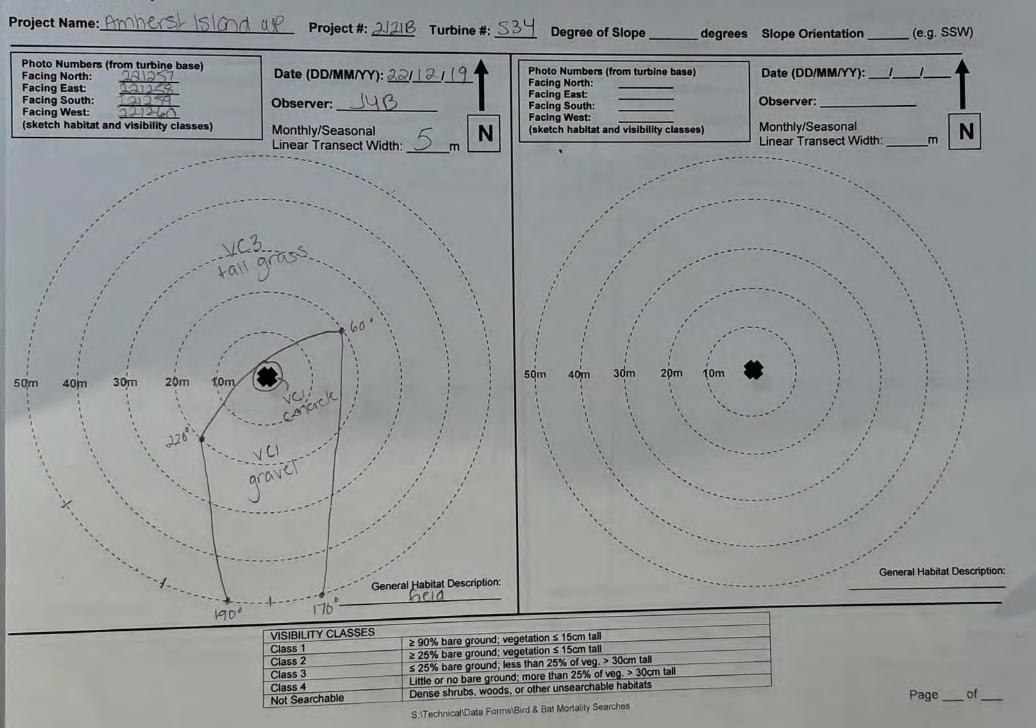


Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: BAH Monthly/Seasonal Linear-Transect Width: 5 m	Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):/
	timeachtainsect vviutii.	CONDITIONS REPRESENTATIVE FOR ENTIRE ZOIG WINTER 1 SEASON (JANUARY-MARCH)	
50m 40m 30m 20m 10m	VCI Snow	50m 40m 30m 20m 10m	
	Class 2 ≥ 25% bare Class 3 ≤ 25% bare Class 4 Little or no b	ground; vegetation ≤ 15cm tall ground; vegetation ≤ 15cm tall ground; vegetation ≤ 15cm tall ground; less than 25% of veg. > 30cm tall hare ground; more than 25% of veg. > 30cm tall ps, woods, or other unsearchable habitats	General Habitat Description

Photo Numbers (from turbine base) Facing North: 1921 Facing East: 1822 Facing South: 1823 Facing West: 1824 (sketch habitat and visibility classes) Date (DD/MI) Observer: 1824 Monthly/Seas Linear Transe	onal Facing West: (sketch habitat and visibility	Observer:
JCI oravel Som 40m 30m 20m 10m Som 10	50m 40m 30m	20m 10m Seneral Habitat Description
VISIBILITY CLAS Class 1 Class 2 Class 3 Class 4 Not Searchable	SES ≥ 90% bare ground; vegetation ≤ 15cm tall ≥ 25% bare ground; vegetation ≤ 15cm tall ≤ 25% bare ground; less than 25% of veg. > 30cm tall Little or no bare ground; more than 25% of veg. > 30cm Dense shrubs, woods, or other unsearchable habitats S :Technical:Data Forms:Bird & Bat Mortality Searches	tall Page of

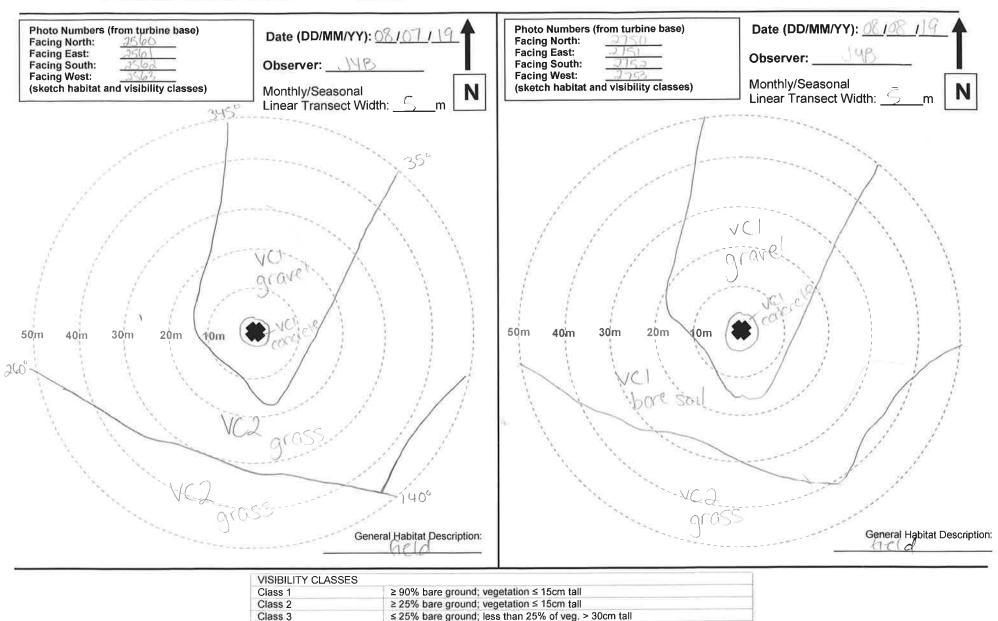
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Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): & Observer: Monthly/Seasonal Linear Transect Width: _	Facing East: Facing South: Facing West:	0bserver:
50m 40m 30m 20m 10m	2001 Let wolf of	X 135	General Habitat Descrip
	Class 2 ≥ Class 3 ≤ Class 4 L	: 90% bare ground; vegetation ≤ 15cm tall : 25% bare ground; vegetation ≤ 15cm tall : 25% bare ground; less than 25% of veg. > 30cr .ittle or no bare ground; more than 25% of veg. > Dense shrubs, woods, or other unsearchable hab	> 30cm tall

Project Name: Amherst Island Une Project #: 21218 Turbine #: 536

Class 4

Not Searchable



Little or no bare ground; more than 25% of veg. > 30cm tall Dense shrubs, woods, or other unsearchable habitats

Project Name: Amberst Kind INP Project #: 21218 Turbine #: 536

Photo Numbers (from turbine base) Facing North: 90935 Facing East: 90936 Facing South: 90936 Facing West: 90936 (sketch habitat and visibility classes)	Date (DD/MM/YY): 69 1 69 1 19 Observer:	Facing North: Facing East: Facing South: Facing West: Mol	te (DD/MM/YY): 10/19 server:
50m 40m 30m 20m 10m	General Habitat Description:	50m 40m 30m 20m 10m	General Habitat Description
	VISIBILITY CLASSES		

Project Name: Denterst Stand WP Project #: 21218 Turbine #: 536

Photo Numbers (from turbine base) Facing North: 23/244 Facing East: 23/250 Facing South: 24/251 Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY): 33/12/19 Observer:	Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes) Conditions	Date (DD/MM/YY):// Observer: Monthly/Seasonal Linear Transect Width:m
50m 40m 30m 20m 1,0m	General Habitat Description:	Representative of entire 2019 Winter 2 Season (November & December)	General Habitat Descr
	Class 2 ≥ 25% bare ground; Class 3 ≤ 25% bare ground;	vegetation ≤ 15cm tall vegetation ≤ 15cm tall less than 25% of veg. > 30cm tall lund; more than 25% of veg. > 30cm tall lund; or other unsearchable habitats	Page 0

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Visibility Class Map Project Name: Amherst Toland WP Project #: 2121 A Turbine #: 537 Degree of Slope _____ degrees Slope Orientation _____ (e.g. SSW) Photo Numbers (from turbine base) Photo Numbers (from turbine base) Date (DD/MM/YY): 1 102/19 Date (DD/MM/YY): / Facing North: Facing North: Facing East: Facing East: Observer: BAH Observer: Facing South: Facing South: Facing West: Facing West: Monthly/Seasonal (sketch habitat and visibility classes) Monthly/Seasonal (sketch habitat and visibility classes) Linear Transect Width: Linear Transect Width: CONDITIONS REPRESENTATIVE FOR ENTIRE 2019 WINTER 1 SEASON (JANUARY-MARCH) (travel 2700 50m 30m 50m 30m 20m 40m 240 VC3 Pasture General Habitat Description: General Habitat Description: 1800 VISIBILITY CLASSES Class 1 ≥ 90% bare ground; vegetation ≤ 15cm tall Class 2 ≥ 25% bare ground; vegetation ≤ 15cm tall Class 3 ≤ 25% bare ground; less than 25% of veg. > 30cm tall Class 4 Little or no bare ground; more than 25% of veg. > 30cm tall

Dense shrubs, woods, or other unsearchable habitats

Not Searchable

Project Name: Amberst Island UP Project #: 21218 Turbine #: 537

Photo Numbers (from turbine base) Facing North: Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Observer: 148 Monthly/Seasonal Linear Transect Width: 5	Facing East: Facing South: Facing West: (sketch habitat and visibility classes)	Date (DD/MM/YY):/
50m 40m 30m 20m 10m 240 VCI 240	CA CYCOS General Ha	sbitat Description:	General Habitat Descri
	Class 2 ≥ 2 Class 3 ≤ 2 Class 4 Litt	00% bare ground; vegetation ≤ 15cm tall 25% bare ground; vegetation ≤ 15cm tall 25% bare ground; less than 25% of veg. > 30cm tall 25% bare ground; more than 25% of veg. > 30cm tall 25% bare ground; more than 25% of veg. > 30cm tall 25% bare ground; more than 25% of veg. > 30cm tall 25% bare ground; more than 25% of veg. > 30cm tall 25% bare ground; more than 25% of veg. > 30cm tall 25% bare ground; less than	Page of