

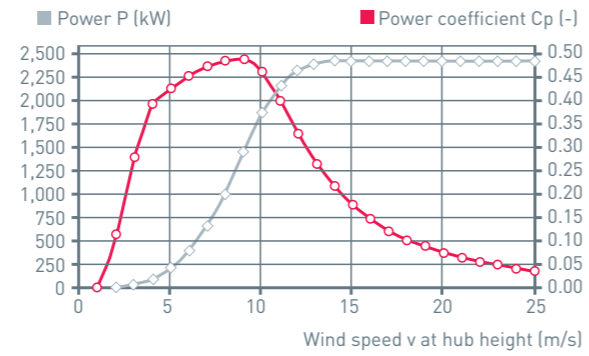
Appendix

APPENDIX A:	TURBINE SPECIFICATIONS
APPENDIX B:	AVIAN SURVEY
APPENDIX C:	BAT IMPACT ASSESSMENT
APPENDIX D:	ARCHAEOLOGY RESOURCE IMPACT ASSESSMENT
APPENDIX E:	MAINLAND MOOSE SURVEYS
APPENDIX F:	WETLAND AND WATERCOURSE ASSESSMENT
APPENDIX G:	VASCULAR PLANT ASSESSMENT
APPENDIX H:	NOISE IMPACT ASSESSMENT
APPENDIX I:	SHADOW FLICKER ASSESSMENT
APPENDIX J:	EMI ASSESSMENT
APPENDIX K:	COMPLAINT RESOLUTION PLAN
APPENDIX L:	STAKEHOLDER CONSULTATION
APPENDIX M:	CONSULTANT CV

Appendix A:
Wind Turbine Generator Specifications



Calculated power curve



Wind (m/s)	Power P (kW)	Power-coefficient Cp (-)
1	0.0	0.00
2	3.6	0.11
3	29.9	0.27
4	98.2	0.38
5	208.3	0.41
6	384.3	0.44
7	637.0	0.46
8	975.8	0.47
9	1,403.6	0.47
10	1,817.8	0.45
11	2,088.7	0.39
12	2,237.0	0.32
13	2,300.0	0.26
14	2,350.0	0.21
15	2,350.0	0.17
16	2,350.0	0.14
17	2,350.0	0.12
18	2,350.0	0.10
19	2,350.0	0.08
20	2,350.0	0.07
21	2,350.0	0.06
22	2,350.0	0.05
23	2,350.0	0.05
24	2,350.0	0.04
25	2,350.0	0.04

ρ = 1.225 kg/m³

Technical specifications E-92

Rated power: 2,350 kW
Rotor diameter: 92 m
Hub height in meter: 84 / 85 / 98 / 104 / 108 / 138
Wind zone (DIBt): WZ III
Wind class (IEC): IEC/EN IIA
WEC concept: Gearless, variable speed, single blade adjustment

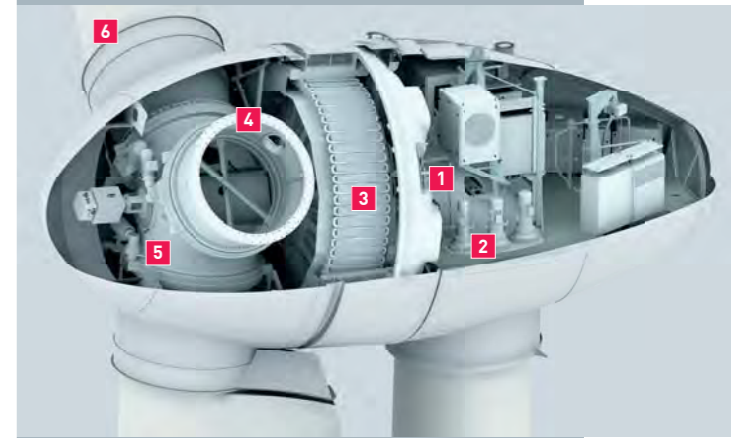
Rotor
 Type: Upwind rotor with active pitch control
 Rotational direction: Clockwise
 No. of blades: 3
 Swept area: 6,648 m²
 Blade material: GRP (epoxy resin); Built-in lightning protection
 Rotational speed: Variable, 5 - 16 rpm
 Pitch control: ENERCON single blade pitch system; one independent pitch system per rotor blade with allocated emergency supply

Drive train with generator
 Main bearing: Double row tapered/cylindrical roller bearings
 Generator: ENERCON direct-drive annular generator
Grid feed: ENERCON inverter
Brake systems: - 3 independent pitch control systems with emergency power supply
 - Rotor brake
 - Rotor lock
Yaw system: Active via yaw gear, load-dependent damping
Cut-out wind speed: 28 - 34 m/s (with ENERCON storm control*)
Remote monitoring: ENERCON SCADA

* For more information on the ENERCON storm control feature, please see the last page.

E-92

2,350 kW



- 1 Main carrier
- 2 Yaw drive
- 3 Annular generator
- 4 Blade adapter
- 5 Rotor hub
- 6 Rotor blade

Appendix B:

Avian Study



**BASELINE AVIFAUNA SURVEYS
FINAL REPORT
AULDS MOUNTAIN, NS**

October 11, 2013



Taking Charge™



October 11, 2013

Mr. Andy MacCallum
Natural Forces Wind Inc.
1801 Hollis Street, Suite 1205
Halifax, NS B3J 3N4

Dear Mr. MacCallum,

Re: Baseline Avifauna Surveys, Final Report
Aulds Mountain, NS

Attached is the Baseline Avifauna Surveys Final Report prepared for Aulds Mountain, NS on behalf of Natural Forces Wind Inc.

This report documents our observations, findings, and recommendations.

We trust this report to be satisfactory at this time. Once you have had an opportunity to review this correspondence, please contact us to address any questions you may have.

Thank you,

A handwritten signature in blue ink, appearing to read "Garry Gregory".

Garry Gregory, MSc.
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ggregory@strum.com

A handwritten signature in blue ink, appearing to read "Carys Burgess".

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TABLE OF CONTENTS

	<i>page</i>
1.0 INTRODUCTION	1
2.0 PROJECT SITE DESCRIPTION	1
3.0 RELEVANT LEGISLATION	1
4.0 AVIAN SURVEYS	2
4.1 Fall Migration Surveys	2
4.1.1 Methodology	2
4.2.1 Results.....	2
4.2 Winter Surveys	3
4.2.1 Methodology	3
4.2.2 Results.....	3
4.3 Spring Migration Surveys.....	4
4.3.1 Methodology	4
4.3.2 Results.....	4
4.4 Breeding Season Surveys	5
4.4.1 Methodology	5
4.4.2 Results.....	5
4.5 Overall Patterns in Bird Use of the Project Site.....	6
5.0 DISCUSSION	7
6.0 RECOMMENDATIONS	9
7.0 REFERENCES	10

Appendix A: Drawings

Appendix B: Survey Results

1.0 INTRODUCTION

Strum Consulting completed fall, over-wintering, spring migration and breeding surveys of the bird community at a proposed wind energy development located at Aulds Mountain, Nova Scotia (the Project), on behalf of Natural Forces Wind Inc. The objective of the surveys was to gather baseline seasonal data on avifauna at the Project site to facilitate pre- and post-construction comparisons, and to further inform the Project planning process.

This report presents and discusses the avifauna survey results.

2.0 PROJECT SITE DESCRIPTION

Natural Forces Wind Inc. has proposed the development of a two turbine wind farm at Aulds Mountain, located in Pictou County, Nova Scotia. The Project site is located in the small community of Piedmont, approximately 21 km east of New Glasgow (Drawing 1, Appendix A).

The Project site consists of the western extent of Aulds Mountain between Highway 104 and the Piedmont Valley Road. The peak elevation of Aulds Mountain is 290 m, while the maximum elevation within the Project site boundaries is 240 m. Habitats at the Project site consist of clear-cut and forested areas (e.g., softwood, mixed wood, and unclassified), with a minor hardwood component.

3.0 RELEVANT LEGISLATION

Birds in Nova Scotia have protection under both provincial and federal legislation. Most bird species, including waterfowl and insectivorous birds, are protected under the federal *Migratory Birds Convention Act (MBCA)*, 1994 (S.C. 1994, c. 22), which prohibits the killing of a migratory bird as well as the disturbance, destruction, and take of a migratory bird egg or nest without a permit from Environment Canada. Birds of prey and upland game birds, meanwhile, are not protected under the *MBCA* but have similar protection under the provincial *Wildlife Act (R.S.N.S. 1989, c. 504)*.

Certain bird species have been afforded further protection under additional provincial and federal legislation. At the federal level, the *Species at Risk Act (SARA)* (S.C. 2002, c. 29) prohibits the killing, harming, harassment, or capture of species listed as 'endangered' or 'threatened' under the Act, as well as the destruction of critical habitat for these species. The provincial *Endangered Species Act (NESA)* (S.N.S. 1998, c. 11), meanwhile, prohibits the killing, injuring, possession, or disturbance of a species listed as 'endangered' or 'threatened' under the Act, as well as the disturbance or destruction of dwelling places/areas for these species. It is important to note that the species and designations listed under the respective Acts are not necessarily the same.

Different levels of government are involved in the protection of birds and bird habitat through environmental assessment approval or through approval related monitoring program requirements. These include the following federal and provincial departments:

- Environment Canada – Canadian Wildlife Services (CWS);
- Nova Scotia Department of Natural Resources (NSDNR) – Wildlife Division; and
- Nova Scotia Environment (NSE).

4.0 AVIAN SURVEYS

All avifauna surveys were conducted by an expert birder and were designed in consultation with officials from NSDNR and CWS while conforming to protocols outlined in the document “Recommended Protocols for Monitoring Impacts of Wind Turbines on Birds” (CWS 2007).

In each season, species observed during the surveys were screened against the criteria outlined in the document “A Guide to Addressing Wildlife Species and Habitats in an EA Registration Document” (NSE 2009) to develop a list of priority species. Priority species include those species with the following considerations:

- Listed under SARA as “Endangered”, “Threatened”, or “Special Concern”;
- Listed under the NSESA as “Endangered”, “Threatened”, or “Vulnerable”;
- Assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as “Endangered”, “Threatened”, or “Special Concern”; and/or
- Assessed by NSDNR as “Red” (at risk or may be at risk) or “Yellow” (sensitive).

4.1 Fall Migration Surveys

4.1.1 Methodology

Fall surveys were completed on September 26 and October 27, 2012, and September 19, 2013. Surveys were timed to coincide with peak migration of insect-eating and seed-eating passerines. Use of the Project area by migratory birds in the fall season was evaluated using two survey types: stopover counts to assess use of the Project area as a stopover site (conducted within 4 hours of sunrise to encompass the periods of highest bird activity); and diurnal passage counts to assess use of the Project area by migrating birds of prey and other diurnal migrants (conducted in late morning and early afternoon).

4.2.1 Results

A total of 28 stopover count surveys were conducted across 10 locations, while 5 diurnal passage counts were performed across 3 locations (Drawing 2, Appendix A). A total of 331 birds were detected during fall migration surveys, comprising 49 species. Golden-crowned Kinglet (*Regulus satrapa*), Black-capped Chickadee (*Poecile atricapillus*), Common Raven (*Corvus corax*), White-throated Sparrow (*Zonotrichia albicollis*) and American Crow (*Corvus brachyrhynchos*) were the most abundant and most frequently observed species. Sixty-seven percent of bird species observed are Passerines including 11 species of warblers and 3 species of sparrows. Non-passerine species observed include: water birds (American Black Duck, *Anas rubripes*; Common Loon, *Gavia immer*; Herring Gull, *Larus argentatus*; Ring-billed Gull, *Larus delawarensis*; American Woodcock, *Scolopax minor*), birds of prey (Bald Eagle, *Haliaeetus leucocephalus*; Red-tailed Hawk, *Buteo jamaicensis*; Osprey, *Pandion haliaetus*; Northern Harrier, *Circus cyaneus*; Broad-winged Hawk, *Buteo platypterus*), upland game birds (Ruffed Grouse, *Bonasa umbellus*), and woodpeckers (Downy

Woodpecker, *Picoides pubescens*; Hairy Woodpecker, *Picoides villosus*; Northern Flicker, *Colaptes auratus*; Pileated Woodpecker, *Dryocopus pileatus*).

The following priority species were observed during stopover count surveys at the Project site (Drawing 3, Appendix A):

- Blackpoll Warbler (*Dendroica striata*) - "Yellow" (NSDNR 2010);
- Boreal Chickadee (*Poecile hudsonicus*) – "Yellow" (NSDNR 2010);
- Common Loon – "Red" (NSDNR 2010);
- Golden-crowned Kinglet – "Yellow" (NSDNR 2010);
- Gray Jay (*Perisoreus canadensis*) – "Yellow" (NSDNR 2010);
- Pine Grosbeak (*Pinicola enucleator*) – "Red" (NSDNR 2010);
- Pine Siskin (*Spinus pinus*) – "Yellow" (NSDNR 2010);
- Rose-breasted Grosbeak (*Pheucticus ludovicianus*) – "Yellow" (NSDNR 2010);
- Ruby-crowned Kinglet (*Regulus calendula*) – "Yellow" (NSDNR 2010); and
- Wilson's Warbler (*Wilsonia pusilla*) – "Yellow" (NSDNR 2010)

No species with legal protection under SARA or the NSESA were recorded.

Four of 5 diurnal passage surveys did not detect significant movements of birds of prey over the Project site. However, over the span of 1 hour during one watch period (HAWK 3; 19 September, 2013), 10 individuals passed over the site (Bald Eagle, Northern Harrier, Red-tailed Hawk, and Broad-winged Hawk) with flight patterns characteristic of migratory movements. These movements occurred near the top of the northern ridge and individuals generally used thermals and soaring to move northeast to southwest through the Project site. Seven of these individuals flew through the site at a height less than 120 m from the ground.

Detailed results are provided in Tables B1 and B2 (Appendix B).

4.2 Winter Surveys

4.2.1 Methodology

Winter bird surveys were completed on February 21st, 2013 and were timed to evaluate the representative bird community during the winter months. Use of the Project area by birds in the winter season was evaluated using the area search methodology. Each survey was conducted within 4 hours of sunrise to encompass the periods of highest bird activity, particularly for resident passerines.

4.2.2 Results

A total of 12 area search surveys were conducted at 12 separate locations within the Project site (Drawing 2, Appendix A). Nine species, consisting of 32 individual birds, were recorded during the winter surveys. Black-capped Chickadee, American Crow, and Common Raven (*Corvus corax*) were the most abundant and most frequently observed species. Common Redpoll (*Acanthis flammea*) and Blue Jay (*Cyanocitta cristata*) were the other passerine species observed; otherwise,

the winter bird community consisted of woodpecker and upland game species. Overall, there were 3.09 ± 1.40 birds and 2.09 ± 0.76 species observed per survey location (mean \pm 95% confidence interval) during the winter surveys.

No priority species were observed during winter bird surveys at the Project site. Similarly, no species with legal protection under SARA or the NSESA were recorded during these surveys.

Detailed survey results are provided in Tables B3 and B4 (Appendix B).

4.3 Spring Migration Surveys

4.3.1 Methodology

Spring migration surveys were completed on May 6th and 28th, 2013 and were timed to coincide with the main waves of spring migrant arrivals in Nova Scotia. Use of the Project area by spring migrants was evaluated using the stopover count methodology. Each survey was conducted within 4 hours of sunrise to encompass the periods of highest bird activity, particularly for migrant passerines.

4.3.2 Results

A total of 23 stopover count surveys were completed at the same 12 locations within the Project site that were surveyed during the winter season (Drawing 2, Appendix A). A total of 377 birds, representing 48 species, were observed during these spring migration surveys. White-throated Sparrow (*Zonotrichia albicollis*), Magnolia Warbler (*Dendroica magnolia*), and American Robin (*Turdus migratorius*) were the most abundant species, while Purple Finch (*Carpodacus purpureus*) and Yellow-rumped Warbler (*Dendroica coronata*) were also regularly observed. Overall, there were 16.39 ± 2.07 birds and 10.47 ± 1.32 species observed per survey location during the spring migration period.

Waterfowl were not observed at the site directly, although Common Merganser (*Mergus merganser*), Canada Goose (*Branta canadensis*), and Common Loon were either observed flying over the Project site in small numbers or were heard calling in the distance.

Birds of prey during the spring surveys were represented by Bald Eagle and Sharp-shinned Hawk (*Accipiter striatus*), which were observed soaring above/travelling through the valley to the south of the Project site.

The following priority species were observed during spring migration surveys at the Project site (Drawing 5, Appendix A):

- Blackpoll Warbler (*Dendroica striata*) – “Yellow” (NSDNR 2010);
- Boreal Chickadee – “Yellow” (NSDNR 2010);
- Common Loon – “Red” (NSDNR 2010);
- Pine Siskin– “Yellow” (NSDNR 2010); and
- Ruby-crowned Kinglet – “Yellow” (NSDNR 2010).

No species with legal protection under SARA or the NSESA were recorded during these surveys.

Detailed survey results are provided in Tables B5 and B6 (Appendix B).

4.4 Breeding Season Surveys

4.4.1 Methodology

Use of the Project site by breeding birds was evaluated using the point count methodology. This method consists of establishing survey locations in areas of interest, with considerations for habitat types and species of conservation concern (*i.e.*, Priority Species as per Section 4.0), and counting all birds observed/heard during a 10-minute period. Surveys were conducted within 4 hours of sunrise, to encompass the periods of highest bird activity, during site visits June 12 and June 22, 2013. A total of 24 point count surveys were conducted at 12 locations (Drawing 2, Appendix A).

Identified species were assigned one of three breeding classifications as per the criteria outlined in the Maritimes Breeding Bird Atlas Guide for Atlassers (MBBA 2006). In this classification scheme, species are designated as “Possible”, “Probable”, or “Confirmed” breeders on the basis of behavioural observations.

4.4.2 Results

There were 43 species, consisting of 418 individual bird observations, recorded during the breeding season surveys. One of these species (American Robin) was considered a “Confirmed breeder”, 28 were considered at least “Probable” breeders, and 14 were considered “Possible” breeders. An average of 17.4 ± 2.17 (mean \pm 95% confidence interval) birds were detected per survey location, with an average of 12.4 ± 1.35 species detected per survey location.

White-throated Sparrow, Magnolia Warbler, and Alder Flycatcher (*Empidonax alnorum*) were the most frequently observed and the most abundant species counted during the surveys. Passerines were the dominant group on the Project site representing 86% of species.

Non-passerine species observed during the breeding bird surveys included: Common Loon, Common Merganser (*Mergus merganser*), Hairy Woodpecker (*Picoides villosus*), Northern Flicker (*Colaptes auratus*), Yellow-bellied Sapsucker (*Sphyrapicus varius*), Pileated Woodpecker (*Dryocopus pileatus*), and Belted Kingfisher (*Megaceryle alcyon*) [observed passing over (*i.e.*, above 50 m in height) the site].

The following priority species were observed during breeding bird surveys at the Project site (Drawing 6, Appendix A):

- Eastern Wood-Pewee (*Contopus virens*) – “Vulnerable” (NSESA 2013), “Special Concern” (COSEWIC 2013), “Yellow” (NSDNR 2010);
- Common Loon – “Red” (NSDNR 2010);
- Golden-crowned Kinglet – “Yellow” (NSDNR 2010); and
- Ruby-crowned Kinglet– “Yellow” (NSDNR 2010);

Eastern Wood-Pewee is the only species with legal protection under either SARA or NSESA observed during breeding bird surveys at the Project site. This species was only observed during one breeding bird survey and is, thus, considered a “Possible” breeder at the Project site (MBBA 2006).

Detailed results are provided in Tables B7 and B8 (Appendix B).

4.5 Overall Patterns in Bird Use of the Project Site

Species Diversity and Abundance

A total of 66 species were observed using the Project site during the study period: 43 during the breeding period, 48 during spring migration, 49 during fall migration, and 9 during the winter.

Priority Species

Eastern Wood-Pewee was the only species observed that has legal protection under the NSESA (‘Vulnerable’). The species has also been assessed and ranked as ‘Special Concern’ by COSEWIC (2013).

A total of 11 priority species (*i.e.*, those listed under SARA, NSESA or assessed and ranked by COSEWIC and/or NSDNR) were observed at the Project site. These species were:

- Eastern Wood-Pewee;
- Blackpoll Warbler;
- Boreal Chickadee;
- Common Loon;
- Golden -crowned Kinglet;
- Gray Jay;
- Pine Grosbeak;
- Pine Siskin;
- Rose-br easted Grosbeak;
- Ruby-crowned Kinglet; and
- Wilson’s Warbler.

Site Utilization

Several species of birds of prey were observed flying over, or near, the site in spring [early May: Bald Eagle (1); late May: Sharp-shinned Hawk (1)] and fall [(late September and late October: Red-tailed Hawk (4), Bald Eagle (6), Broad-winged Hawk (1), Northern Harrier (3), Osprey (1)] and are likely using the area as a foraging ground, breeding ground and/or as a migratory route.

Although the site features no major waterbodies to support aquatic or wetland-associated species, there is evidence that several aquatic, water-associated, or wetland-associated species use the site or nearby landscape [*e.g.*, Bald Eagle in spring and fall; Common Merganser in spring and noted as a ‘probable breeder’ (an adult displaying “agitated” behaviour) during the breeding season; Belted Kingfisher observed passing over the site during the breeding season ; and American Black Duck (5)

observed passing over the site during the fall migration]. Furthermore, Herring Gull (5), Ring-billed Gull (1) and Canada Goose (3) were all observed in small numbers at the edge of, or beyond, the site boundaries. American Woodcock and Wilson's Warbler were detected on-site in late September.

Observations of Common Loon in the vicinity of the site (*i.e.*, more than 100 m beyond point count locations) suggest that the local landscape might be important for Common Loon breeding and movement.

5.0 DISCUSSION

Priority Species

Seven of the priority species observed are common in coniferous or conifer-dominated forest types in Nova Scotia, including: Boreal Chickadee, Golden-crowned Kinglet, Pine Siskin, Ruby-crowned Kinglet, Blackpoll Warbler, Gray Jay and Pine Grosbeak. Of these, Boreal Chickadee, Golden-crowned Kinglet and Gray Jay are likely year-round residents at the site, while Ruby-crowned Kinglet and Blackpoll Warbler likely use the site as a migration stopover. Pine Siskin and Pine Grosbeak have less predictable inter-annual distributions across their range because of fluctuations in winter food availability (BAM 2013) but also appear to be using the site during migration.

Breeding Bird Survey (BBS) data (Environment Canada 2010) indicate that three of these priority species have undergone marked population declines in Nova Scotia between 1999 and 2009: Pine Siskin (Irregularly common in NS; 17.8 % decline per year), Boreal Chickadee (common resident in NS; 22.6% decline per year) and Ruby-crowned Kinglet (fairly common in NS; 11.6% decline per year). Pine Siskin is an irruptive¹ vagrant whose populations increase in southern portions of the breeding range (*e.g.*, Nova Scotia) when cone crops in coniferous tree species are low in northern portions of the range (BAM 2013). Although BBS data to assess Blackpoll Warbler and Pine Grosbeak trends during this time period (1999 to 2009) in Nova Scotia are insufficient (Environment Canada 2010), Blackpoll Warbler populations have exhibited significant national declines (4.2% decline per year).

Priority species detected on site that are associated with deciduous vegetation include Eastern Wood-Pewee (fairly common in NS; "Vulnerable" under NSESA), Rose-breasted Grosbeak (fairly common in NS), and Wilson's Warbler (relatively uncommon in NS). Despite significant population decline in Canada and in the Atlantic Northern Forest Bird Conservation Region, neither Eastern Wood-pewee nor Rose-breasted Grosbeak has shown significant population declines in Nova Scotia (Environment Canada 2010). Although the Wilson's Warbler is not well monitored by BBS surveys (Environment Canada 2013), it is characterized as having undergone a large population decrease in Canada since the 1970s, with a possible stabilisation within the last 10 years (Environment Canada 2013).

¹ Irruptive growth is defined by population explosions and subsequent sharp population crashes, or diebacks.

Birds at Risk of Collision with Turbines

Some bird species are at higher risk for turbine collision than others. Presence of species known to exhibit aerial flight displays can factor into the sensitivity of a site to bird mortality (CWS 2006). Although not detected on the Project site during breeding season surveys, American Woodcock, detected in September, could have been local breeders if these individuals had not been physiologically ready to migrate until late fall (Keppie and Whiting 1994). Furthermore, American Woodcock are known to occasionally exhibit aerial flight displays on singing grounds in fall (Keppie and Whiting 1994) which could increase the risk to this species for collision. However, since American Woodcock were observed approximately 700 m from the nearest proposed turbine location the species should not be at high risk for this Project site.

Diurnally-migrating songbirds, raptors and waterfowl could be susceptible to collision with turbines especially if birds use thermals for dispersal, if high winds carry birds off course, or birds travel at heights corresponding to turbine rotors. However, very few waterbird and gull fatalities have ever been reported at wind sites (Kingsley and Whittam, 2005). Similarly, diurnal raptors are considered to be at high risk of collision with turbines because of their use of thermals, and preference for travel along linear topographic features (Kingsley and Whittam, 2005). Yet, despite a small number of facilities reporting high raptor collision rates, raptor fatalities represent an average of less than 3% of all birds killed by turbines (Kingsley and Whittam, 2005). Nocturnal migrants can be at risk of collision with turbines due to the time at which large movements occur (*i.e.*, low light or night time when vision may be compromised) and the locations of those movements that concentrate birds during migration (*i.e.*, high ridges, hill systems). Furthermore, nocturnal migrants may also cross ridges during fall migration, as opposed to following the landforms (Mabee *et al.* 2006), and will typically fly at lower heights while at high elevations (Kingsley and Whittam 2005) and in fog and drizzle conditions (which may be experienced at this Project site due to the proximity of the coast). Lower flight heights under these conditions could cause birds to fly at heights coinciding with the effective rotor height of the turbines (height of turbines + elevation of landform).

Abundance and diversity of nocturnal-migrant birds at the Project site during the fall and spring migratory periods were considered average, suggesting that the Project site is not located within a major migratory pathway.

Although the majority of diurnal passage surveys did not detect significant movements of birds of prey, passage rates of diurnal-migrant birds of prey are known to vary greatly from day to day in response to environmental conditions (CWS 2007). One hawk watch revealed that several species of diurnal-migrant birds of prey are likely using the Project site as a migratory pathway along the northern ridge of the site (see "HAWK 3", Drawing 2, Appendix A), and frequently at flight heights corresponding to the height of turbine rotors.

Further monitoring however will validate these findings (refer to 6.0 for recommendations) by focussing on two main considerations:

1. Local abundance and diversity of migrants can be highly variable during the migratory period (CWS 2007), so it is possible that migration surveys may have missed significant migrant pulses at, or over, the Project site.
2. The site is located in a geographic region with landform characteristics that render the area as “high” potential for adverse impacts to bird populations (CWS 2007); in particular the Project site is situated near the western extent of the Pictou-Antigonish Highlands (Davis and Browne 1996), one of mainland Nova Scotia’s most prominent hill systems, and in close proximity to the coast. These factors could combine to concentrate migrating birds and increase the likelihood that birds will fly at heights corresponding to turbine rotors (as noted above). Landform features associated with this Project site could therefore increase the risk of mortality events resulting from collisions with Project infrastructure.

6.0 RECOMMENDATIONS

Due to the Project site’s coastal proximity and landscape position along a well-defined ridge system, it is recommended that a post-construction monitoring program be implemented to focus on the potential behavioural and physical effects to migrant passerines, waterfowl, and birds of prey. The program should include carcass searches and, diurnal passage migration monitoring on-site at the peak of the fall migration period (*i.e.*, between late August and early October).

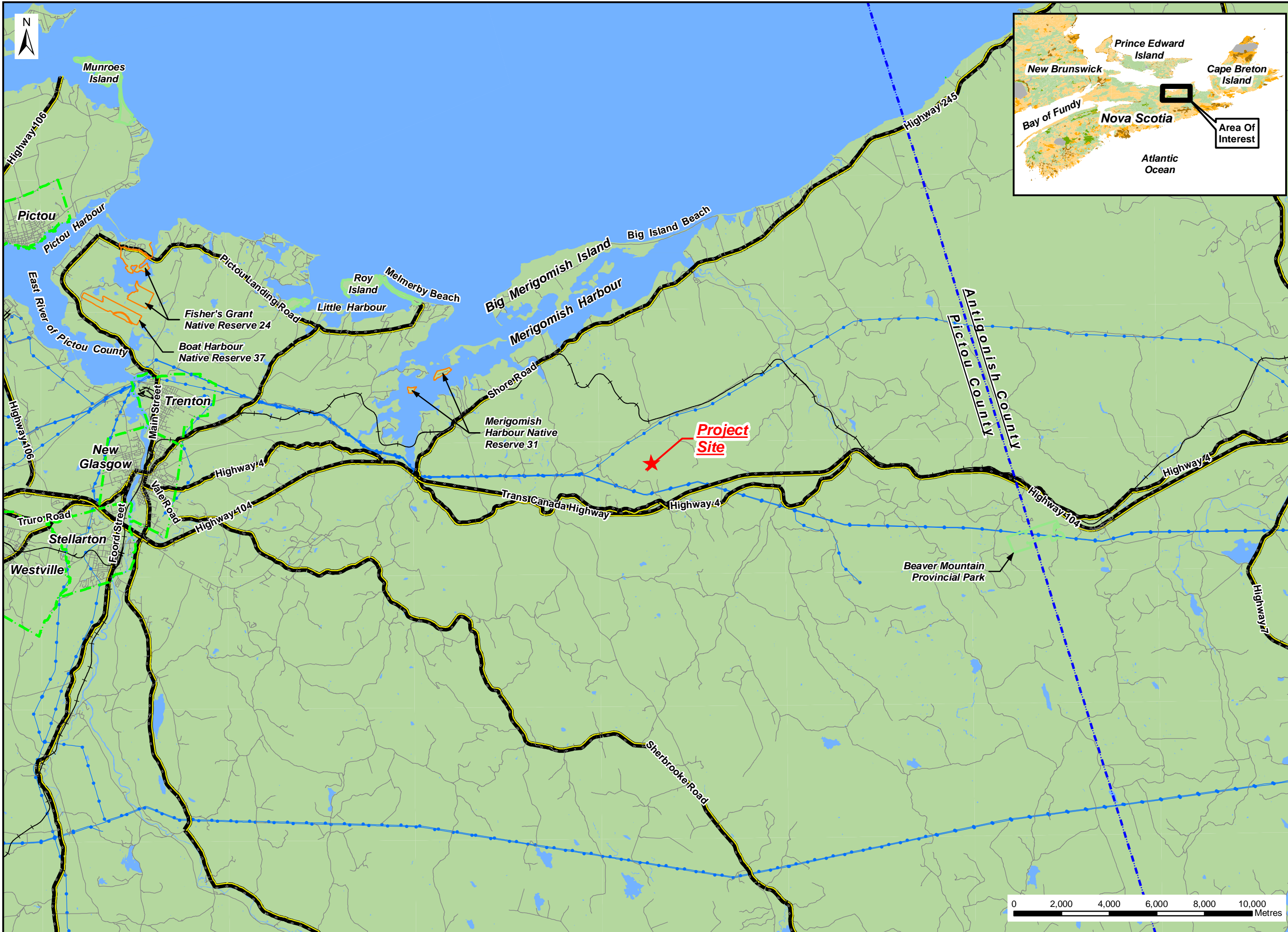
It is also recommended that remnant, mid-aged to mature softwood stands along the south facing slope to the south of Turbine 2 be left intact; a measure which should be feasible given the prevalence of disturbed areas in other areas of the site. Such habitat features are likely of importance to breeding forest species, especially those that make use of large trees or nest high in the softwood canopy. Similarly, it is recommended that other potentially important habitat features, including but not necessarily limited to standing deadwood, be left intact where possible. Potential breeding habitat for Eastern Wood-Pewee in the vicinity of Turbine 2, including small patches of mature hardwoods, should also maintained, to the extent possible, to minimize potential impacts to this species.

To minimize risk to breeding birds, vegetation removal activities should be conducted outside of the peak nesting season for most breeding birds in Nova Scotia (*i.e.*, May 1st – August 31st). Where this is impractical, an expert birder should be deployed, prior to the initiation of clearing, to identify and mark active nests within proposed work areas. Where active nests are encountered, work should be suspended in the area pending the emergence of fledged young. Avifauna management protocol should be included in the Project Environmental Protection Plan, for construction, to inform on-site workers.

7.0 REFERENCES

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APPENDIX A
DRAWINGS



Notes:

1. Reference: Digital Topographic Mapping by Nova Scotia Geomatics Centre.
2. Projection: NAD83(CSRS), UTM Zone 20 North.

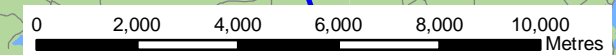
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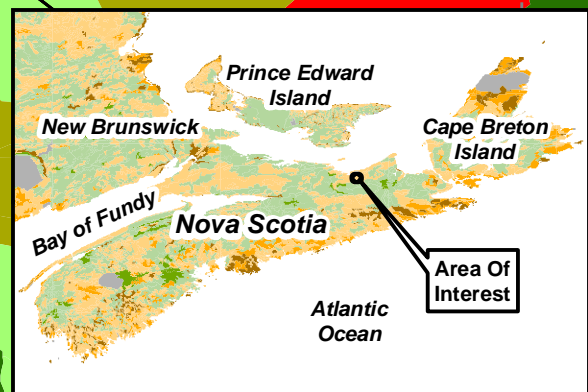
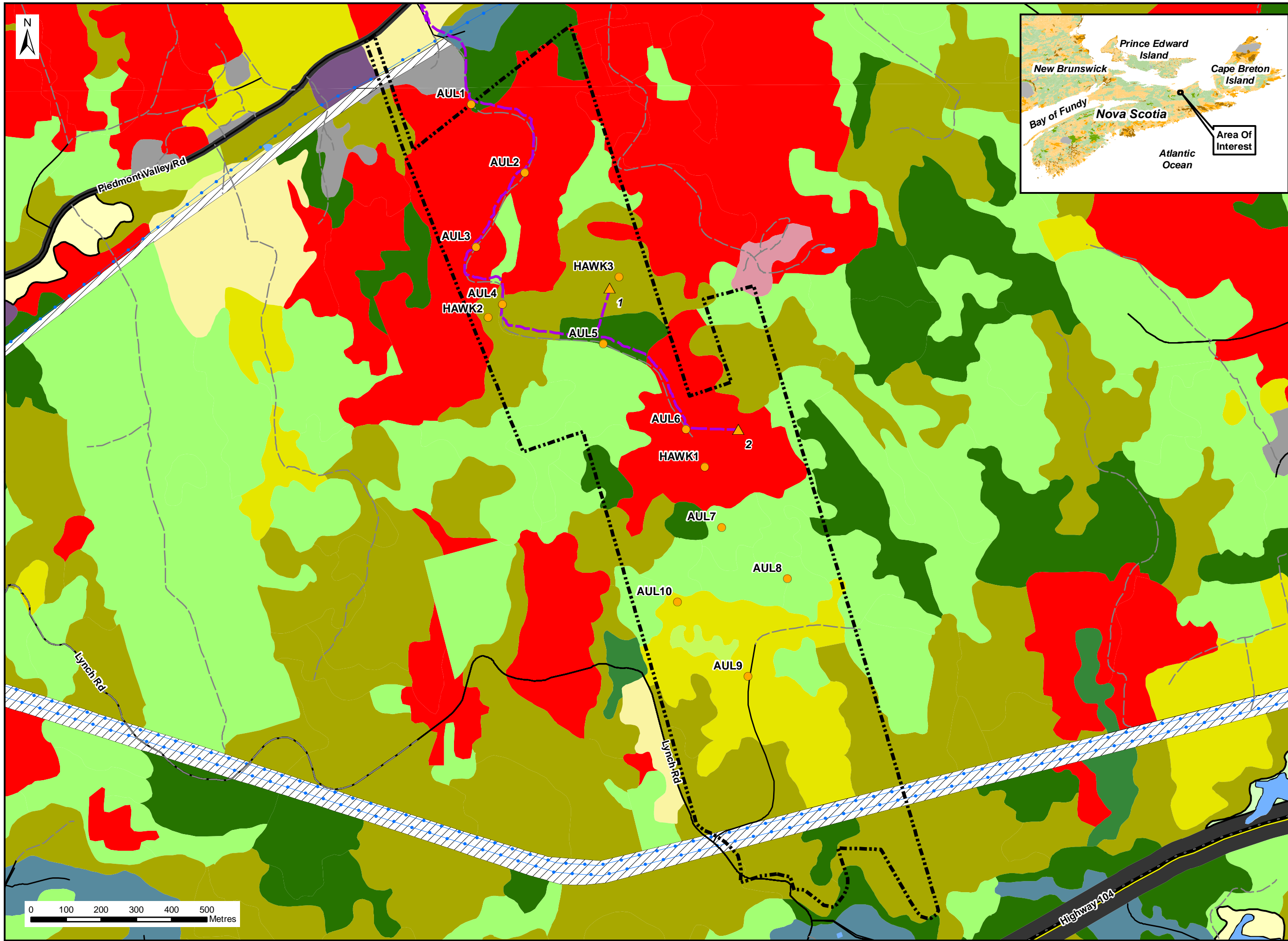
- - - County Boundary
- - - Municipal Boundary
- Native Reserve
- Provincial Park
- Active Railroad
- Public Roads
- Major Roads and Highways
- Existing Transmission Lines
- Water Bodies

Project Site Location



Date: October 2013	Project #: 12-4509
Scale: 1:150,000	Drawing #: 1
Drawn By: H. Serhan	
Checked By: S. Dickey	





Notes:
 1. Reference: Wetland Inventory by NSDNR 2011; Forest Inventory by NSDNR 2011; Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

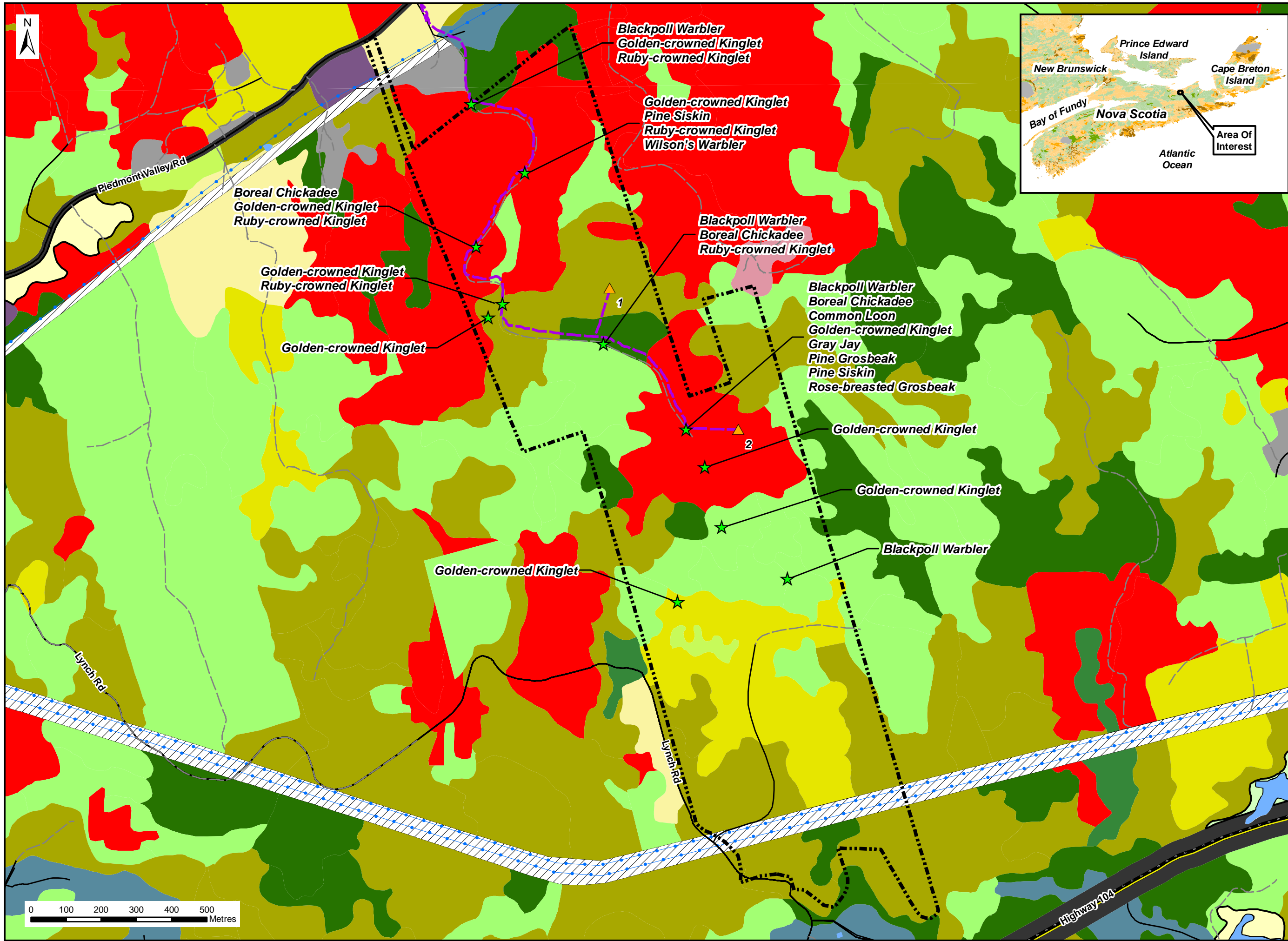
- Legend:**
- Bird Survey Locations
 - ▲ Proposed Turbine Location
 - Proposed Access Road
 - Project Site Boundaries
 - == Major Roads and Highways
 - Public Roads
 - - - Access Roads / Trails
 - Existing Transmission Lines
 - Water Body
- NSDNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
- NSDNR Forest Inventory**
- Softwood
 - Mixedwood
 - Hardwood
 - Unclassified Forest
 - Sugar Bush
 - Plantation
 - Alders <75%
 - Alders >75%
 - Clear Cut
 - Partial Cut-over
 - Beaver Flowage
 - Agriculture
 - Urban
 - Gravel Pit
 - ▨ Powerline Corridor
 - ▨ Road Corridor

Bird Survey Locations



Date: Dec. 2012	Project #: 12-4509
Scale: 1:10,000	Drawing #: 2
Drawn By: G. Gregory	
Checked By: A. Walter	





Notes:
 1. Reference: Wetland Inventory by NSDNR 2011; Forest Inventory by NSDNR 2011; Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

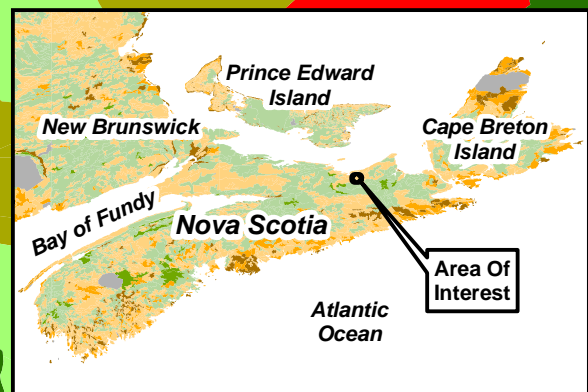
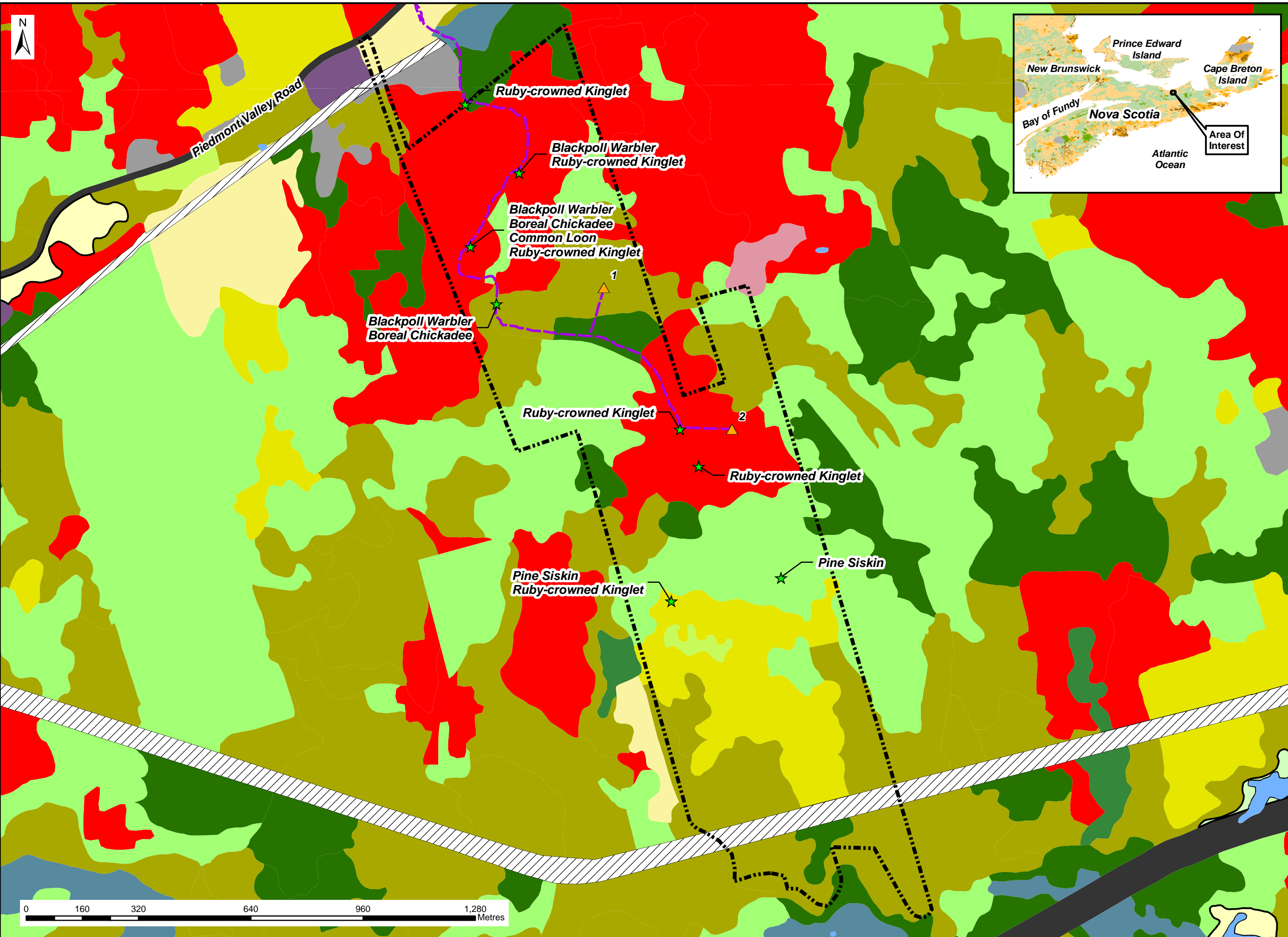
- Legend:**
- ★ Priority Species Locations - Fall
 - ▲ Proposed Turbine Location
 - Proposed Access Road
 - - - Project Site Boundaries
 - Major Roads and Highways
 - Public Roads
 - Access Roads / Trails
 - Existing Transmission Lines
 - Water Body
- NSDNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
- NSDNR Forest Inventory**
- Softwood
 - Mixedwood
 - Hardwood
 - Unclassified Forest
 - Sugar Bush
 - Plantation
 - Alders <75%
 - Alders >75%
 - Clear Cut
 - Partial Cut-over
 - Beaver Flowage
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor

**Fall Bird
Priority Species
Locations**



Date: Oct. 2013	Project #: 12-4509
Scale: 1:10,000	Drawing #: 3
Drawn By: J Churchill	
Checked By: A. Walter	





Notes:

- Reference: Wetland Inventory by NSDNR 2011; Forest Inventory by NSDNR 2011; Topographic Mapping by Service NS.
- Projection: NAD83 Zone 20N

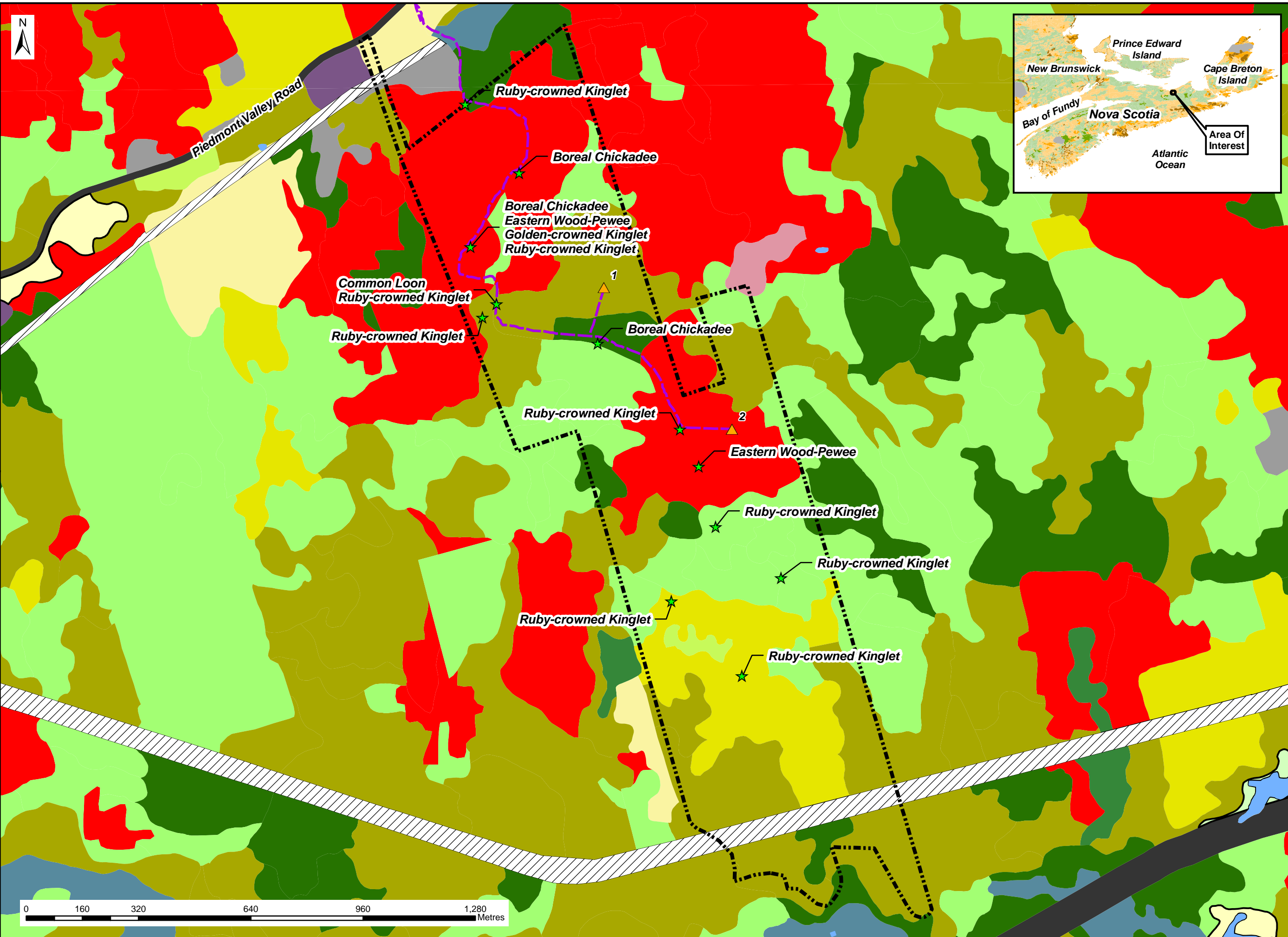
- Legend**
- Project Site Boundaries
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Spring Migration
 - Water Body
- NSDNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
- NSDNR Forest Inventory**
- Softwood
 - Mixedwood
 - Hardwood
 - Unclassified Forest
 - Sugar Bush
 - Plantation
 - Alders <75%
 - Alders >75%
 - Clear Cut
 - Partial Cut-over
 - Beaver Flowage
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor

**Spring Migration
Priority Species
Locations**



Date: August 2013	Project #: 12-4509
Scale: 1:10,000	Drawing #: 4
Drawn By: G. Gregory	
Checked By: A. Walter	





Notes:
 1. Reference: Wetland Inventory by NSDNR 2011; Forest Inventory by NSDNR 2011; Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

- Legend**
- Project Site Boundaries
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Breeding
 - Water Body
- NSDNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
- NSDNR Forest Inventory**
- Softwood
 - Mixedwood
 - Hardwood
 - Unclassified Forest
 - Sugar Bush
 - Plantation
 - Alders <75%
 - Alders >75%
 - Clear Cut
 - Partial Cut-over
 - Beaver Flowage
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor

**Breeding Bird
Priority Species
Locations**



Date: August 2013	Project #: 12-4509
Scale: 1:10,000	Drawing #: 5
Drawn By: G. Gregory	
Checked By: A. Walter	



APPENDIX B
SURVEY RESULTS

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
26 Sept/2012	Aul1	548433E, 5049750N	Young mixedwood/hardwood	20 km/h S	10	Overcast	None	6:44 AM	American Robin	2	0-50
									Golden-crowned Kinglet	2	0-50
									Hermit Thrush	1	0-50
									White-throated Sparrow	2	0-50
26 Sept/2012	Aul2	548587E, 5049555N	Young mixed wood, small clearing	20 km/h S	10	Overcast	None	7:01 AM	Black-capped Chickadee	4	0-50
									Golden-crowned Kinglet	2	0-50
									Ruby-crowned Kinglet	1	0-50
									White-throated Sparrow	1	0-50
26 Sept/2012	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	20 km/h S	10	Overcast	None	7:09 AM	American Crow	1	100+
									Black-throated Green Warbler	1	0-50
									Common Yellowthroat	1	0-50
									White-throated Sparrow	3	0-50
26 Sept/2012	Aul4	548323E, 5049181N	Young mixed hardwood	20 km/h S	10	Overcast	None	7:21 AM	Blue-headed Vireo	1	0-50
									Dark-eyed Junco	2	0-50
									Golden-crowned Kinglet	4	0-50
									Ruby-crowned Kinglet	2	0-50
									White-throated Sparrow	2	0-50
26 Sept/2012	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	20-25 km/h S	12	Overcast	None	7:37 AM	Black-capped Chickadee	2	0-50
									Dark-eyed Junco	2	0-50
									Red-tailed Hawk	1	0-50
									Ruby-crowned Kinglet	1	0-50
									Yellow-rumped Warbler	1	FO SW
									Yellow-rumped Warbler	1	0-50
26 Sept/2012	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	20-25 km/h S	12	Overcast	None	7:53 AM	American Robin	2	0-50
									Blackpoll Warbler	1	0-50
									Blue Jay	1	100+
									Common Raven	1	FO W
									Common Raven	2	100+
									Dark-eyed Junco	1	0-50
									Dark-eyed Junco	1	0-50
									Golden-crowned Kinglet	3	0-50
									Northern Flicker	1	50-100
									Palm Warbler	1	0-50
									Pine Siskin	2	0-50
									Purple Finch	1	100+
									White-throated Sparrow	4	0-50
									Yellow-rumped Warbler	4	0-50

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
26 Sept/2012	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	20-25 km/h S	14	Overcast	None	8:13 AM	American Crow	1	100+
									Blue Jay	1	100+
									White-throated Sparrow	1	0-50
									Yellow-rumped Warbler	1	50-100
26 Sept/2012	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	20-25 km/h S	15	Overcast	None	8:32 AM	American Robin	1	50-100
									American Robin	1	0-50
									Bald Eagle	1	Soar
									Black-capped Chickadee	1	0-50
									Dark-eyed Junco	1	0-50
									Red-tailed Hawk	1	Soar
26 Sept/2012	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	20-25 km/h S	15	Overcast	None	9:05 AM	American Woodcock	3	0-50
									Black-capped Chickadee	4	0-50
									Blue Jay	1	100+
									Palm Warbler	1	0-50
									Yellow-rumped Warbler	1	0-50
26 Sept/2012	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	20-25 km/h S	16	Overcast	None	9:21 AM	American Crow	1	0-50
									Dark-eyed Junco	2	0-50
									Golden-crowned Kinglet	3	0-50
									White-throated Sparrow	2	0-50
26 Sept/2012	HAWK 1	549099E, 5048718N	Patchy mid-aged forest	20-25 km/h S	16	Clear	None	9:45 AM	No birds of prey observed		
27 Oct/2012	Aul1	548433E, 5049750N	Young mixedwood/hardwood	20 km/h N	7	Overcast	None	7:35 AM	American Crow	1	100+
									Black-capped Chickadee	1	0-50
									Common Raven	1	100+
									Hairy Woodpecker	1	50-100
									Red-tailed Hawk	1	100+
27 Oct/2012	Aul2	548587E, 5049555N	Young mixed wood, small clearing	20 km/h N	7	Overcast	None	7:52 AM	American Crow	2	100+
									Black-capped Chickadee	4	50-100
									Common Raven	1	100+
									Golden-crowned Kinglet	3	50-100
									Pine Siskin	1	100+
									White-winged Crossbill	3	FO NE
27 Oct/2012	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	20 km/h N	7	Overcast	None	8:07 AM	American Crow	2	100+
									Black-capped Chickadee	1	50-100
									Common Raven	1	100+

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Golden-crowned Kinglet	1	0-50
									Ruffed Grouse	1	50-100
									White-winged Crossbill	2	100+
									White-winged Crossbill	10	0-50
27 Oct/2012	Aul4	548323E, 5049181N	Young mixed hardwood	20 km/h N Gust 30 km/h	7	Overcast	None	8:26 AM	American Crow	1	100+
									American Crow	8	FO SW
									American Robin	9	F/O S
									Black-capped Chickadee	2	0-50
									Common Raven	1	0-50
									Golden-crowned Kinglet	2	0-50
									White-winged Crossbill	2	FO NE
27 Oct/2012	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	20 km/h N Gust 30 km/h	7	Overcast	None	8:45 AM	American Black Duck	4	FO S
									American Crow	1	100+
									Common Raven	2	100+
27 Oct/2012	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	20 km/h N Gust 30 km/h	7	Overcast	None	9:25 AM	Black-capped Chickadee	3	50-100
									Black-capped Chickadee	1	0-50
									Boreal Chickadee	2	0-50
									Common Loon	1	100+
									Common Raven	3	100+
									Golden-crowned Kinglet	6	100+
									Golden-crowned Kinglet	2	50-100
									Gray Jay	2	0-50
									Pine Grosbeak	2	50-100
									Rose-breasted Grosbeak	1	100+
27 Oct/2012	HAWK 1	549099E, 5048718N	Patchy mid-aged forest	20 km/h N Gust 30 km/h	7	Overcast	None	9:46 AM	American Black Duck	1	100+
									Bald Eagle	1	100+
									Black-capped Chickadee	3	50-100
									Boreal Chickadee	2	0-50
									Herring Gull	5	100+
									Ring-billed Gull	1	100+
27 Oct/2012	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	20 km/h N Gust 30 km/h	7	Overcast	None	10:17 AM	American Crow	1	100+
									Golden-crowned Kinglet	2	0-50
27 Oct/2012	HAWK 2	548483E, 5049144N	Young mixed hardwood	20 km/h N Gust 30 km/h	7	Overcast	Light mist	10:49 AM	American Crow	2	100+
									Golden-crowned Kinglet	2	0-50
19 Sept/2013	Aul1	548433E, 5049750N	Young mixedwood/hardwood	5 km/h N	10	Clear	None	7:09 AM	American Crow	1	100+
									American Robin	3	0-50
									American Robin	4	FO N

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Blackburnian Warbler	1	0-50
									Blackpoll Warbler	1	0-50
									Black-throated Green Warbler	1	0-50
									Blue Jay	1	0-50
									Blue Jay	1	50-100
									Blue-headed Vireo	1	0-50
									Common Yellowthroat	1	0-50
									Dark-eyed Junco	1	0-50
									Magnolia Warbler	1	0-50
									Northern Flicker	1	0-50
									Pileated Woodpecker	1	50-100
									Purple Finch	1	FO
									Ruby-crowned Kinglet	3	0-50
									White-throated Sparrow	4	0-50
19 Sept/2013	Aul2	548587E, 5049555N	Young mixed wood, small clearing	5 km/h N	10	Clear	None	7:26 AM	Black-capped Chickadee	4	0-50
									Black-capped Chickadee	1	50-100
									Blue Jay	2	50-100
									Common Raven	3	100+
									Common Yellowthroat	1	0-50
									Downy Woodpecker	1	50-100
									Hermit Thrush	1	0-50
									Magnolia Warbler	1	0-50
									Nashville Warbler	1	0-50
									Red-eyed Vireo	1	0-50
									White-throated Sparrow	1	0-50
									Wilson's Warbler	1	0-50
									Yellow-rumped Warbler	1	0-50
									Yellow-rumped Warbler	1	FO N
19 Sept/2013	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	5 km/h N	12	Clear	None	7:45 AM	Blackburnian Warbler	2	0-50
									Blue-headed Vireo	1	0-50
									Boreal Chickadee	1	0-50
									Canada Goose	3	100+
									Golden-crowned Kinglet	1	0-50
									Ruby-crowned Kinglet	1	0-50
									Song Sparrow	1	0-50
19 Sept/2013	Aul4	548323E, 5049181N	Young mixed hardwood	5 km/h N	14	Clear	None	8:05 AM	None		
19 Sept/2013	Aul11	549099E, 5048718N	Patchy mid-aged forest	5 km/h N	14	Clear	None	8:15 AM	American Robin	1	50-100
									Blue Jay	2	100+
									Common Raven	1	100+
									Common Yellowthroat	2	0-50
									Song Sparrow	1	0-50
									White-throated Sparrow	1	0-50
									Yellow-rumped Warbler	1	0-50

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
19 Sept/2013	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	5 km/h N	16	Clear	None	8:27 AM	Black-capped Chickadee	4	0-50
									Blackpoll Warbler	1	0-50
									Blackpoll Warbler	1	50-100
									Black-throated Green Warbler	1	0-50
									Boreal Chickadee	1	50-100
									Common Yellowthroat	2	0-50
									Magnolia Warbler	1	0-50
									Purple Finch	1	0-50
									Purple Finch	2	50-100
									Ruby-crowned Kinglet	3	0-50
									White-throated Sparrow	1	0-50
19 Sept/2013	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	5 km/h N	16	Clear	None	8:54 AM	None		
19 Sept/2013	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	5 km/h N	18	Clear	None	9:02 AM	Blue Jay	2	100+
									Common Raven	1	100+
19 Sept/2013	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	5 km/h N	20	Clear	None	9:15 AM	American Goldfinch	2	FO S
									American Robin	1	0-50
									Blackburnian Warbler	1	0-50
									Black-capped Chickadee	4	0-50
									Blackpoll Warbler	1	0-50
									Black-throated Green Warbler	2	0-50
									Blue Jay	2	0-50
									Common Raven	1	FO NE
									Magnolia Warbler	1	0-50
									Northern Flicker	1	0-50
									Northern Parula	1	0-50
									Pileated Woodpecker	1	100+
									Red-eyed Vireo	1	0-50
19 Sept/2013	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	5 km/h N	20	Clear	None	9:44 AM	Black-capped Chickadee	2	0-50
									Blue-headed Vireo	1	0-50
									Blue-headed Vireo	1	0-50
									Evening Grosbeak	1	0-50
									Hermit Thrush	1	0-50
									Ovenbird	2	0-50
									White-throated Sparrow	1	0-50
19 Sept/2013	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	5 km/h N	20	Clear	None	9:53 AM	None		

Table B1: Detailed Fall Bird Survey Results, Auld's Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
19 Sept/2013	HAWK 1	549099E, 5048718N	Patchy mid-aged forest	0 km/h	20	Clear	None	10:15 AM	American Goldfinch	2	50-100
									Blue Jay	1	0-50
									Pileated Woodpecker	1	0-50
19 Sept/2013	HAWK 3	548855E, 5049259N	recent clear cut (0-2 years) with regenerating deciduous shrubs; adjacent to mature hardwood (to west)	5 km/h NW	23	Clear	None	11:40 AM	Bald Eagle	1	100+
									Bald Eagle	1	100+
									Bald Eagle	1	50-100
									Bald Eagle	1	0-50
									Blue Jay	1	50-100
									Blue Jay	1	100+
									Blue Jay	2	100+
									Broad-winged Hawk	1	0-50
									Common Raven	2	100+
									Common Raven	2	100+
									Northern Harrier	2	0-50
									Northern Harrier	1	50-100
									Osprey	1	100+
									Red-tailed Hawk	1	50-100

Table B2: Fall Bird Survey Results Summary, Auld's Mountain

Project # 12-4509

Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status	Number of Times Observed	Number of Individuals Observed
American Black Duck	<i>Anas rubripes</i>	Not Listed	Not Listed	Not Listed	Green	2	5
American Crow	<i>Corvus brachyrhynchos</i>	Not Listed	Not Listed	Not Listed	Green	12	22
American Goldfinch	<i>Spinus tristis</i>	Not Listed	Not Listed	Not Listed	Green	1	2
American Robin	<i>Turdus migratorius</i>	Not Listed	Not Listed	Not Listed	Green	9	24
American Woodcock	<i>Scolopax minor</i>	Not Listed	Not Listed	Not Listed	Green	1	3
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Not Listed	Not Listed	Not at Risk	Green	6	6
Blackburnian Warbler	<i>Dendroica fusca</i>	Not Listed	Not Listed	Not Listed	Green	3	4
Black-capped Chickadee	<i>Poecile atricapillus</i>	Not Listed	Not Listed	Not Listed	Green	16	41
Blackpoll Warbler	<i>Dendroica striata</i>	Not Listed	Not Listed	Not Listed	Yellow	5	5
Black-throated Green Warbler	<i>Dendroica virens</i>	Not Listed	Not Listed	Not Listed	Green	4	5
Blue Jay	<i>Cyanocitta cristata</i>	Not Listed	Not Listed	Not Listed	Green	9	13
Blue-headed Vireo	<i>Vireo solitarius</i>	Not Listed	Not Listed	Not Listed	Green	5	5
Boreal Chickadee	<i>Poecile hudsonicus</i>	Not Listed	Not Listed	Not Listed	Yellow	4	6
Broad-winged Hawk	<i>Buteo platypterus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Canada Goose	<i>Branta canadensis</i>	Not Listed	Not Listed	Not Listed	Green	1	3
Common Loon	<i>Gavia immer</i>	Not Listed	Not Listed	Not at Risk	Red	1	1
Common Raven	<i>Corvus corax</i>	Not Listed	Not Listed	Not Listed	Green	12	18
Common Yellowthroat	<i>Geothlypis trichas</i>	Not Listed	Not Listed	Not Listed	Green	5	7
Dark-eyed Junco	<i>Junco hyemalis</i>	Not Listed	Not Listed	Not Listed	Green	7	10
Downy Woodpecker	<i>Picoides pubescens</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Not Listed	Not Listed	Not Listed	Yellow	13	33
Gray Jay	<i>Perisoreus canadensis</i>	Not Listed	Not Listed	Not Listed	Yellow	1	2
Hairy Woodpecker	<i>Picoides villosus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Hermit Thrush	<i>Catharus guttatus</i>	Not Listed	Not Listed	Not Listed	Green	3	3
Herring Gull	<i>Larus argentatus</i>	Not Listed	Not Listed	Not Listed	Green	1	5
Magnolia Warbler	<i>Dendroica magnolia</i>	Not Listed	Not Listed	Not Listed	Green	4	4
Nashville Warbler	<i>Vermivora ruficapilla</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Northern Flicker	<i>Colaptes auratus</i>	Not Listed	Not Listed	Not Listed	Green	3	3
Northern Harrier	<i>Circus cyaneus</i>	Not Listed	Not Listed	Not at Risk	Green	3	3
Northern Parula	<i>Parula americana</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Osprey	<i>Pandion haliaetus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Ovenbird	<i>Seiurus aurocapilla</i>	Not Listed	Not Listed	Not Listed	Green	1	2
Palm Warbler	<i>Dendroica palmarum</i>	Not Listed	Not Listed	Not Listed	Green	2	2
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Not Listed	Not Listed	Not Listed	Green	3	3
Pine Grosbeak	<i>Pinicola enucleator</i>	Not Listed	Not Listed	Not Listed	Red	1	2
Pine Siskin	<i>Spinus pinus</i>	Not Listed	Not Listed	Not Listed	Yellow	2	3
Purple Finch	<i>Carpodacus purpureus</i>	Not Listed	Not Listed	Not Listed	Green	4	5
Red-eyed Vireo	<i>Vireo olivaceus</i>	Not Listed	Not Listed	Not Listed	Green	2	2
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Not Listed	Not Listed	Not at Risk	Green	4	4
Ring-billed Gull	<i>Larus delawarensis</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Not Listed	Not Listed	Not Listed	Yellow	1	1
Ruby-crowned Kinglet	<i>Regulus calendula</i>	Not Listed	Not Listed	Not Listed	Yellow	6	11
Ruffed Grouse	<i>Bonasa umbellus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Song Sparrow	<i>Melospiza melodia</i>	Not Listed	Not Listed	Not Listed	Green	2	2
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Not Listed	Not Listed	Not Listed	Green	12	23
White-winged Crossbill	<i>Loxia leucoptera</i>	Not Listed	Not Listed	Not Listed	Green	4	17
Wilson's Warbler	<i>Wilsonia pusilla</i>	Not Listed	Not Listed	Not Listed	Yellow	1	1
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Not Listed	Not Listed	Not Listed	Green	8	11

Table B3: Detailed Winter Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
Feb 21/2013	Aul1	548433E, 5049750N	Young mixedwood/hardwood	Calm	-3	Overcast	None	7:01 AM	American Crow	2	50-100
									Black-capped Chickadee	3	0-50
									Common Raven	1	100 ⁺
									Common Redpoll	1	FO N
									Hairy Woodpecker	1	0-50
Aul2	548587E, 5049555N	Young mixed wood, small clearing	5 km/h SW	-3	Overcast	Light Flurries	7:20 AM	American Crow	1	100 ⁺	
								Common Raven	2	50-100	
Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	5 km/h SW	-3	Overcast	Light Flurries	7:32 AM	American Crow	2	100 ⁺	
								Black-capped Chickadee	2	0-50	
								Blue Jay	1	100 ⁺	
Aul4	548323E, 5049181N	Young mixed hardwood	5 km/h SW	-3	Overcast	Light Flurries	7:51 AM	Ruffed Grouse	1	0-50	
Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	5 km/h SW	-2	Overcast	Light Flurries	8:03 AM	American Crow	2	100 ⁺	
								Common Raven	1	100 ⁺	
								Common Redpoll	1	FO NE	
Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	5 km/h SW	-2	Overcast	Flurries	8:18 AM	Common Raven	1	50-100	
Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	5 km/h SW	-2	Overcast	Flurries	8:38 AM	Pileated Woodpecker	1	50-100	
Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	5 km/h SW	-2	Overcast	Flurries	8:51 AM	Black-capped Chickadee	4	0-50	
								Downy Woodpecker	1	0-50	
								Hairy Woodpecker	1	0-50	
Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	5 km/h SW	-1	Overcast	Light Snow	9:05 AM	American Crow	1	100 ⁺	
								Pileated Woodpecker	1	50-100	
Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	5 km/h SW	-1	Overcast	Light Snow	9:21 AM	Black-capped Chickadee	2	0-50	
Aul11	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	5 km/h SW	-2	Overcast	Flurries	8:26 AM	American Crow	1	FO NE to SW	

Table B4: Winter Bird Survey Results Summary, Aulds Mountain**Project # 12-4509**

Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status	Number of Times Observed	Number of Individuals Observed
American Crow	<i>Corvus brachyrhynchos</i>	Green	Not Listed	Not Listed	Not Listed	6	9
Black-capped Chickadee	<i>Poecile atricapillus</i>	Green	Not Listed	Not Listed	Not Listed	4	11
Blue Jay	<i>Cyanocitta cristata</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Common Raven	<i>Corvus corax</i>	Green	Not Listed	Not Listed	Not Listed	3	3
Common Redpoll	<i>Acanthis flammea</i>	Green	Not Listed	Not Listed	Not Listed	2	2
Downy Woodpecker	<i>Picoides pubescens</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Hairy Woodpecker	<i>Picoides villosus</i>	Green	Not Listed	Not Listed	Not Listed	2	2
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Green	Not Listed	Not Listed	Not Listed	2	2
Ruffed Grouse	<i>Bonasa umbellus</i>	Green	Not Listed	Not Listed	Not Listed	1	1

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
May 6/2013	Aul1	548433E, 5049750N	Young mixedwood/hardwood	Calm	5	Clear	None	6:01 AM	American Robin	1	100 ⁺
									American Robin	4	0-50
									Blue Jay	1	100 ⁺
									Downy Woodpecker	1	0-50
									Hermit Thrush	3	100 ⁺
									Purple Finch	1	100 ⁺
									Ruby-crowned Kinglet	1	100 ⁺
									Ruffed Grouse	1	50-100
									White-throated Sparrow	4	100 ⁺
									White-throated Sparrow	1	50-100
									Winter Wren	1	100 ⁺
									Yellow-rumped Warbler	2	50-100
										Aul2	548587E, 5049555N
Blue-headed Vireo	2	100 ⁺									
Downy Woodpecker	1	50-100									
Hairy Woodpecker	1	100 ⁺									
Hermit Thrush	2	100 ⁺									
Northern Flicker	1	0-50									
Purple Finch	1	0-50									
Purple Finch	1	50-100									
Ruby-crowned Kinglet	1	100 ⁺									
Song Sparrow	1	0-50									
Song Sparrow	1	100 ⁺									
White-throated Sparrow	1	50-100									
Yellow-bellied Sapsucker	1	100 ⁺									
Yellow-rumped Warbler	1	50-100									
	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	Calm	5	Clear	None	6:23 AM	American Robin	2	100 ⁺
									Black-capped Chickadee	2	0-50
									Blue Jay	1	50-100
									Blue Jay	3	100 ⁺
									Evening Grosbeak	1	100 ⁺
									Hairy Woodpecker	1	50-100
									Hermit Thrush	1	100 ⁺
									Pileated Woodpecker	1	0-50
									Purple Finch	1	50-100
									Ruby-crowned Kinglet	1	50-100
									Ruffed Grouse	1	0-50
									White-throated Sparrow	2	0-50
									White-throated Sparrow	1	50-100
White-throated Sparrow	2	100 ⁺									
Yellow-bellied Sapsucker	1	100 ⁺									

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Yellow-rumped Warbler	1	50-100
	Aul4	548323E, 5049181N	Young mixed hardwood	Calm	5	Clear	None	6:36 AM	American Robin	1	50-100
									American Robin	1	100 ⁺
									Dark-eyed Junco	1	100 ⁺
									Evening Grosbeak	2	FO W
									Hermit Thrush	2	100 ⁺
									Northern Flicker	1	50-100
									Northern Flicker	1	100 ⁺
									Purple Finch	1	50-100
									Ruffed Grouse	1	50-100
									White-throated Sparrow	1	50-100
									White-throated Sparrow	2	100 ⁺
									Yellow-bellied Sapsucker	1	100 ⁺
	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	Calm	7	Clear	None	6:50 AM	American Crow	2	100 ⁺
									American Goldfinch	1	FO E
									American Robin	2	0-50
									American Robin	1	100 ⁺
									Dark-eyed Junco	1	0-50
									Dark-eyed Junco	2	50-100
									Northern Flicker	1	100 ⁺
									Northern Flicker	1	100 ⁺
									Purple Finch	1	50-100
									Purple Finch	1	100 ⁺
									Ruffed Grouse	1	50-100
									White-throated Sparrow	1	50-100
									White-throated Sparrow	2	100 ⁺
									Winter Wren	1	100 ⁺
									Yellow-bellied Sapsucker	1	100 ⁺
									Yellow-rumped Warbler	1	50-100
	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	Calm	7	Clear	None	7:05 AM	American Goldfinch	1	100 ⁺
									American Robin	1	50-100
									American Robin	2	100 ⁺
									Black-capped Chickadee	1	100 ⁺
									Blue-headed Vireo	1	100 ⁺
									Dark-eyed Junco	1	0-50
									Hermit Thrush	1	50-100
									Northern Flicker	1	100 ⁺
									Purple Finch	1	50-100
									Ruby-crowned Kinglet	1	50-100

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Ruby-crowned Kinglet	1	100 ⁺
									White-throated Sparrow	1	0-50
									White-throated Sparrow	3	50-100
									White-throated Sparrow	2	100 ⁺
									Winter Wren	1	100 ⁺
									Yellow-rumped Warbler	1	0-50
									Yellow-rumped Warbler	2	50-100
									Yellow-rumped Warbler	1	100 ⁺
	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	Calm	7	Clear	None	7:26 AM	American Crow	1	100 ⁺
									Blue-headed Vireo	1	0-50
									Northern Flicker	1	100 ⁺
									Purple Finch	2	100 ⁺
									Ruffed Grouse	1	0-50
									White-throated Sparrow	1	0-50
									White-throated Sparrow	2	50-100
									Winter Wren	1	0-50
									Winter Wren	1	50-100
									Yellow-rumped Warbler	1	0-50
									Yellow-rumped Warbler	1	50-100
									Yellow-rumped Warbler	1	100 ⁺
	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	Calm	7	Clear	None	7:44 AM	American Robin	1	100 ⁺
									Evening Grosbeak	1	100 ⁺
									Northern Flicker	1	100 ⁺
									Pine Siskin	2	FO NE
									Purple Finch	1	0-50
									Purple Finch	1	100 ⁺
									Red-breasted Nuthatch	1	50-100
									White-throated Sparrow	1	50-100
									White-throated Sparrow	2	100 ⁺
									Winter Wren	1	50-100
	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	Calm	9	Clear	None	8:03 AM	American Goldfinch	1	100 ⁺
									Black-capped Chickadee	2	50-100
									Blue Jay	1	100 ⁺
									Common Grackle	1	FO SW
									Northern Flicker	1	100 ⁺
									Purple Finch	1	100 ⁺
									Ruffed Grouse	1	50-100
									White-throated Sparrow	1	50-100
									White-throated Sparrow	1	100 ⁺

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Winter Wren	1	100 ⁺
									Yellow-bellied Sapsucker	1	100 ⁺
									Yellow-rumped Warbler	1	50-100
	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	Calm	9	Clear	None	8:24 AM	American Goldfinch	1	FO E
									American Robin	1	0-50
									American Robin	1	100 ⁺
									Blue Jay	1	100 ⁺
									Brown Creeper	1	100 ⁺
									Pine Siskin	1	100 ⁺
									Purple Finch	1	50-100
									Purple Finch	1	FO S
									Ruby-crowned Kinglet	1	0-50
									White-throated Sparrow	1	0-50
									White-throated Sparrow	1	50-100
									White-throated Sparrow	1	100 ⁺
	Aul11	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	Calm	8	Clear	None	9:24 AM	American Robin	1	50-100
									American Robin	2	100 ⁺
									Black-capped Chickadee	1	100 ⁺
									Blue-headed Vireo	1	100 ⁺
									Evening Grosbeak	2	FO E
									Hermit Thrush	1	100 ⁺
									Northern Flicker	1	100 ⁺
									Pileated Woodpecker	1	50-100
									Purple Finch	1	100 ⁺
									Purple Finch	1	FO E
									Ruby-crowned Kinglet	1	100 ⁺
									White-throated Sparrow	3	50-100
									White-throated Sparrow	3	100 ⁺
									Yellow-rumped Warbler	1	100 ⁺
	Aul12	548483E, 5049144N	Mid-aged mixedwoods overlooking valley to northwest	Calm	8	Clear	None	9:40 AM	Bald Eagle	1	FO E
									Common Raven	1	50-100
									Palm Warbler	1	0-50
May 28/2013	Aul1	548433E, 5049750N	Young mixedwood/hardwood	5 km/h	8	Overcast	Light Drizzle	5:16 AM	American Robin	1	50-100
									American Robin	1	100 ⁺
									Black-capped Chickadee	2	50-100
									Black-throated Green Warbler	1	50-100

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Hermit Thrush	1	50-100
									Hermit Thrush	1	100+
									Magnolia Warbler	1	100+
									Nashville Warbler	1	100+
									Ovenbird	1	0-50
									Ovenbird	1	50-100
									Song Sparrow	1	50-100
									White-throated Sparrow	1	50-100
									White-throated Sparrow	2	100+
	Aul2	548587E, 5049555N	Young mixed wood, small clearing	5 km/h	8	Overcast	Light Drizzle	5:31 AM	American Robin	1	100+
									Blackburnian Warbler	1	50-100
									Blackpoll Warbler	1	0-50
									Blue-headed Vireo	2	100+
									Common Yellowthroat	1	100+
									Lincoln's Sparrow	1	50-100
									Magnolia Warbler	1	0-50
									Magnolia Warbler	1	50-100
									Magnolia Warbler	2	100+
									Ovenbird	1	50-100
									Ovenbird	1	100+
									Ruby-crowned Kinglet	1	0-50
									White-throated Sparrow	2	100+
									Yellow-bellied Sapsucker	1	100+
	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	5 km/h	8	Overcast	Light Drizzle	5:43 AM	American Goldfinch	1	100+
									American Robin	1	100+
									Black-and-White Warbler	1	100+
									Blackpoll Warbler	1	50-100
									Blackpoll Warbler	1	100+
									Blue-headed Vireo	1	100+
									Boreal Chickadee	2	50-100
									Common Loon	1	100+
									Common Merganser	4	FO W
									Common Yellowthroat	1	50-100
									Evening Grosbeak	1	100+
									Least Flycatcher	1	100+
									Magnolia Warbler	1	50-100
									Magnolia Warbler	2	100+
									Nashville Warbler	1	100+
									Ovenbird	2	100+
									Pileated Woodpecker	1	100+
									Ruby-crowned Kinglet	2	100+

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Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Ruby-throated Hummingbird	1	100 ⁺
									White-throated Sparrow	1	100 ⁺
	Aul4	548323E, 5049181N	Young mixed hardwood	5 km/h	8	Overcast	Light Drizzle	6:02 AM	Blackpoll Warbler	1	0-50
									Black-throated Green Warbler	1	0-50
									Boreal Chickadee	1	0-50
									Common Yellowthroat	1	0-50
									Common Yellowthroat	1	100 ⁺
									Magnolia Warbler	1	0-50
									Magnolia Warbler	2	50-100
									Magnolia Warbler	1	100 ⁺
									Ovenbird	1	50-100
									Ovenbird	2	100 ⁺
									Swainson's Thrush	1	0-50
									White-throated Sparrow	2	50-100
	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	5 km/h	8	Overcast	Light Drizzle	6:49 AM	American Goldfinch	1	50-100
									Black-and-White Warbler	1	50-100
									Blackburnian Warbler	1	0-50
									Black-capped Chickadee	1	100 ⁺
									Black-throated Green Warbler	1	50-100
									Common Yellowthroat	1	100 ⁺
									Magnolia Warbler	2	0-50
									Magnolia Warbler	1	50-100
									Ovenbird	2	100 ⁺
									Swainson's Thrush	1	0-50
									White-throated Sparrow	2	100 ⁺
									Yellow-rumped Warbler	2	FO W
	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	5 km/h	8	Overcast	Light Drizzle	7:04 AM	American Goldfinch	1	50-100
									Lincoln's Sparrow	1	50-100
									Magnolia Warbler	3	50-100
									Magnolia Warbler	3	100 ⁺
									Purple Finch	1	0-50
									Purple Finch	1	50-100
									Ruby-crowned Kinglet	1	50-100
									White-throated Sparrow	2	0-50
									Yellow-rumped Warbler	1	0-50
									Yellow-rumped Warbler	1	50-100
									Yellow-rumped Warbler	1	100 ⁺

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Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	15-20 km/h	8	Overcast	Light Drizzle	7:23 AM	American Goldfinch	1	50-100
									American Redstart	1	50-100
									American Robin	1	100+
									Blackburnian Warbler	1	50-100
									Black-throated Green Warbler	1	100+
									Blue-headed Vireo	1	100+
									Common Raven	1	100+
									Common Yellowthroat	1	0-50
									Dark-eyed Junco	1	50-100
									Evening Grosbeak	2	100+
									Hairy Woodpecker	1	0-50
									Lincoln's Sparrow	1	0-50
									Lincoln's Sparrow	1	50-100
									Magnolia Warbler	2	50-100
									Magnolia Warbler	1	100+
									Ovenbird	1	100+
									Purple Finch	1	50-100
									White-throated Sparrow	2	50-100
	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	15-20 km/h	8	Overcast	Light Drizzle	7:47 AM	American Redstart	1	100+
									Black-and-White Warbler	1	50-100
									Blackburnian Warbler	1	50-100
									Black-capped Chickadee	1	50-100
									Blue-headed Vireo	1	100+
									Common Raven	1	100+
									Dark-eyed Junco	1	0-50
									Hairy Woodpecker	1	0-50
									Magnolia Warbler	2	50-100
									Magnolia Warbler	1	100+
									Nashville Warbler	2	50-100
									Ovenbird	1	50-100
									Purple Finch	1	100+
									Yellow-rumped Warbler	1	100+
	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	15-20 km/h	8	Overcast	Light Drizzle	8:08 AM	American Goldfinch	1	0-50
									American Redstart	1	0-50
									American Redstart	1	50-100
									Black-and-White Warbler	1	0-50
									Blue Jay	1	100+
									Blue-headed Vireo	1	0-50

Table B5: Detailed Spring Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind Speed and Direction	Temperature °C	Sky	Precipitation				
									Chestnut-sided Warbler	2	0-50
									Nashville Warbler	1	100+
									Northern Parula	1	100+
									Ovenbird	1	100+
	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	15-20 km/h	8	Overcast	Light Drizzle	8:28 AM	American Redstart	1	100+
									American Robin	1	100+
									Black-and-White Warbler	1	0-50
									Blackburnian Warbler	1	100+
									Black-throated Green Warbler	1	100+
									Blue-headed Vireo	2	100+
									Dark-eyed Junco	1	50-100
									Least Flycatcher	2	50-100
									Least Flycatcher	1	100+
									Magnolia Warbler	1	50-100
									Northern Parula	1	100+
									Purple Finch	1	100+
									Ruby-crowned Kinglet	1	100+
									Ruffed Grouse	1	50-100
									White-throated Sparrow	2	0-50
									Yellow-rumped Warbler	1	100+
	Aul11	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	15-20 km/h	9	Overcast	Light Drizzle	8:59 AM	Black-and-White Warbler	1	0-50
									Canada Goose	3	100+
									Common Raven	1	0-50
									Magnolia Warbler	2	50-100
									Ovenbird	1	100+
									Purple Finch	1	100+
									Ruby-crowned Kinglet	1	50-100
									Sharp-shinned Hawk	1	FO

E

Table B6: Spring Bird Survey Results Summary, Aulds Mountain

Project # 12-4509

Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status	Number of Times Observed	Number of Individuals Observed
American Crow	<i>Corvus brachyrhynchos</i>	Green	Not Listed	Not Listed	Not Listed	2	3
American Goldfinch	<i>Spinus tristis</i>	Green	Not Listed	Not Listed	Not Listed	9	9
American Redstart	<i>Setophaga ruticilla</i>	Green	Not Listed	Not Listed	Not Listed	5	5
American Robin	<i>Turdus migratorius</i>	Green	Not Listed	Not Listed	Not Listed	21	30
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Green	Not at Risk	Not Listed	Not Listed	1	1
Black-and-White Warbler	<i>Mniotilta varia</i>	Green	Not Listed	Not Listed	Not Listed	6	6
Blackburnian Warbler	<i>Dendroica fusca</i>	Green	Not Listed	Not Listed	Not Listed	5	5
Black-capped Chickadee	<i>Poecile atricapillus</i>	Green	Not Listed	Not Listed	Not Listed	7	10
Blackpoll Warbler	<i>Dendroica striata</i>	Yellow	Not Listed	Not Listed	Not Listed	4	4
Black-throated Green Warbler	<i>Dendroica virens</i>	Green	Not Listed	Not Listed	Not Listed	5	5
Blue Jay	<i>Cyanocitta cristata</i>	Green	Not Listed	Not Listed	Not Listed	6	8
Blue-headed Vireo	<i>Vireo solitarius</i>	Green	Not Listed	Not Listed	Not Listed	10	13
Boreal Chickadee	<i>Poecile hudsonicus</i>	Yellow	Not Listed	Not Listed	Not Listed	2	3
Brown Creeper	<i>Certhia americana</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Canada Goose	<i>Branta canadensis</i>	Green	Not Listed	Not Listed	Not Listed	1	3
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	Green	Not Listed	Not Listed	Not Listed	1	2
Common Grackle	<i>Quiscalus quiscula</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Common Loon	<i>Gavia immer</i>	Red	Not at Risk	Not Listed	Not Listed	1	1
Common Merganser	<i>Mergus merganser</i>	Green	Not Listed	Not Listed	Not Listed	1	4
Common Raven	<i>Corvus corax</i>	Green	Not Listed	Not Listed	Not Listed	4	4
Common Yellowthroat	<i>Geothlypis trichas</i>	Green	Not Listed	Not Listed	Not Listed	6	6
Dark-eyed Junco	<i>Junco hyemalis</i>	Green	Not Listed	Not Listed	Not Listed	7	8
Downy Woodpecker	<i>Picoides pubescens</i>	Green	Not Listed	Not Listed	Not Listed	2	2
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Green	Not Listed	Not Listed	Not Listed	6	9
Hairy Woodpecker	<i>Picoides villosus</i>	Green	Not Listed	Not Listed	Not Listed	4	4
Hermit Thrush	<i>Catharus guttatus</i>	Green	Not Listed	Not Listed	Not Listed	8	12
Least Flycatcher	<i>Empidonax minimus</i>	Green	Not Listed	Not Listed	Not Listed	3	4
Lincoln's Sparrow	<i>Melospiza lincolni</i>	Green	Not Listed	Not Listed	Not Listed	4	4
Magnolia Warbler	<i>Dendroica magnolia</i>	Green	Not Listed	Not Listed	Not Listed	19	30
Nashville Warbler	<i>Vermivora ruficapilla</i>	Green	Not Listed	Not Listed	Not Listed	4	5
Northern Flicker	<i>Colaptes auratus</i>	Green	Not Listed	Not Listed	Not Listed	10	10
Northern Parula	<i>Parula americana</i>	Green	Not Listed	Not Listed	Not Listed	2	2
Ovenbird	<i>Seiurus aurocapilla</i>	Green	Not Listed	Not Listed	Not Listed	12	15
Palm Warbler	<i>Dendroica palmarum</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Green	Not Listed	Not Listed	Not Listed	3	3
Pine Siskin	<i>Spinus pinus</i>	Yellow	Not Listed	Not Listed	Not Listed	2	3
Purple Finch	<i>Carpodacus purpureus</i>	Green	Not Listed	Not Listed	Not Listed	22	23

Table B6: Spring Bird Survey Results Summary, Aulds Mountain

Project # 12-4509

Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status	Number of Times Observed	Number of Individuals Observed
Red-breasted Nuthatch	<i>Sitta canadensis</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Ruby-crowned Kinglet	<i>Regulus calendula</i>	Yellow	Not Listed	Not Listed	Not Listed	12	13
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	Green	Not Listed	Not Listed	Not Listed	1	1
Ruffed Grouse	<i>Bonasa umbellus</i>	Green	Not Listed	Not Listed	Not Listed	7	7
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Green	Not at Risk	Not Listed	Not Listed	1	1
Song Sparrow	<i>Melospiza melodia</i>	Green	Not Listed	Not Listed	Not Listed	3	3
Swainson's Thrush	<i>Catharus ustulatus</i>	Green	Not Listed	Not Listed	Not Listed	2	2
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Green	Not Listed	Not Listed	Not Listed	33	56
Winter Wren	<i>Troglodytes troglodytes</i>	Green	Not Listed	Not Listed	Not Listed	7	7
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	Green	Not Listed	Not Listed	Not Listed	6	6
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Green	Not Listed	Not Listed	Not Listed	18	21

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
Jun 12/2013	Aul1	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	20 km/h SW	12	Overcast	None	5:15 AM	Blackburnian Warbler	1	50-100	
									Alder Flycatcher	1	0-50	
									Alder Flycatcher	1	50-100	
									American Redstart	2	0-50	
									American Redstart	1	50-100	
									American Robin	1	100 ⁺	
									Black-throated Green Warbler	1	0-50	
									Cedar Waxwing	1	0-50	
									Common Yellowthroat	1	50-100	
									Hermit Thrush	1	100 ⁺	
									Magnolia Warbler	2	0-50	
									White-throated Sparrow	1	0-50	
									White-throated Sparrow	1	50-100	
										Aul2	548587E, 5049555N	Young mixed wood, small clearing
Alder Flycatcher	1	100 ⁺										
American Goldfinch	1	50-100										
American Robin	1	50-100										
Blackburnian Warbler	1	50-100										
Black-throated Green Warbler	1	50-100										
Blue-headed Vireo	1	50-100										
Boreal Chickadee	2	50-100										
Dark-eyed Junco	1	0-50										
Hairy Woodpecker	1	100 ⁺										
Hermit Thrush	1	100 ⁺										
Magnolia Warbler	1	50-100										
Nashville Warbler	1	50-100										
Purple Finch	1	50-100										
Purple Finch	2	100 ⁺										
Red-eyed Vireo	1	100 ⁺										
White-throated Sparrow	2	100 ⁺										
	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	20 km/h SW	12	Overcast	None	5:44 AM	Alder Flycatcher	1	0-50	
									Alder Flycatcher	1	50-100	
									American Redstart	1	50-100	
									American Robin	2	0-50	
									American Robin	1	50-100	
									Black-and-white Warbler	1	50-100	
									Black-throated Green Warbler	1	50-100	
									Boreal Chickadee	1	0-50	
									Golden-crowned Kinglet	1	50-100	
									Hermit Thrush	1	100 ⁺	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
									Least Flycatcher	1	50-100	
									Magnolia Warbler	1	0-50	
									Nashville Warbler	2	50-100	
									Purple Finch	1	0-50	
									Ruby-crowned Kinglet	1	100 ⁺	
									Yellow-rumped Warbler	1	0-50	
	Aul4	548323E, 5049181N	Young mixed hardwood	20 km/h SW	12	Overcast	None	5:58 AM	American Redstart	1	50-100	
									American Redstart	1	100 ⁺	
									Blackburnian Warbler	1	50-100	
									Black-throated Green Warbler	1	50-100	
									Black-throated Green Warbler	1	100 ⁺	
									Chestnut-sided Warbler	1	0-50	
									Common Loon	1	100 ⁺	
									Common Raven	1	100 ⁺	
									Magnolia Warbler	2	50-100	
									Northern Parula	1	50-100	
									Ovenbird	1	50-100	
									Ovenbird	1	100 ⁺	
									Red-eyed Vireo	1	100 ⁺	
									Ruby-crowned Kinglet	1	50-100	
									Swainson's Thrush	2	100 ⁺	
									White-throated Sparrow	1	0-50	
									White-throated Sparrow	1	50-100	
	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	20 km/h SW	12	Overcast	None	6:14 AM	Alder Flycatcher	1	100 ⁺	
									Black-and-white Warbler	1	50-100	
									Black-capped Chickadee	1	100 ⁺	
									Black-throated Green Warbler	1	50-100	
									Boreal Chickadee	1	100 ⁺	
									Cedar Waxwing	2	0-50	
									Magnolia Warbler	1	100 ⁺	
									Mourning Dove	1	FO SE	< 50 m Height
									Northern Flicker	1	100 ⁺	
									Ovenbird	1	50-100	
									Red-eyed Vireo	2	100 ⁺	
									White-throated Sparrow	2	100 ⁺	
	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	10 km/h SW	15	Clearing	None	7:00 AM	Alder Flycatcher	1	0-50	
									Alder Flycatcher	1	50-100	
									Alder Flycatcher	2	100 ⁺	
									American Goldfinch	1	50-100	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
									American Redstart	1	50-100	
									Black-and-white Warbler	1	0-50	
									Black-throated Green Warbler	1	50-100	
									Cedar Waxwing	6	0-50	
									Cedar Waxwing	1	FO N	< 50 m Height
									Common Yellowthroat	1	100 ⁺	
									Magnolia Warbler	1	0-50	
									Magnolia Warbler	1	50-100	
									Magnolia Warbler	2	100 ⁺	
									Purple Finch	1	50-100	
									Ruby-crowned Kinglet	1	100 ⁺	
									Swainson's Thrush	1	100 ⁺	
									White-throated Sparrow			
									Yellow-rumped Warbler	1	100 ⁺	
	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	10 km/h SW	15	Clearing	None	7:16 AM	Alder Flycatcher	1	100 ⁺	
									American Goldfinch	4	0-50	
									American Goldfinch	1	FO	< 50 m Height
									American Robin	1	0-50	
									Blackburnian Warbler	1	50-100	
									Common Yellowthroat	1	50-100	
									Least Flycatcher	1	100 ⁺	
									Magnolia Warbler	1	50-100	
									Ovenbird	1	100 ⁺	
									Purple Finch	1	100 ⁺	
									Red-eyed Vireo	1	100 ⁺	
									White-throated Sparrow	1	50-100	
									White-throated Sparrow	2	100 ⁺	
	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	10 km/h SW	15	Clearing	None	7:32 AM	American Redstart	1	50-100	
									American Redstart	1	100 ⁺	
									Black-and-white Warbler	1	50-100	
									Black-throated Green Warbler	1	50-100	
									Blue-headed Vireo	1	100 ⁺	
									Chestnut-sided Warbler	1	100 ⁺	
									Common Yellowthroat	1	50-100	
									Common Yellowthroat	1	100 ⁺	
									Dark-eyed Junco	1	50-100	
									Hermit Thrush	1	100 ⁺	
									Magnolia Warbler	1	50-100	
									Nashville Warbler	1	50-100	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
								Ovenbird	1	100 ⁺		
								Ovenbird	1	50-100		
								Red-breasted Nuthatch	1	100 ⁺		
								Red-eyed Vireo	1	100 ⁺		
								Ruby-crowned Kinglet	1	100 ⁺		
								White-throated Sparrow	1	100 ⁺		
	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	0	18	Clearing	None	7:48 AM	Common Yellowthroat	1	0-50	
									Alder Flycatcher	2	0-50	
									American Redstart	1	50-100	
									Belted Kingfisher	1	FO N	> 50 m Height
									Black-and-white Warbler	1	50-100	
									Black-throated Green Warbler	1	100 ⁺	
									Chestnut-sided Warbler	1	50-100	
									Hairy Woodpecker	1	50-100	
									Magnolia Warbler	1	0-50	
									Magnolia Warbler	1	100 ⁺	
									Red-eyed Vireo	1	0-50	
									Ruby-crowned Kinglet	1	100 ⁺	
	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	0	18	Clearing	None	8:05 AM	American Redstart	1	100 ⁺	
									American Robin	1	100 ⁺	
									Blackburnian Warbler	1	0-50	
									Blackburnian Warbler	1	50-100	
									Black-capped Chickadee	1	100 ⁺	
									Blue-headed Vireo	1	50-100	
									Least Flycatcher	1	0-50	
									Least Flycatcher	2	50-100	
									Least Flycatcher	1	100 ⁺	
									Magnolia Warbler	1	0-50	
									Magnolia Warbler	1	50-100	
									Northern Parula	1	100 ⁺	
									Ovenbird	1	50-100	
									Purple Finch	1	50-100	
									Red-eyed Vireo	1	50-100	
									Ruby-crowned Kinglet	1	50-100	
									White-throated Sparrow	1	50-100	
	Aul11	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	0	18	Clearing	None	6:34 AM	Alder Flycatcher	2	50-100	
									Alder Flycatcher	1	100 ⁺	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
									Black-throated Green Warbler	1	100 ⁺	
									Chestnut-sided Warbler	1	50-100	
									Common Yellowthroat	1	0-50	
									Common Yellowthroat	1	100 ⁺	
									Hermit Thrush	1	100 ⁺	
									Least Flycatcher	1	100 ⁺	
									Magnolia Warbler	1	50-100	
									Mourning Warbler	1	50-100	
									Mourning Warbler	1	100 ⁺	
									Pileated Woodpecker	1	100 ⁺	
									Red-eyed Vireo	1	50-100	
									Red-eyed Vireo	1	100 ⁺	
									Song Sparrow	2	0-50	
									Song Sparrow	1	50-100	
									Swainson's Thrush	1	100 ⁺	
	Aul12	548483E, 5049144N	Mid-aged mixedwoods overlooking valley to northwest	0	18	Clearing	None	8:46 AM	American Redstart	1	50-100	
									Black-throated Green Warbler	1	50-100	
									Blue Jay	2	50-100	
									Magnolia Warbler	1	0-50	
									Nashville Warbler	1	50-100	
									Pileated Woodpecker	1	0-50	
									Red-eyed Vireo	1	50-100	
									Swainson's Thrush	1	50-100	
June 22/2013	Aul1	549099E, 5048718N	Young mixedwood/hardwood	10 south	12	Unknown	None	5:15 AM	Alder Flycatcher	1	100 ⁺	
									American Robin	1	50-100	
									Blackburnian Warbler	1	50-100	
									Black-capped Chickadee	1	50-100	
									Chestnut-sided Warbler	1	50-100	
									Chestnut-sided Warbler	1	100 ⁺	
									Magnolia Warbler	1	100 ⁺	
									Red-eyed Vireo	1	0-50	
									Ruby-crowned Kinglet	1	100 ⁺	
									White-throated Sparrow	1	100 ⁺	
	Aul2	548587E, 5049555N	Young mixed wood, small clearing	10 south	12	Unknown	None	5:29 AM	Alder Flycatcher	2	100 ⁺	
									American Crow	3	100 ⁺	
									American Redstart	1	50-100	
									American Robin	2	50-100	
									Belted Kingfisher	1	FO S	< 50 m Height
									Black-and-white Warbler	1	50-100	
									Blackburnian Warbler	1	100 ⁺	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
									Black-throated Green Warbler	1	100 ⁺	
									Blue-headed Vireo	1	100 ⁺	
									Boreal Chickadee	1	50-100	
									Cedar Waxwing	2	0-50	
									Common Merganser	1	FO	< 50 m Height
									Common Raven	1	100 ⁺	
									Magnolia Warbler	1	50-100	
									Magnolia Warbler	2	100 ⁺	
									Northern Parula	1	50-100	
									Pileated Woodpecker	1	100 ⁺	
									Purple Finch	1	0-50	
									Red-eyed Vireo	2	100 ⁺	
									Song Sparrow	1	0-50	
									Swainson's Thrush	1	50-100	
									Swainson's Thrush	1	100 ⁺	
									White-throated Sparrow	1	50-100	
									White-throated Sparrow	1	100 ⁺	
									Yellow-bellied Sapsucker	1	100 ⁺	
									Yellow-rumped Warbler	1	50-100	
	Aul3	548449E, 5049344N	Young mixed with large softwoods to east of road	10 south	12	Unknown	None	5:44 AM	Alder Flycatcher	1	0-50	
									Alder Flycatcher	1	50-100	
									American Redstart	1	50-100	
									American Robin	1	0-50	
									Black-and-white Warbler	1	50-100	
									Black-throated Green Warbler	1	100 ⁺	
									Blue-headed Vireo	1	100 ⁺	
									Chestnut-sided Warbler	1	50-100	
									Common Raven	1	100 ⁺	
									Common Yellowthroat	1	50-100	
									Dark-eyed Junco	1	50-100	
									Eastern Wood-Pewee	1	100 ⁺	
									Least Flycatcher	1	50-100	
									Least Flycatcher	1	100 ⁺	
									Nashville Warbler	1	100 ⁺	
									Northern Flicker	1	100 ⁺	
									Northern Parula	1	50-100	
									Ovenbird	1	100 ⁺	
									Purple Finch	1	50-100	
									Red-eyed Vireo	1	50-100	
									Red-eyed Vireo	1	100 ⁺	
									Swainson's Thrush	1	100 ⁺	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
								White-throated Sparrow	2	0-50		
								White-throated Sparrow	1	50-100		
	Aul4	548323E, 5049181N	Young mixed hardwood	10 south	12	Unknown	None	6:01 AM	American Redstart	1	50-100	
								American Robin	1	0-50		
								Black-and-white Warbler	1	0-50		
								Black-and-white Warbler	1	50-100		
								Black-throated Green Warbler	1	0-50		
								Black-throated Green Warbler	1	100 ⁺		
								Hermit Thrush	1	50-100		
								Hermit Thrush	1	100 ⁺		
								Magnolia Warbler	1	0-50		
								Magnolia Warbler	1	50-100		
								Mourning Dove	1	100 ⁺		
								Mourning Warbler	1	0-50		
								Ovenbird	1	0-50		
								Ruby-crowned Kinglet	1	0-50		
								Swainson's Thrush	1	50-100		
								Swainson's Thrush	1	100 ⁺		
								White-throated Sparrow	2	0-50		
								White-throated Sparrow	1	100 ⁺		
	Aul5	548811E, 5049009N	Young Softwood along road/ Mid-mature hardwood	10 south	12	Unknown	None	7:00 AM	Alder Flycatcher	1	50-100	
								Black-and-white Warbler	1	0-50		
								Black-throated Green Warbler	2	50-100		
								Chestnut-sided Warbler	1	50-100		
								Dark-eyed Junco	1	50-100		
								Magnolia Warbler	1	0-50		
								Magnolia Warbler	1	50-100		
								Mourning Warbler	1	50-100		
								Red-eyed Vireo	1	100 ⁺		
								Swainson's Thrush	3	100 ⁺		
								White-throated Sparrow	2	100 ⁺		
	Aul6	549046E, 5048825N	Clearing for MET tower/ surrounded by shrub softwoods	10 south	12	Unknown	None	7:15 AM	Alder Flycatcher	2	50-100	
								Alder Flycatcher	1	100 ⁺		
								Alder Flycatcher	1	0-50		
								American Goldfinch	1	100 ⁺		
								American Robin	2	0-50		
								Black-and-white Warbler	1	100 ⁺		
								Black-throated Green Warbler	2	50-100		
								Common Yellowthroat	1	0-50		
								Common Yellowthroat	1	50-100		

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
								Hermit Thrush	1	100 ⁺		
								Lincoln's Sparrow	1	50-100		
								Magnolia Warbler	1	50-100		
								Red-eyed Vireo	1	50-100		
								White-throated Sparrow	1	100 ⁺		
	Aul7	549147E, 5048546N	Wet mixed shrub on hillside/ transitions downhill to mid aged mixedwood	10 south	12	Unknown	None	7:32 AM	Alder Flycatcher	1	50-100	
								American Robin	1	0-50		
								Black-and-white Warbler	1	50-100		
								Black-throated Green Warbler	1	0-50		
								Cedar Waxwing	2	50-100		
								Hairy Woodpecker	1	0-50		
								Hairy Woodpecker	1	100 ⁺		
								Least Flycatcher	1	50-100		
								Lincoln's Sparrow	1	100 ⁺		
								Magnolia Warbler	1	50-100		
								Magnolia Warbler	1	100 ⁺		
								Purple Finch	1	50-100		
								Ruby-crowned Kinglet	1	100 ⁺		
								Swainson's Thrush	1	0-50		
								White-throated Sparrow	2	0-50		
								White-throated Sparrow	1	100 ⁺		
	Aul8	549334E, 5048401N	Hillside mixed aged beech/spruce/fir	10 south	12	Unknown	None	7:52 AM	American Crow	2	100 ⁺	
								American Redstart	1	50-100		
								Blue Jay	1	100 ⁺		
								Blue-headed Vireo	1	100 ⁺		
								Chestnut-sided Warbler	1	50-100		
								Dark-eyed Junco	1	50-100		
								Hermit Thrush	1	100 ⁺		
								Least Flycatcher	1	100 ⁺		
								Magnolia Warbler	1	50-100		
								Ovenbird	1	50-100		
								Ovenbird	1	100 ⁺		
								Purple Finch	1	100 ⁺		
								Red-eyed Vireo	1	50-100		
								Red-eyed Vireo	1	100 ⁺		
								Swainson's Thrush	1	100 ⁺		
								White-throated Sparrow	1	50-100		
								White-throated Sparrow	1	100 ⁺		
								Yellow-rumped Warbler	1	0-50		

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
	Aul9	549222E, 5048122N	Dense alder and shrub/mid-aged hardwood	10 south	12	Unknown	None	8:11 AM	American Redstart	2	50-100	
									American Robin	1	100 ⁺	
									Chestnut-sided Warbler	1	0-50	
									Chestnut-sided Warbler	1	50-100	
									Least Flycatcher	1	100 ⁺	
									Ovenbird	1	100 ⁺	
									Red-eyed Vireo	1	50-100	
									Red-eyed Vireo	1	100 ⁺	
									White-throated Sparrow	1	100 ⁺	
									Yellow-bellied Sapsucker	1	100 ⁺	
	Aul10	549021E, 5048335N	Mid-aged to mature hardwood, wet woods grading into softwoods upland	5 south	12	Unknown	None	8:33 AM	American Goldfinch	2	0-50	
									American Redstart	2	50-100	
									American Redstart	1	100 ⁺	
									Blackburnian Warbler	1	50-100	
									Blackburnian Warbler	1	100 ⁺	
									Black-capped Chickadee	2	100 ⁺	
									Blue-headed Vireo	1	100 ⁺	
									Cedar Waxwing	4	0-50	
									Common Yellowthroat	1	50-100	
									Least Flycatcher	1	0-50	
									Least Flycatcher	1	50-100	
									Least Flycatcher	1	100 ⁺	
									Ovenbird	1	50-100	
									Red-eyed Vireo	1	50-100	
									Swainson's Thrush	1	100 ⁺	
	Aul11	549099E, 5048718N	Patchy mid-aged forest overlooking valley to South	10 south	12	Unknown	None	6:24 AM	Blackburnian Warbler	1	50-100	
									Cedar Waxwing	2	0-50	
									Chestnut-sided Warbler	1	0-50	
									Common Merganser	1	0-50	Agitated Behaviour
									Common Yellowthroat	2	0-50	
									Common Yellowthroat	1	100 ⁺	
									Eastern Wood-Pewee	1	100 ⁺	
									Least Flycatcher	1	100 ⁺	
									Mourning Warbler	1	50-100	
									Mourning Warbler	1	100 ⁺	
									Pileated Woodpecker	1	100 ⁺	

Table B7: Detailed Breeding Bird Survey Results, Aulds Mountain

Project # 12-4509

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind Speed and Direction	Temperature °C	Sky	Precipitation					
								Red-eyed Vireo	1	100 ⁺		
								Song Sparrow	1	100 ⁺		
								White-throated Sparrow	1	100 ⁺		
	Aul12	548483E, 5049144N	Mid-aged mixedwoods overlooking valley to northwest	5 south	12	Unknown	None	9:05 AM	Black-and-white Warbler	1	50-100	
								Common Raven	1	100 ⁺		
								Magnolia Warbler	1	0-50		
								Ovenbird	1	50-100		
								Purple Finch	1	50-100		
								Ruby-crowned Kinglet	1	50-100		
								Swainson's Thrush	1	50-100		
								White-throated Sparrow	1	50-100		

Table B8: Detailed Breeding Bird Survey Results, Aulds Mountain

Project # 12-4509

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	SARA Status	NSESA Status	COSEWIC Status	NSDNR Status
Alder Flycatcher	<i>Empidonax alnorum</i>	23	29	Not Listed	Not Listed	Not Listed	Green
American Crow	<i>Corvus brachyrhynchos</i>	2	5	Not Listed	Not Listed	Not Listed	Green
American Goldfinch	<i>Spinus tristis</i>	6	10	Not Listed	Not Listed	Not Listed	Green
American Redstart	<i>Setophaga ruticilla</i>	18	21	Not Listed	Not Listed	Not Listed	Green
American Robin	<i>Turdus migratorius</i>	13	16	Not Listed	Not Listed	Not Listed	Green
Belted Kingfisher	<i>Megaceryle alcyon</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Black-and-white Warbler	<i>Mniotilta varia</i>	13	13	Not Listed	Not Listed	Not Listed	Green
Blackburnian Warbler	<i>Dendroica fusca</i>	11	11	Not Listed	Not Listed	Not Listed	Green
Black-capped Chickadee	<i>Poecile atricapillus</i>	4	5	Not Listed	Not Listed	Not Listed	Green
Black-throated Green Warbler	<i>Dendroica virens</i>	18	20	Not Listed	Not Listed	Not Listed	Green
Blue Jay	<i>Cyanocitta cristata</i>	2	3	Not Listed	Not Listed	Not Listed	Green
Blue-headed Vireo	<i>Vireo solitarius</i>	7	7	Not Listed	Not Listed	Not Listed	Green
Boreal Chickadee	<i>Poecile hudsonicus</i>	4	5	Not Listed	Not Listed	Not Listed	Yellow
Cedar Waxwing	<i>Bombycilla cedrorum</i>	8	20	Not Listed	Not Listed	Not Listed	Green
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	12	12	Not Listed	Not Listed	Not Listed	Green
Common Loon	<i>Gavia immer</i>	1	1	Not Listed	Not Listed	Not at Risk	Red
Common Merganser	<i>Mergus merganser</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Common Raven	<i>Corvus corax</i>	4	4	Not Listed	Not Listed	Not Listed	Green
Common Yellowthroat	<i>Geothlypis trichas</i>	14	15	Not Listed	Not Listed	Not Listed	Green
Dark-eyed Junco	<i>Junco hyemalis</i>	5	5	Not Listed	Not Listed	Not Listed	Green
Eastern Wood-Pewee	<i>Contopus virens</i>	2	2	Not Listed	Vulnerable	Special Concern	Yellow
Golden-crowned Kinglet	<i>Regulus satrapa</i>	1	1	Not Listed	Not Listed	Not Listed	Yellow
Hairy Woodpecker	<i>Picoides villosus</i>	4	4	Not Listed	Not Listed	Not Listed	Green
Hermit Thrush	<i>Catharus guttatus</i>	9	9	Not Listed	Not Listed	Not Listed	Green
Least Flycatcher	<i>Empidonax minimus</i>	15	16	Not Listed	Not Listed	Not Listed	Green
Lincoln's Sparrow	<i>Melospiza lincolni</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Magnolia Warbler	<i>Dendroica magnolia</i>	28	32	Not Listed	Not Listed	Not Listed	Green
Mourning Dove	<i>Zenaidura macroura</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Mourning Warbler	<i>Oporornis philadelphia</i>	6	6	Not Listed	Not Listed	Not Listed	Green
Nashville Warbler	<i>Vermivora ruficapilla</i>	5	6	Not Listed	Not Listed	Not Listed	Green
Northern Flicker	<i>Colaptes auratus</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Northern Parula	<i>Parula americana</i>	4	4	Not Listed	Not Listed	Not Listed	Green
Ovenbird	<i>Seiurus aurocapilla</i>	14	14	Not Listed	Not Listed	Not Listed	Green
Pileated Woodpecker	<i>Dryocopus pileatus</i>	4	4	Not Listed	Not Listed	Not Listed	Green

Table B8: Detailed Breeding Bird Survey Results, Aulds Mountain

Project # 12-4509

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	SARA Status	NSESA Status	COSEWIC Status	NSDNR Status
Purple Finch	<i>Carpodacus purpureus</i>	11	12	Not Listed	Not Listed	Not Listed	Green
Red-breasted Nuthatch	<i>Sitta canadensis</i>	1	1	Not Listed	Not Listed	Not Listed	Green
Red-eyed Vireo	<i>Vireo olivaceus</i>	22	24	Not Listed	Not Listed	Not Listed	Green
Ruby-crowned Kinglet	<i>Regulus calendula</i>	10	10	Not Listed	Not Listed	Not Listed	Yellow
Song Sparrow	<i>Melospiza melodia</i>	4	5	Not Listed	Not Listed	Not Listed	Green
Swainson's Thrush	<i>Catharus ustulatus</i>	14	17	Not Listed	Not Listed	Not Listed	Green
White-throated Sparrow	<i>Zonotrichia albicollis</i>	27	33	Not Listed	Not Listed	Not Listed	Green
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	2	2	Not Listed	Not Listed	Not Listed	Green
Yellow-rumped Warbler	<i>Dendroica coronata</i>	4	4	Not Listed	Not Listed	Not Listed	Green

Possible Breeder
 Confirmed Breeder