

Appendix B:

Avian Study



**BASELINE AVIFAUNA SURVEYS
FINAL REPORT
GAETZ BROOK COMMUNITY WIND PROJECT**

June 21, 2013



Taking Charge™



June 21, 2013

Mr. Andy MacCallum
Natural Forces Technologies Inc.
#1205 – 1801 Hollis Street
Halifax, NS B3J 3N4

Dear Mr. MacCallum,

Re: Baseline Avifauna Surveys, Final Report
Gaetz Brook Community Wind Project

Attached is the Baseline Avifauna Surveys, Final Report prepared for the Gaetz Brook Community Wind Project in Gaetz Brook, Nova Scotia.

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 "Andy Walter".

Andy Walter, P.Eng
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A handwritten signature in blue ink, appearing to read "Carys Burgess".

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1.0 INTRODUCTION

Strum Consulting was commissioned to complete avifauna surveys at the location of a proposed wind energy development located at Gaetz Brook, Nova Scotia (the Project), on behalf of Natural Forces Technologies Inc. The objective of this study was to gather baseline data on avifauna during all key stages in the annual cycle at the Project site to facilitate pre- and post-construction comparisons, and to inform the Project planning process.

This report presents the survey results, with interpretation.

2.0 PROJECT SITE DESCRIPTION

Natural Forces Technologies Inc. has proposed the development of a single turbine wind farm at Gaetz Brook, within the Halifax Regional Municipality of Nova Scotia (Drawing 1, Appendix A). The Project site consists of 47.4 ha of softwood forest and cutovers less than 4 km from the Chezzetcook mudflats. The landscape in the general Project area is typified by clear-cut areas interspersed with windthrow and mid-aged to mature softwood stands.

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 instead 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* 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

Details of methodologies and results of the avian surveys are provided below. All 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).

4.1 Breeding Season

4.1.1 Methodology

Use of the Project site by breeding birds was evaluated using the point count methodology. This method consists of establishing survey locations at least 300 m apart, with considerations for habitat types and species of conservation concern, 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 on June 21 and July 12, 2012. A total of 14 point count surveys were conducted at seven locations (Drawing 2, Appendix A).

Identified species were assigned one of three breeding classifications as per the criteria outlined in the Maritime 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.

4.1.2 Results

There were 53 species, consisting of 1,141 individual birds, recorded during the breeding season surveys. A total of 12 of these species were considered “Confirmed breeders”, while 19 were considered at least “Probable” breeders (Table B1, Appendix B). An average of 81.5 ± 15.75 (mean \pm 95% confidence interval) birds were detected per survey, with an average of 21.1 ± 2.83 species detected per survey.

American Robin (*Turdus migratorius*), White-throated Sparrow (*Zonotrichia albicollis*), and Magnolia Warbler (*Dendroica magnolia*) were the most abundant species during the surveys, while Common Yellowthroat (*Geothlypis trichas*) was among the most frequently observed species. Passerines were the dominant group, but the bird community at the Project site during the breeding season is also influenced by the proximity of the coast.

Non-passerine species observed during the breeding bird surveys included: Canada Goose (*Branta canadensis*), Common Loon (*Gavia immer*), Common Merganser (*Mergus merganser*), Common Snipe (*Gallinago gallinago*), Great Black-backed Gull (*Larus marinus*), Great Blue Heron (*Ardea Herodias*), Hairy Woodpecker (*Picoides villosus*), Herring Gull (*Larus argentatus*), Northern Flicker (*Colaptes auratus*), Red-tailed Hawk (*Buteo jamaicensis*), Ring-billed Gull (*Larus delawarensis*), Ruby-throated Hummingbird (*Archilochus colubris*), Tree Swallow (*Tachycineta bicolor*), and Willet (*Tringa semipalmata*).

Species observed during the breeding 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. The following priority species were observed during breeding bird surveys at the Project site (Drawing 3, Appendix A):

- Canada Warbler (*Wilsonia canadensis*) - "Red" (NSDNR 2010), "Threatened" (COSEWIC 2013), "Threatened" (Government of Canada 2013);
- Common Loon – "Red" (NSDNR 2010);
- Common Snipe – "Yellow" (NSDNR 2010);
- Golden-crowned Kinglet (*Regulus satrapa*) – "Yellow" (NSDNR 2010);
- Pine Siskin (*Spinus pinus*) – "Yellow" (NSDNR 2010);
- Ruby-crowned Kinglet (*Regulus calendula*) – "Yellow" (NSDNR 2010);
- Tree Swallow – "Yellow" (NSDNR 2010);
- Willet – "Red" (NSDNR 2010);
- Wilson's Warbler (*Wilsonia pusilla*) – "Yellow" (NSDNR 2010); and
- Yellow-bellied Flycatcher (*Empidonax flaviventris*) – "Yellow" (NSDNR 2010).

Canada Warbler is the only species with legal protection under either *SARA* or *NSESA* that was observed during breeding bird surveys at the Project site. This species was considered a "Probable" breeder due to the observation of a pair of adults in appropriate habitat during the breeding season.

Detailed results are provided in Table B2, Appendix B.

4.2 Shorebirds

4.2.1 Methodology

The use of the general Project area by shorebirds in the late summer was evaluated using the watch count methodology. This method consists of establishing a vantage point allowing a high degree of shoreline/open water visibility, and recording data on species composition/abundance, behaviour, and flight routes to and from shoreline/intertidal foraging areas. Shorebird surveys were designed to encompass both low and high tides, and were conducted during visits to the general Project area on August 22 and September 7. A total of seven watch counts were carried out at six locations (Drawing 4, Appendix A).

4.2.2 Results

There were 13 species, consisting of 1,008 individual birds, recorded during shorebird watch counts (Table B3, Appendix B). Semipalmated Plover (*Charadrius semipalmatus*) and Semipalmated Sandpiper (*Calidris pusilla*) were the most abundant species. Herring Gull and American Black Duck (*Anas rubripes*) were the most frequently observed species.

Average shorebird abundance at the Project site was 38 ± 17.63 birds/survey, compared to 236 ± 376.72 in the areas surrounding the Project site. This was due primarily to single observations of large flocks of Semipalmated Plover and Semipalmated Sandpiper along the Chezzetcook Inlet to

the south of the Project site. These large observations also account for the high degree of variability observed in the numbers of birds/survey in the lands surrounding the Project site.

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

- Greater Yellowlegs (*Tringa melanoleuca*) – “Yellow” (NSDNR 2010);
- Semipalmated Sandpiper – “Yellow” (NSDNR 2010);
- Spotted Sandpiper (*Actitis macularius*) – “Yellow” (NSDNR 2010); and
- Willet – “Red” (NSDNR 2010).

No species with legal protection under either SARA or NSESA were observed during shorebird surveys in the general Project area.

Detailed results are provided in Table B4, Appendix B.

4.3 Fall Migration

4.3.1 Methodology

Use of the Project site by birds in the fall migration season was evaluated using the stopover count methodology. This method consists of walking 300 m transects and recording all birds observed/heard, as well as noting the distance to the observer or flight direction, in the case of flyovers. Surveys were conducted within 4 hours of sunrise, to encompass the peak foraging times for insect and seed eating passerine migrants, during site visits on September 17 and October 4, 2012. Survey dates were chosen based on the availability of suitable weather conditions and to coincide with the peak migration periods for insect eating and seed eating migrants in Nova Scotia. A total of 18 stopover count surveys were carried out, each at a different location (Drawing 4, Appendix A).

4.3.2 Results

There were 51 species, consisting of 1,014 individual birds, recorded during fall migration surveys (Table B5, Appendix B). An average of 56.33 ± 12.33 (mean \pm 95% confidence interval) birds were detected per survey, with an average of 13.5 ± 2.04 species detected per survey. A total of 38 of the species recorded during fall migration surveys were also present during breeding season surveys. Yellow-rumped Warbler (*Dendroica coronata*), Dark-eyed Junco (*Junco hyemalis*), and Black-capped Chickadee (*Poecile atricapillus*) were the most abundant species during the surveys. American Crow (*Corvus brachyrhynchos*) was also among the most frequently observed species. Passerines dominated the fall bird community, although non-passerine species observed during the fall migration surveys included: American Black Duck, American Woodcock (*Scolopax minor*), Common Loon, Common Merganser, Common Nighthawk (*Chordeiles minor*), Downy Woodpecker (*Picoides pubescens*), Hairy Woodpecker, Northern Flicker, Osprey (*Pandion haliaetus*), Ruffed Grouse (*Bonasa umbellus*), and Spruce Grouse (*Falcapennis canadensis*).

Species observed during the fall migration 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. The following priority species were observed during fall migration surveys at the Project site (Drawing 7, Appendix A):

- Blackpoll Warbler (*Dendroica striata*) – “Yellow” (NSDNR 2010);
- Boreal Chickadee (*Poecile hudsonicus*) – “Yellow” (NSDNR 2010);
- Common Loon – “Red” (NSDNR 2010);
- Common Nighthawk – “Red” (NSDNR 2010), “Threatened” (COSEWIC 2013), “Threatened” (SARA 2013), “Threatened” (NSES 2007);
- Golden-crowned Kinglet (*Regulus satrapa*) – “Yellow” (NSDNR 2010);
- Gray Jay (*Perisoreus canadensis*) – “Yellow” (NSDNR 2010);
- Pine Siskin (*Spinus pinus*) – “Yellow” (NSDNR 2010); and
- Ruby-crowned Kinglet (*Regulus calendula*) – “Yellow” (NSDNR 2010);

Common Nighthawk is the only species with legal protection under either SARA or NSES that was observed during fall migration surveys at the Project site.

Detailed results are provided in Table B6, Appendix B.

4.4 Winter

4.4.1 Methodology

Use of the Project site by birds during the winter season was evaluated using the area search methodology. This method consists of establishing survey locations in priority habitats and recording all birds observed/heard, as well as the approximate distance from the observer. Surveys were conducted within 4 hours of sunrise, to encompass peak activity times for over-wintering passerines, during a site visit on January 15, 2013. The survey date was chosen based on the availability of suitable weather conditions that are representative of winter conditions in Nova Scotia. A total of seven area search surveys were carried out, each at a different location (Drawing 2, Appendix A).

4.4.2 Results

There were 10 species, consisting of 68 individual birds, recorded during winter surveys (Table B7, Appendix B). An average of 9.71 ± 3.69 (mean \pm 95% confidence interval) birds were detected per survey, with an average of 3.57 ± 1.34 species detected per survey. American Crow, Black-capped Chickadee, and Common Redpoll (*Acanthis flammea*) were the most abundant species during the surveys, while American Crow, Black-capped Chickadee, and Golden-crowned Kinglet were the most frequently observed species. Passerines dominated the winter bird community, although non-passerine species observed during these surveys included: American Black Duck and Herring Gull.

Species observed during the winter 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. The following priority species were observed during winter surveys at the Project site (Drawing 8, Appendix A):

- Boreal Chickadee – “Yellow” (NSDNR 2010);
- Golden-crowned Kinglet – “Yellow” (NSDNR 2010); and
- Gray Jay – “Yellow” (NSDNR 2010);

No species with legal protection under either SARA or NSESA was observed during winter surveys at the Project site.

Detailed results are provided in Table B8, Appendix B.

4.5 Spring Migration

4.5.1 Methodology

Use of the Project site by birds during the spring migration season was evaluated using the stopover count methodology (see Section 4.3.1). A total of 53 stopover count surveys were carried out during site visits on May 7th, 22nd, 30th, and June 16th, 2013 (Drawing 9, Appendix A). Survey dates were chosen to coincide with weather conditions potentially affecting the distribution of spring migrants at the site, including fog and rain events. Surveys were conducted based upon the expected peak of spring passerine migration in the general Project area, based on local knowledge and consultations with NSDNR.

4.5.2 Results

There were 53 species, consisting of 944 individual birds, recorded during spring migration surveys (Table B9, Appendix B). An average of 18.19 ± 2.24 (mean \pm 95% confidence interval) birds were detected per survey, with an average of 10.7 ± 0.99 species detected per survey. White-throated Sparrow, Magnolia Warbler (, and Common Yellowthroat were the most abundant and frequently observed species during the surveys. The bird community was dominated by migrant passerines, which accounted for 54.7% of the species and 80.7% of the individuals observed. Non-passerine species observed during the spring migration surveys included: American Black Duck, Common Loon, Double-crested Cormorant (*Phalacrocorax auritus*), Great Blue Heron, Hairy Woodpecker, Herring Gull, Northern Flicker, Osprey, Pileated Woodpecker (*Dryocopus pileatus*), Ring-necked Pheasant (*Phasianus colchicus*), Ruffed Grouse, and Sharp-shinned Hawk (*Accipiter striatus*).

Species observed during the spring migration 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. The following priority species were observed during spring migration surveys at the Project site (Drawing 10, Appendix A):

- Blackpoll Warbler – “Yellow” (NSDNR 2010);
- Boreal Chickadee – “Yellow” (NSDNR 2010);
- Canada Warbler – “Red” (NSDNR 2010), “Threatened” (COSEWIC 2013), “Threatened” (SARA 2013);

- Common Loon – “Red” (NSDNR 2010);
- Golden-crowned Kinglet – “Yellow” (NSDNR 2010);
- Tennessee Warbler (*Oreothlypis peregrine*) – “Yellow” (NSDNR 2010); and
- Yellow-bellied Flycatcher – “Yellow” (NSDNR 2010).

Canada Warbler is the only species with legal protection under either *SARA* or *NSESA* that was observed during fall migration surveys at the Project site.

Detailed results are provided in Table B10, Appendix B.

5.0 DISCUSSION

The Project site appears to support a reasonably vibrant breeding bird community in terms of species diversity and overall abundance. Typically, the highest density and most diverse breeding bird communities are found in mid-successional habitats (Davis and Browne 1996). Habitat types at the site include treed swamps interspersed with mid-aged, coniferous dominated forests, with cleared/disturbed areas at its eastern and western extents. This habitat diversity accounts for the density of breeding passerines observed, particularly those commonly associated with regenerating/shrubby habitats, such as Alder Flycatcher (*Empidonax alnorum*), American Robin, Hermit Thrush (*Catharus guttatus*), Magnolia Warbler, and White-throated Sparrow. Treed swamp and coniferous forest habitat, meanwhile, supports relatively high densities of breeding Common Yellowthroat and Dark-eyed Junco (*Junco hyemalis*). The Project site generally lacks mature forest, however, which likely accounts for the absence and/or low density of breeding woodpeckers and birds of prey. Similarly, the Project site is of limited use to most breeding aerial insectivores, including swallows and swifts, due primarily to the lack of open-water bodies.

Canada Warbler was identified as a “Probable” breeder at the Project site, and was observed along the Project site’s southern border. This location does not coincide with areas proposed for Project infrastructure; furthermore, suitable breeding habitat featuring a well-developed shrub layer (COSEWIC 2008) is prevalent at the Project site. An individual Canada Warbler was also observed in the same area during spring migration surveys. However, the low numbers of Canada Warbler at the Project site do not suggest that it is an area of particular importance from a population perspective, although effort should be taken to minimize disturbance to the established breeding location in the event of a realignment of Project infrastructure.

The results of the shorebird watch counts suggest that the Project site does not appear to be of importance to roosting shorebirds or staging waterfowl, and does not lie within an important flyway for shorebird or waterfowl migrants in the fall. Only one flock of Semipalmated Plovers was observed flying directly over the site, likely en route to the inter-tidal mudflats of the West Chezzetcook Marsh to the south. Birds observed from survey locations at the Project site were generally flying in a south/southeast direction, but were passing over lands to the south/southwest of the site. Some localized movements to the north, primarily by Herring Gull, were also observed.

Shorebird foraging activity was relatively high at coastal inlets to the south of the Project site, but habitats at the Project site are not favourable for roosting during high tide periods when foraging is limited. Likewise, the lack of open-water bodies at the Project site means that waterfowl species are unlikely to use the site directly, although a small lake that borders the western extent of the site may act as a staging area for migrating American Black Duck. Although unlikely, based upon field observations, shorebird and waterfowl foraging/staging in the general Project area may result in occasional collisions with turbine infrastructure during migration or movements between foraging and roosting areas. In general, however, waterbirds suffer very low mortality rates at wind energy facilities (Kingsley and Whittam 2005; EC *et al.* 2012).

Surveys indicate that the Project site is used by both resident and migrant species during September and October; the peak of fall migration for insect and seed eating passerines in Atlantic Canada. Overall, bird abundance was relatively consistent in these two months. However, resident species, or at least those that commonly over-winter in Nova Scotia, were dominant during the fall migration surveys. These species, which include American Crow, Black-capped Chickadee, Boreal Chickadee, and Golden-crowned Kinglet, were dominant at the Project site during winter surveys as well, although overall winter abundance was relatively low. Abundances of fall migrants were within the expected range, with Dark-eyed Junco and Yellow-rumped Warbler being the most numerous. However, most migrant flocks were relatively small, and no obvious migration corridors were indicated by the surveys. It is possible that the remaining conifer stands may attract nomadic flocks of finches and crossbills in the late fall/winter months, but movements of these species are highly variable from year-to-year and are based on cone crops in northern forests (Pittaway 1998). The presence of Evening Grosbeak (*Coccothraustes vespertinus*), Pine Siskin, and Purple Finch (*Carpodacus purpureus*) indicate that suitable food resources are available for finches at the Project site, but it is impossible to determine if future large-scale movements of this group will encompass the Project site. Common Redpoll, a white birch (*Betula papyrifera*) specialist, was also observed at the site during the winter surveys. This species is a common winter visitor recorded in Nova Scotia every year, although its distribution and abundance in the province varies greatly.

The disturbed nature of the Project site appears to support a diverse, if not particularly abundant, spring migrant community consisting predominantly of species that are common throughout the province. Early spring migrants, most notably White-throated Sparrow, Palm Warbler (*Dendroica palmarum*), and Yellow-rumped Warbler, are common at the Project site in early May, while the migrant pulse of wood warblers reached the site by the May 22, 2013 spring migration survey. By early June, reasonable numbers of Magnolia Warbler, Common Yellowthroat, Black-throated Green Warbler, and Black-and-white Warbler (*Mniotilta varia*) are present, which is consistent with observations during the 2012 breeding season. The close proximity of the Project site to the coast likely accounts for the presence of Blackpoll Warbler and Fox Sparrow (*Passerella iliaca*), albeit in very low numbers. Overall abundance and diversity, in terms of individuals and species observed/survey location, at the Project site during spring migration was significantly less than that observed during the fall migration period ($F = 85.74$, $p = <0.01$ and $F = 7.20$, $p = <0.01$, respectively).

Several priority species were observed during surveys at the Project site, suggesting that viable habitat for these species is present at various time of year. However, several of these species, most

notably those listed as “Yellow” (Vulnerable/Special Concern) by NSDNR including Boreal Chickadee, Golden-crowned Kinglet, Pine Siskin, and Ruby-crowned Kinglet, are still quite common in the forests of Nova Scotia, despite overall population declines on a regional scale. The Common Nighthawk observed during fall migration surveys was flying through the area to the south of the Project site, and was not observed to be using the site directly for either foraging or roosting. Canada Warbler, as discussed above, is present at the site during spring migration and breeding season, and care should be exercised to avoid undue disturbance to this species (e.g., avoidance of identified nesting sites if activities occur during breeding/nesting season).

Post-construction monitoring at wind energy installations across Canada indicates that passerines are the group most commonly affected, accounting for 70% of all bird fatalities (EC *et al.* 2012). Trends in mortalities for this group strongly reflect seasonal patterns, with peaks during spring and fall migration. High ridges and mountains are known to concentrate migrating birds, particularly passerines, along narrow corridors (Kingsley and Whittam 2005). The Project site is not located along such a ridge, and peak elevation is approximately 85 m. However, the Project site’s proximity to the coast means that the local climate is strongly influenced by the ocean, which may give rise to conditions such as heavy fog. Fog, as well as drizzle, can cause nocturnal migrants to fly at lower altitudes which may coincide with the height of rotating turbine blades (Kingsley and Whittam 2005). However, collisions with wind turbines accounts for less than 1% of annual avian mortality resulting from anthropogenic sources; being far outweighed by collisions with buildings and power lines (Erickson *et al.* 2005).

Only one raptor was observed at or near the Project site during fall migration surveys. Flight direction suggests that this individual Osprey was likely not migrating but was instead commuting between waterbodies in the general Project area. Similarly, raptor observations during the spring migration period consisted of foraging Osprey, Sharp-shinned Hawk, and Northern Goshawk. Raptor migration routes often coincide with well-defined ridges, features which are lacking in the general Project area. Topographic and field evidence therefore suggests that the risk of raptor collision with Project infrastructure is quite low.

In summary, the data from avian surveys conducted during the 2012/2013 annual cycle suggest that, while the Project site supports a reasonable breeding and resident bird community, the establishment of a single-turbine wind energy installation is unlikely to significantly affect large numbers of birds by virtue of collisions with migrants. However, the Project location, along the Atlantic coast, does increase the risk slightly for migrating passerines and shorebirds.

6.0 RECOMMENDATIONS

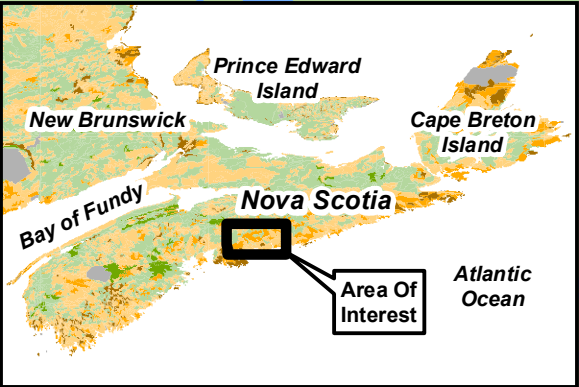
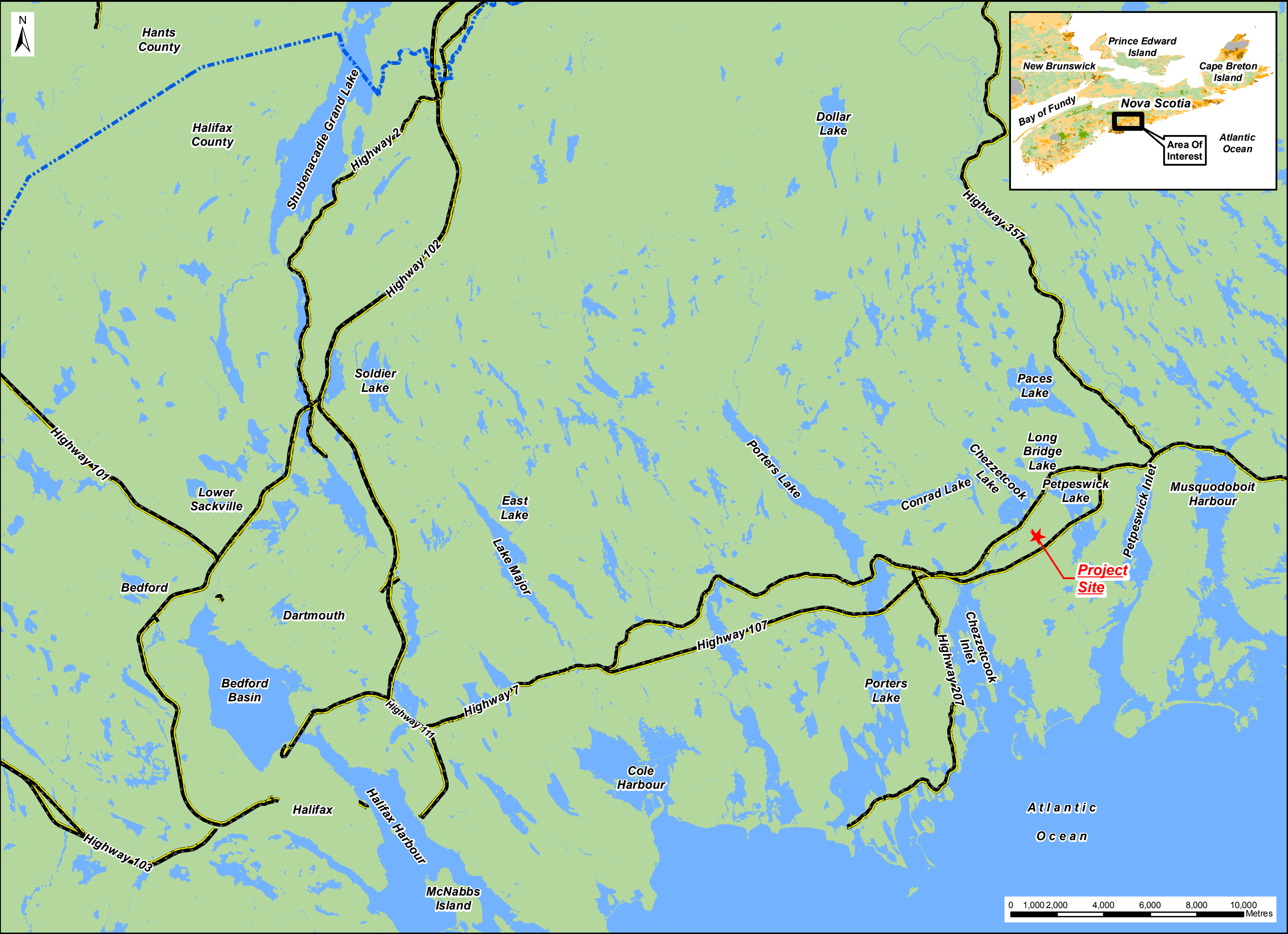
It is recommended that any alterations to the proposed alignment of Project infrastructure be designed in consideration of identified priority species habitats. Furthermore, given the prevalence of disturbed areas at the Project site, avoidance of remnant mid-aged, coastal softwood stands would be desirable. Upon the installation of Project infrastructure, post-construction monitoring, including but not necessarily limited to carcass searches, should also be completed.

7.0 REFERENCES

- COSEWIC (Committee on the Status of Endangered Wildlife in Canada). 2013. Wildlife Species Search. Retrieved from http://www.cosewic.gc.ca/eng/sct1/index_e.cfm
- COSEWIC . 2008. COSEWIC assessment and status report on the Canada Warbler (*Wilsonia canadensis*) in Canada. Accessed January 16th, 2013 from http://www.sararegistry.gc.ca/virtual_sara/files/cosewic/sr_canada_warbler_0808_e.pdf
- CWS (Canadian Wildlife Service). 2007. *Recommended Protocols for Monitoring Impacts of Wind Turbines on Birds*. 33pp.
- Davis, D., & S. Browne. 1996. *The Natural History of Nova Scotia*. Nova Scotia Museum, Halifax, NS. 304 pp.
- EC (Environment Canada). Canadian Wind Energy Association, Bird Studies Canada & the Ontario Ministry of Natural Resources. 2012. *Wind Energy Bird and Bat Monitoring Database: Summary of the Findings from Post-construction Monitoring Reports*. p 22.
- Erickson, W.P., Johnson, G.D., and D.P. Young Jr. 2005. A summary and comparison of bird mortality from anthropogenic causes with an emphasis on collisions. USDA Forest Service General Technical Report PSW-GTR-191. 14 pp.
- Government of Canada. 2013. *Species at Risk Public Registry*. Retrieved from http://www.sararegistry.gc.ca/default_e.cfm.
- Kingsley, A., & B. Whittam. 2005. Wind Turbines and Birds: A Background Review for Environmental Assessment. 81 pp.
- MBBA (Maritime Breeding Bird Atlas). 2006. *Maritime Breeding Bird Atlas Guide for Atlassers*. Version 1. April 2006. 38 pp.
- NSDNR (Nova Scotia Department of Natural Resources). 2010. *Wild Species – The General Status of Species in Nova Scotia*. Retrieved from <http://www.gov.ns.ca/natr/wildlife/genstatus/>
- NSE (Nova Scotia Environment). 2009. *Guide to Addressing Wildlife Species and Habitat in an EA Registration Document*. 8 pp.
- Pittaway, R. (1998, February). Winter Finches. *Ontario Field Ornithologists (OFO) News*. 5 pp.

APPENDIX A

DRAWINGS



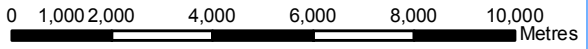
- Notes:**
- 1. Reference: Digital Topographic Mapping By Nova Scotia Geomatics Centre.
 - 2. Projection: NAD83(CSRS), UTM Zone 20 North.

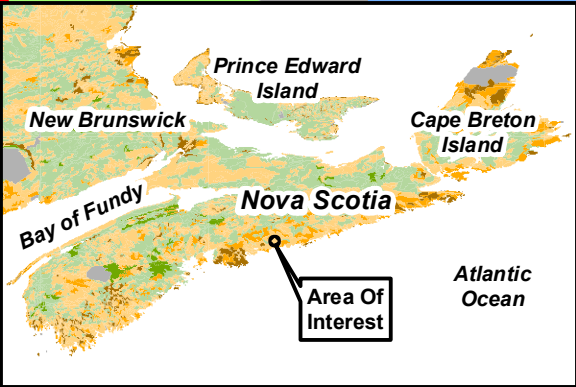
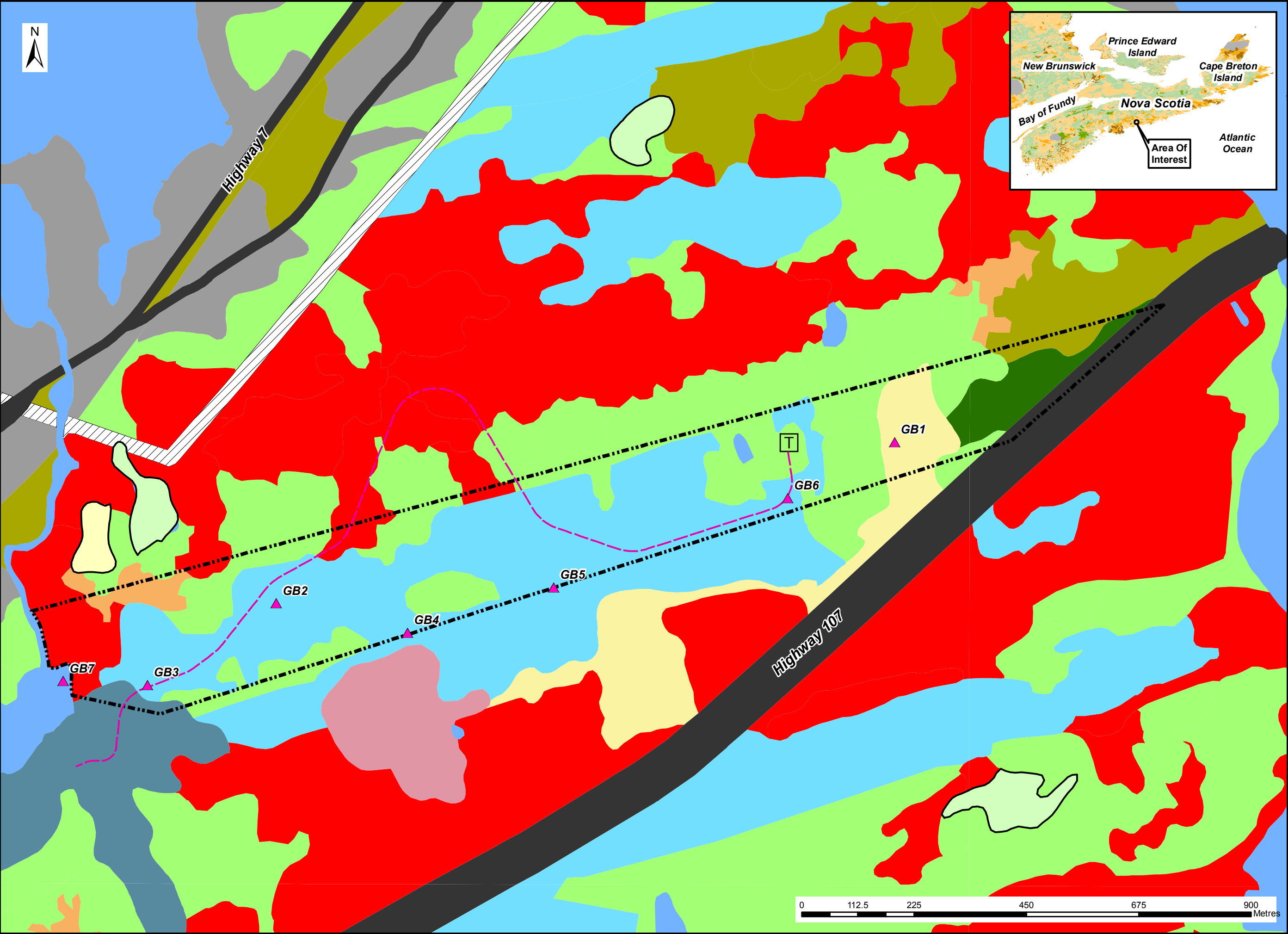
- Legend:**
- County Boundary
 - Highway
 - Water Body

Project Site Location



Date: June 2013	Project #: 12-4428
Scale: 1:150,000	Drawing #: 1
Drawn By: H. Serhan	
Checked By: G. Gregory	





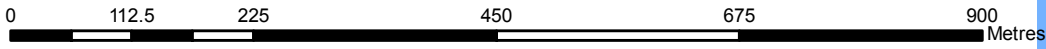
- Notes:**
1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

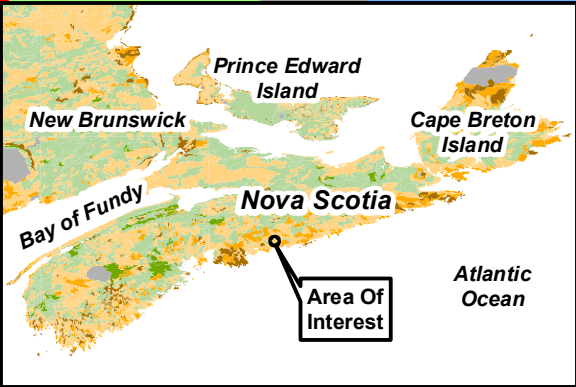
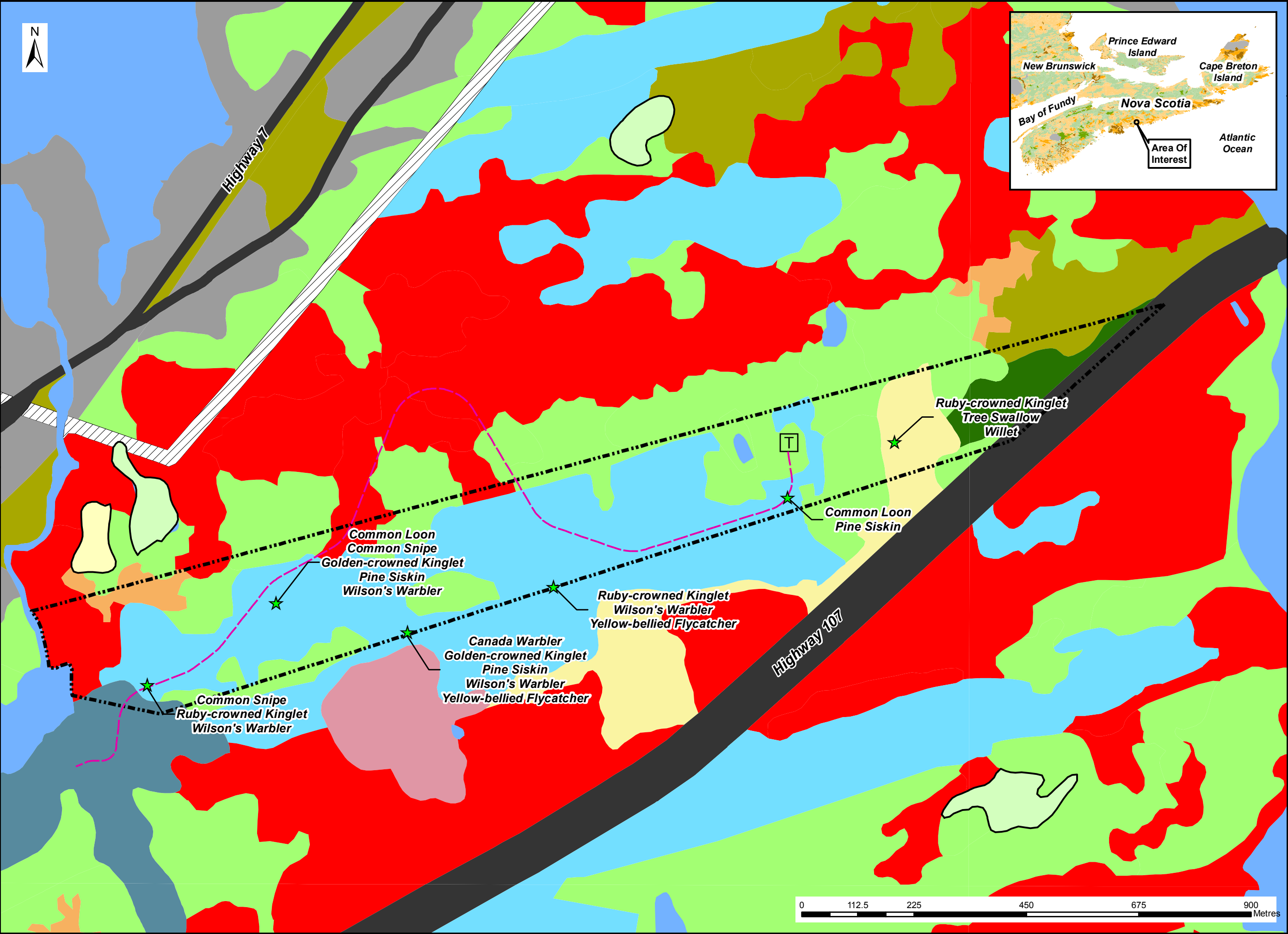
- Legend**
- Project Site Boundary
 - Proposed Access Road
 - Proposed Turbine Location
 - Breeding and Winter Survey Locations
- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

**Breeding Bird
and Winter Survey
Locations**



Date: June 2013	Project #: 12-4428
Scale: 1:7,000	Drawing #: 2
Drawn By: G. Gregory	
Checked By: A. Walter	





- Notes:**
1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

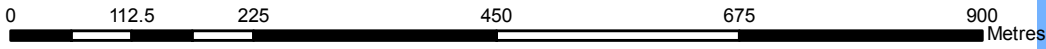
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Breeding

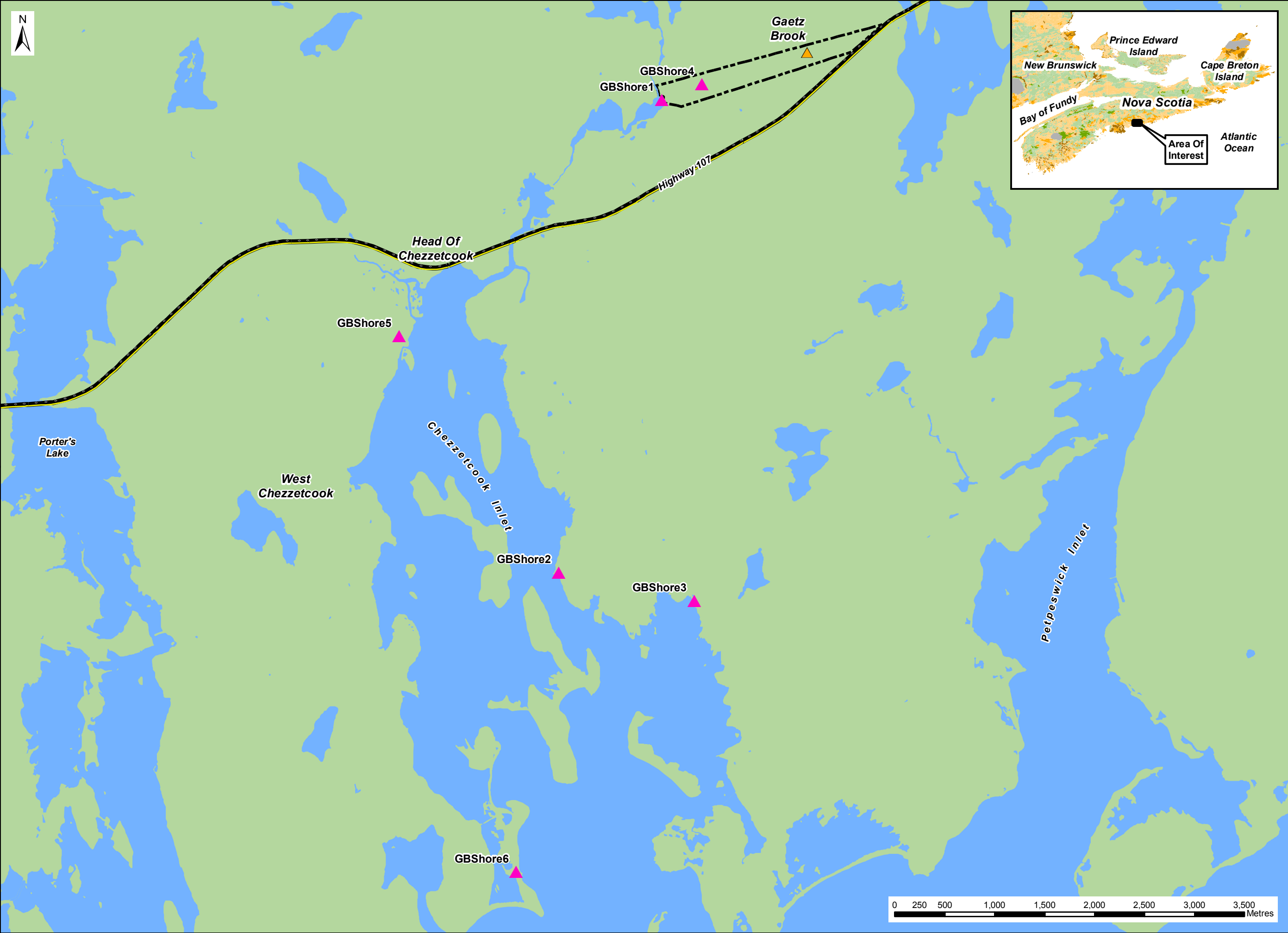
- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

**Breeding Season
Priority Species
Locations**



Date: June 2013	Project #: 12-4428
Scale: 1:7,000	Drawing #: 3
Drawn By: G. Gregory	
Checked By: A. Walter	





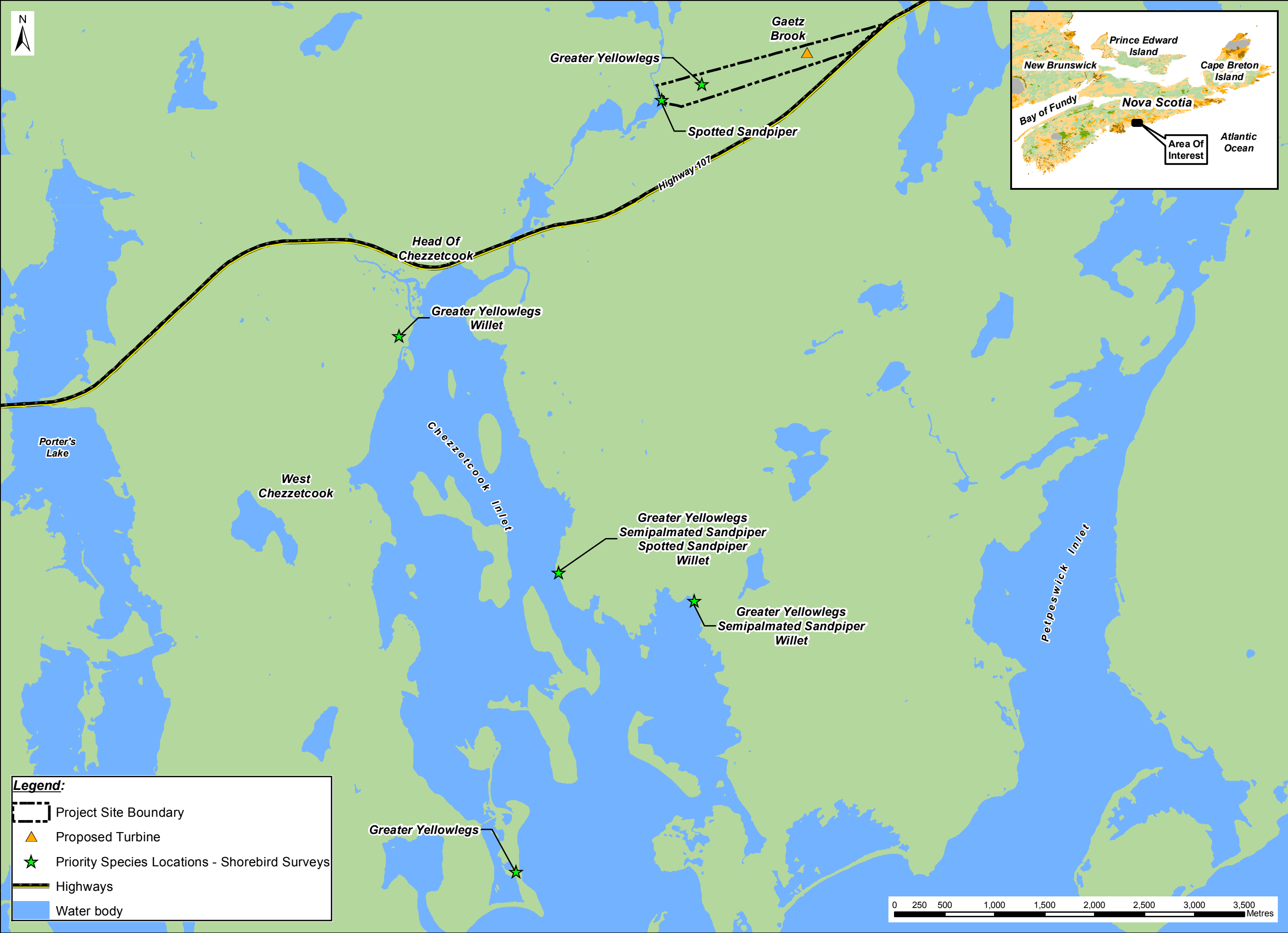
- Notes:**
- Reference: Digital Topographic Mapping By Nova Scotia Geomatics Centre.
 - Projection: NAD83(CSRS), UTM Zone 20 North.

- Legend:**
- Project Site Boundary
 - Proposed Turbine
 - Shorebird Survey Locations
 - Highways
 - Water body

Shorebird Survey Locations

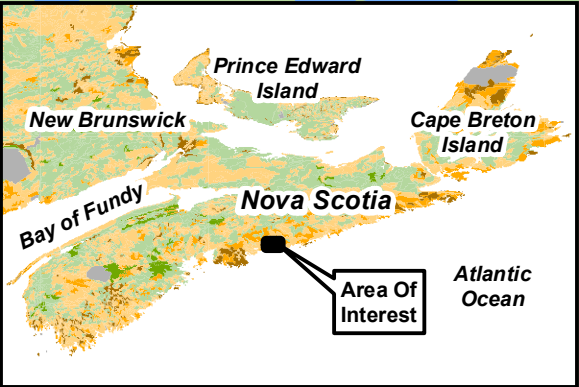


Date: June 2013	Project #: 12-4428
Scale: 1:35,000	Drawing #: 4
Drawn By: G. Gregory	
Checked By: A. Walter	



Legend:

- Project Site Boundary
- Proposed Turbine
- Priority Species Locations - Shorebird Surveys
- Highways
- Water body

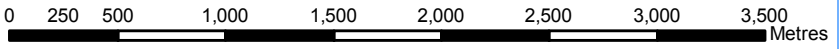


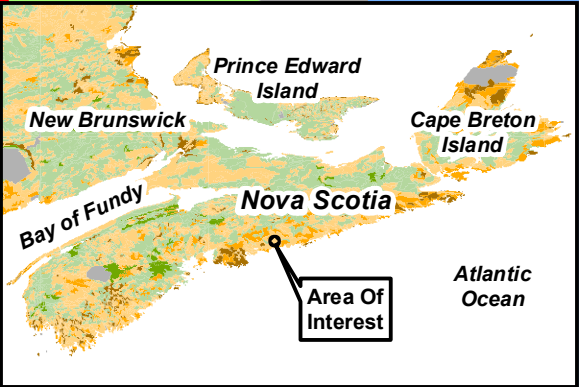
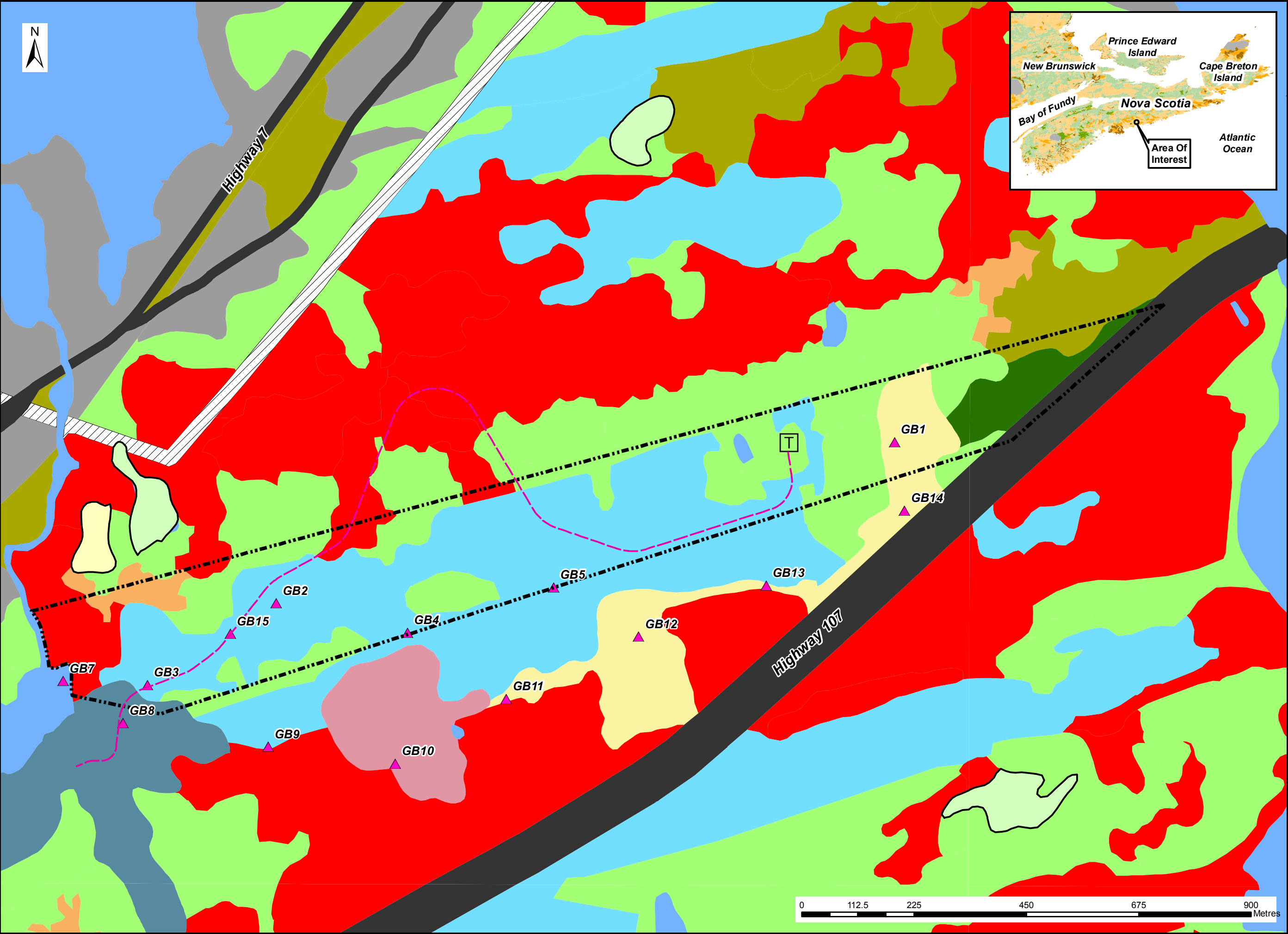
- Notes:**
1. Reference: Digital Topographic Mapping By Nova Scotia Geomatics Centre.
 2. Projection: NAD83(CSRS), UTM Zone 20 North.

**Shorebird Survey
Priority Species
Locations**



Date: June 2013	Project #: 12-4428
Scale: 1:35,000	Drawing #: 5
Drawn By: G. Gregory	
Checked By: A. Walter	





Notes:

1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.

2. Projection: NAD83 Zone 20N

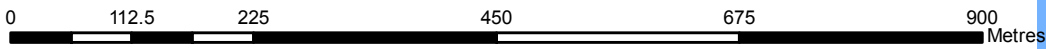
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Fall Bird Survey Locations

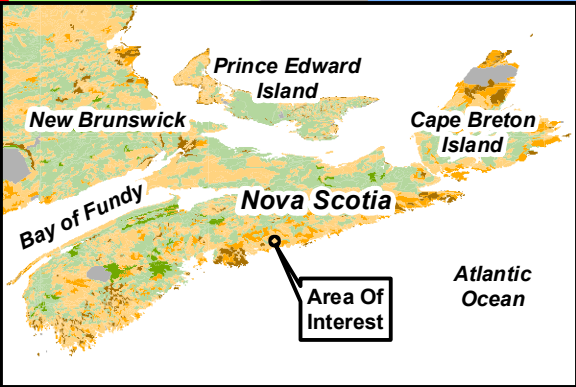
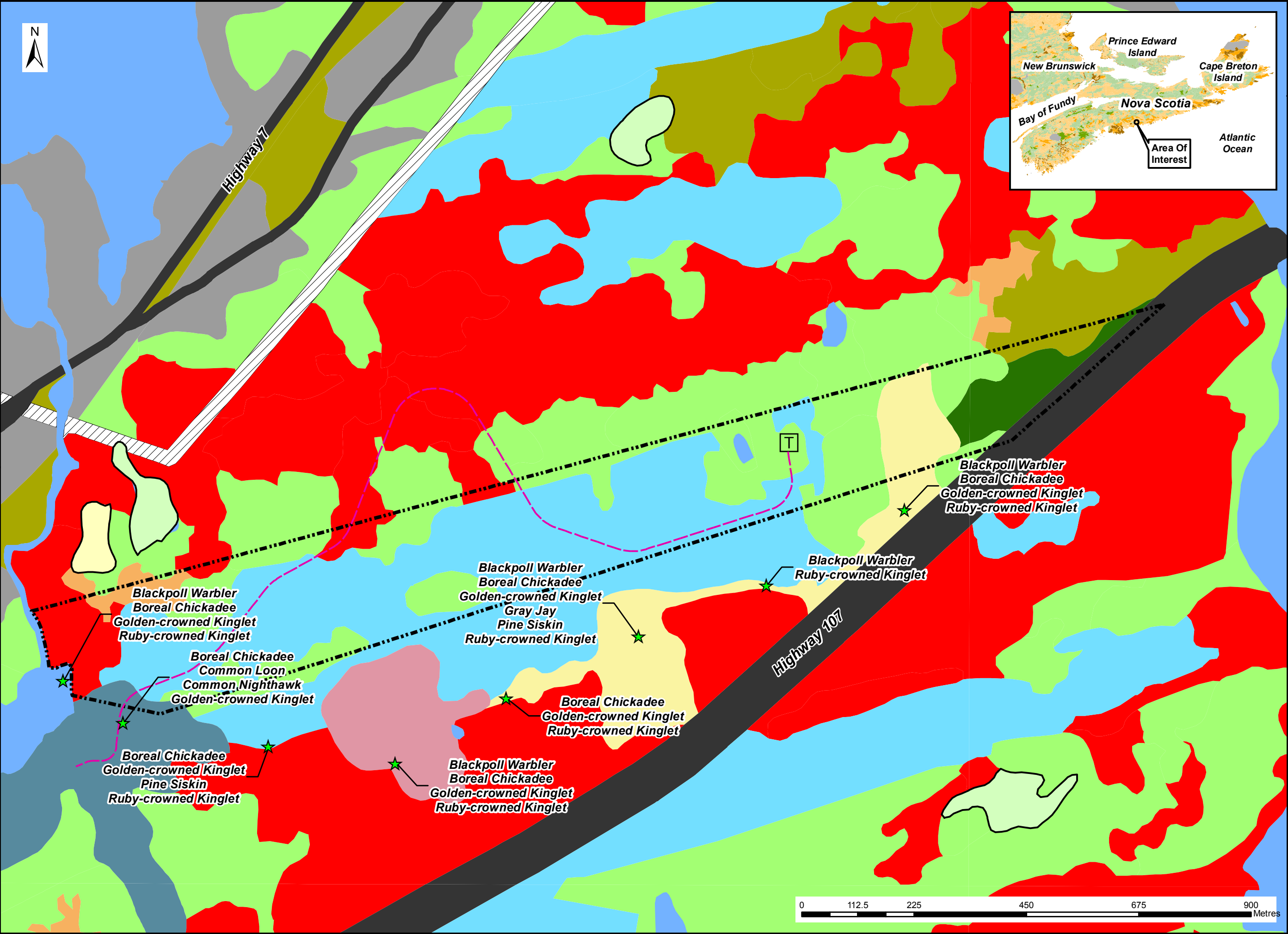
- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

Fall Migration Survey Locations



Date:	June 2013	Project #:	12-4428
Scale:	1:7,000	Drawing #:	6
Drawn By:	G. Gregory		
Checked By:	A. Walter		





Notes:

1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.

2. Projection: NAD83 Zone 20N

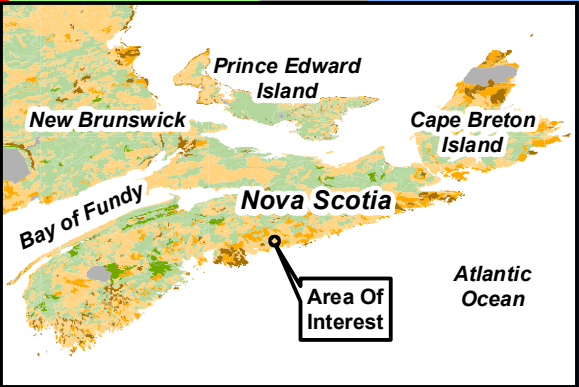
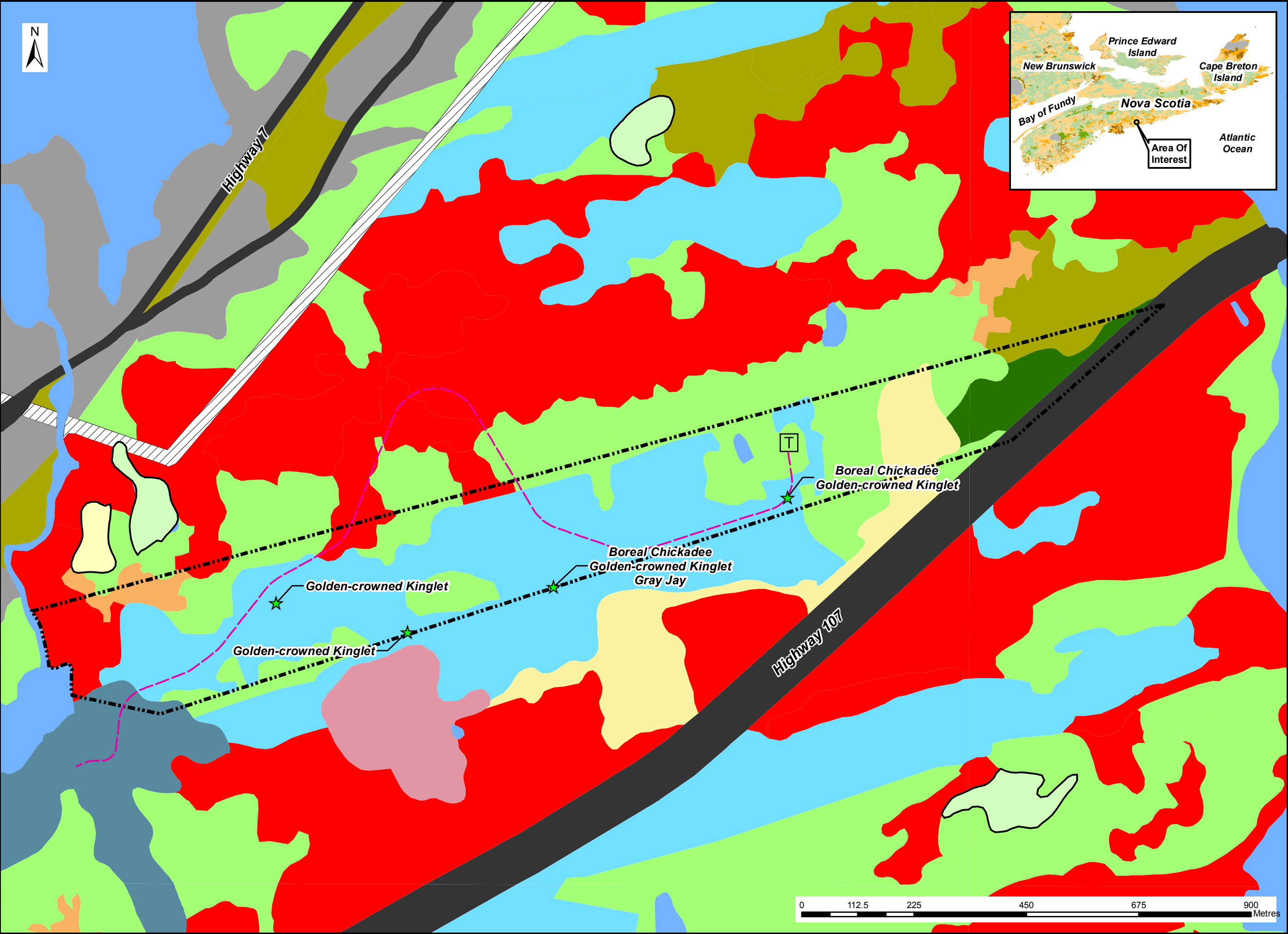
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Fall Migration

- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

Fall Migration Priority Species Locations



Date:	June 2013	Project #:	12-4428
Scale:	1:7,000	Drawing #:	7
Drawn By:	G. Gregory		
Checked By:	A. Walter		



- Notes:**
1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

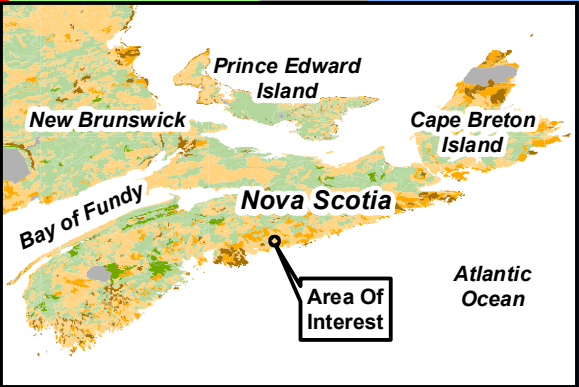
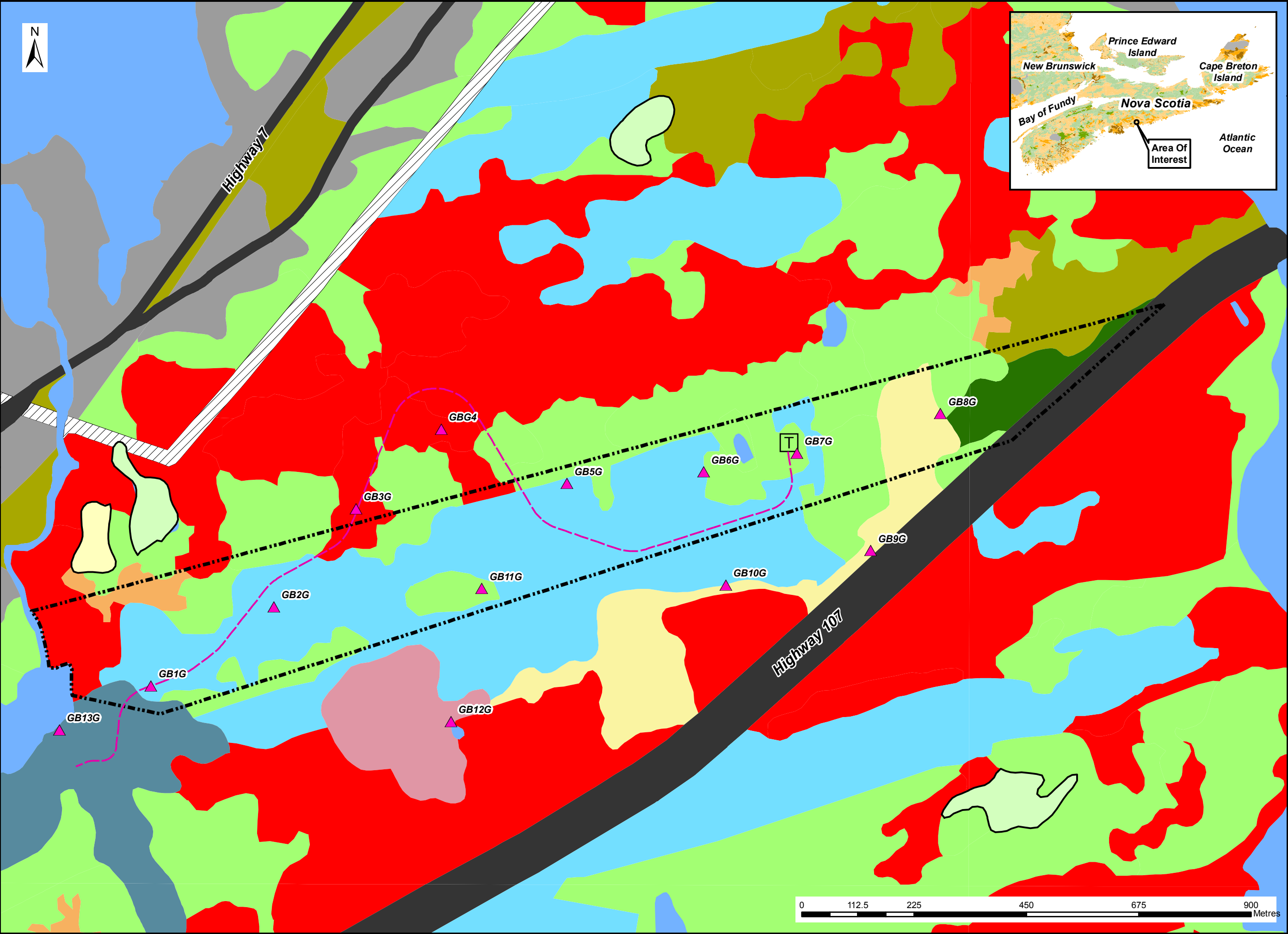
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Winter

- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

Winter Priority Species Locations



Date: June 2013	Project #: 12-4428
Scale: 1:7,000	Drawing #: 8
Drawn By: G. Gregory	
Checked By: A. Walter	



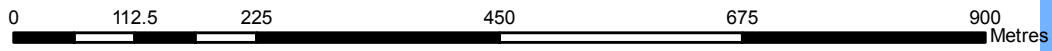
- Notes:**
- Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.
 - Projection: NAD83 Zone 20N

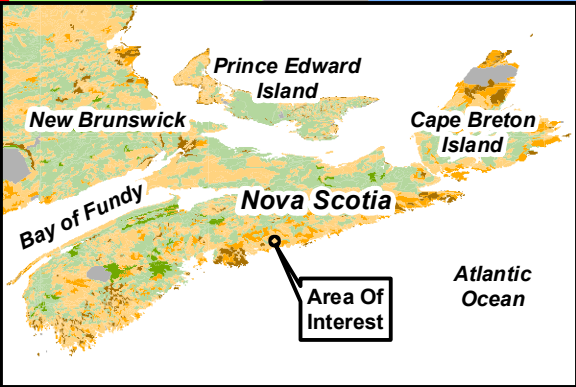
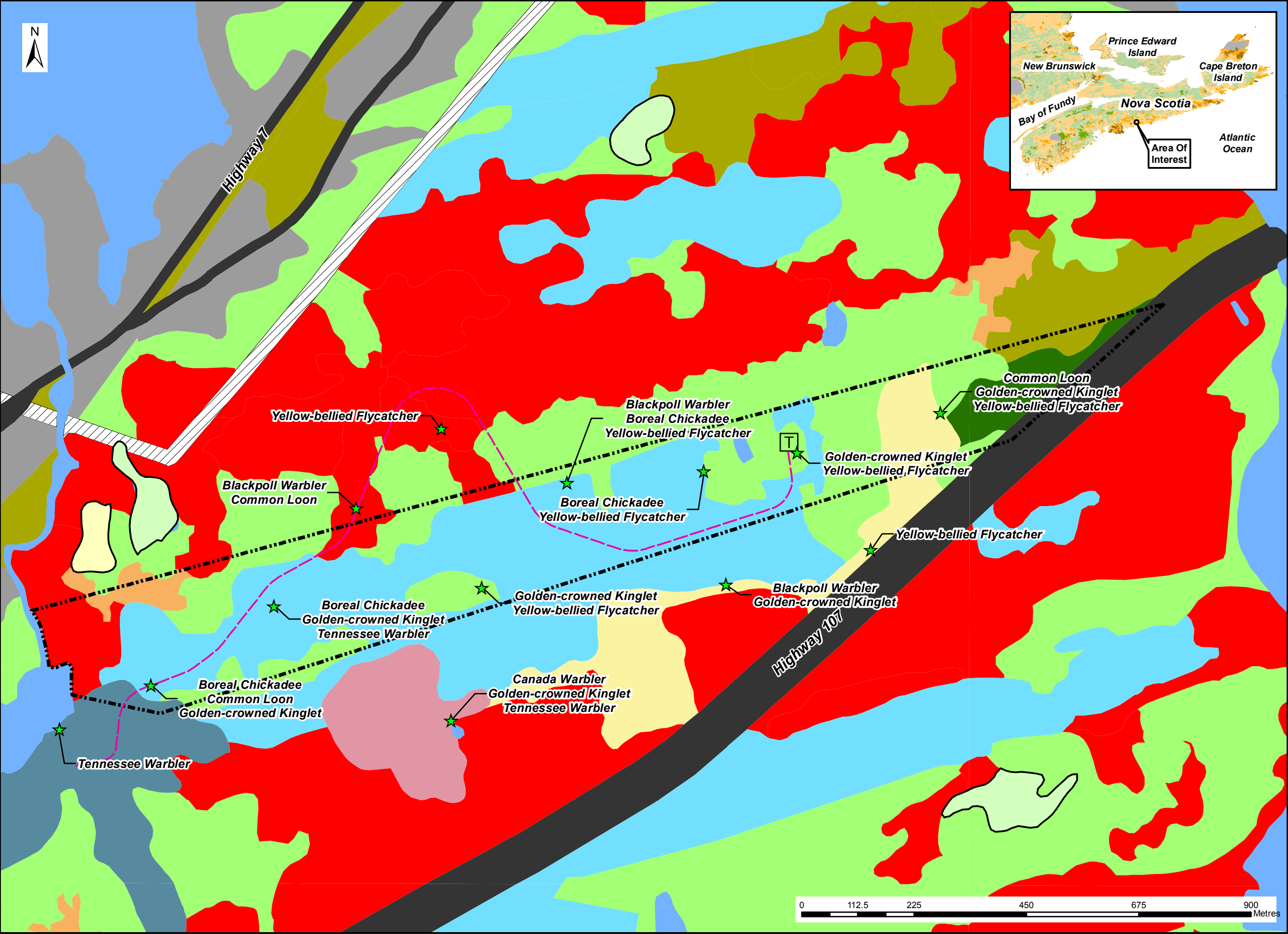
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Spring Migration Survey Locations
- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

Spring Migration Survey Locations



Date:	June 2013	Project #:	12-4428
Scale:	1:7,000	Drawing #:	9
Drawn By:	G. Gregory		
Checked By:	A. Walter		





- Notes:**
1. Reference: Nova Scotia Forest Inventory (NSDNR 2011); Nova Scotia Wetland Inventory (NSDNR 2011); Topographic Mapping by Service NS.
 2. Projection: NAD83 Zone 20N

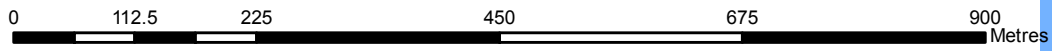
- Legend**
- Project Site Boundary
 - Proposed Turbine Location
 - Proposed Access Road
 - Priority Species Locations - Spring Migration

- NS DNR Wetland Inventory**
- Wetland Type**
- Bog or Fen
 - Fen
 - Marsh
 - Salt Marsh
 - Swamp
 - Water
 - Water Body
 - Unclassified Forest
 - Wind Throw
 - Plantation
 - Clear Cut
 - Inland Water
 - Agriculture
 - Urban
 - Gravel Pit
 - Powerline Corridor
 - Road Corridor
 - Softwood
 - Mixedwood
 - Hardwood

Spring Migration Priority Species Locations



Date: June 2013	Project #: 12-4428
Scale: 1:7,000	Drawing #: 10
Drawn By: G. Gregory	
Checked By: A. Walter	



APPENDIX B

SURVEY RESULTS

Table B1: Summarized Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Alder Flycatcher	<i>Empidonax alnorum</i>	17	50	Green	Not Listed	Not Listed	Not Listed
American Crow	<i>Corvus brachyrhynchos</i>	15	35	Green	Not Listed	Not Listed	Not Listed
American Goldfinch	<i>Spinus tristis</i>	10	21	Green	Not Listed	Not Listed	Not Listed
American Redstart	<i>Setophaga ruticilla</i>	4	7	Green	Not Listed	Not Listed	Not Listed
American Robin	<i>Turdus migratorius</i>	36	138	Green	Not Listed	Not Listed	Not Listed
Black-and-white Warbler	<i>Mniotilta varia</i>	26	36	Green	Not Listed	Not Listed	Not Listed
Black-capped Chickadee	<i>Poecile atricapillus</i>	15	37	Green	Not Listed	Not Listed	Not Listed
Black-throated Green Warbler	<i>Dendroica virens</i>	18	33	Green	Not Listed	Not Listed	Not Listed
Blue Jay	<i>Cyanocitta cristata</i>	13	33	Green	Not Listed	Not Listed	Not Listed
Blue-headed Vireo	<i>Vireo solitarius</i>	15	17	Green	Not Listed	Not Listed	Not Listed
Canada Goose	<i>Branta canadensis</i>	1	2	Green	Not Listed	Not Listed	Not Listed
Canada Warbler	<i>Wilsonia canadensis</i>	1	2	Red	Threatened	Threatened	Not Listed
Cedar Waxwing	<i>Bombycilla cedrorum</i>	8	22	Green	Not Listed	Not Listed	Not Listed
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	5	5	Green	Not Listed	Not Listed	Not Listed
Chipping Sparrow	<i>Spizella passerina</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Common Grackle	<i>Quiscalus quiscula</i>	3	4	Green	Not Listed	Not Listed	Not Listed
Common Loon	<i>Gavia immer</i>	2	3	Red	Not at Risk	Not Listed	Not Listed
Common Merganser	<i>Mergus merganser</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Common Raven	<i>Corvus corax</i>	5	10	Green	Not Listed	Not Listed	Not Listed
Common Snipe	<i>Gallinago gallinago</i>	2	2	Yellow	Not Listed	Not Listed	Not Listed
Common Yellowthroat	<i>Geothlypis trichas</i>	30	83	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	<i>Junco hyemalis</i>	20	43	Green	Not Listed	Not Listed	Not Listed
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	<i>Regulus satrapa</i>	3	6	Yellow	Not Listed	Not Listed	Not Listed
Great Black-backed Gull	<i>Larus marinus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Great Blue Heron	<i>Ardea herodias</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	<i>Picoides villosus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Hermit Thrush	<i>Catharus guttatus</i>	22	92	Green	Not Listed	Not Listed	Not Listed
Herring Gull	<i>Larus argentatus</i>	3	8	Green	Not Listed	Not Listed	Not Listed
Magnolia Warbler	<i>Dendroica magnolia</i>	30	106	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	<i>Zenaida macroura</i>	9	11	Green	Not Listed	Not Listed	Not Listed
Nashville Warbler	<i>Vermivora ruficapilla</i>	7	7	Green	Not Listed	Not Listed	Not Listed
Northern Flicker	<i>Colaptes auratus</i>	9	10	Green	Not Listed	Not Listed	Not Listed
Northern Parula	<i>Parula americana</i>	11	15	Green	Not Listed	Not Listed	Not Listed
Palm Warbler	<i>Dendroica palmarum</i>	8	13	Green	Not Listed	Not Listed	Not Listed

Table B1: Summarized Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Pine Siskin	<i>Spinus pinus</i>	4	9	Yellow	Not Listed	Not Listed	Not Listed
Purple Finch	<i>Carpodacus purpureus</i>	2	4	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	<i>Sitta canadensis</i>	3	3	Green	Not Listed	Not Listed	Not Listed
Red-eyed Vireo	<i>Vireo olivaceus</i>	11	23	Green	Not Listed	Not Listed	Not Listed
Red-tailed Hawk	<i>Buteo jamaicensis</i>	1	1	Green	Not at Risk	Not Listed	Not Listed
Ring-billed Gull	<i>Larus delawarensis</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Ruby-crowned Kinglet	<i>Regulus calendula</i>	3	3	Yellow	Not Listed	Not Listed	Not Listed
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	1	2	Green	Not Listed	Not Listed	Not Listed
Song Sparrow	<i>Melospiza melodia</i>	13	21	Green	Not Listed	Not Listed	Not Listed
Swainson's Thrush	<i>Catharus ustulatus</i>	20	47	Green	Not Listed	Not Listed	Not Listed
Tree Swallow	<i>Tachycineta bicolor</i>	1	2	Yellow	Not Listed	Not Listed	Not Listed
White-throated Sparrow	<i>Zonotrichia albicollis</i>	29	108	Green	Not Listed	Not Listed	Not Listed
Willet	<i>Tringa semipalmata</i>	1	1	Red	Not Listed	Not Listed	Not Listed
Wilson's Warbler	<i>Wilsonia pusilla</i>	5	6	Yellow	Not Listed	Not Listed	Not Listed
Winter Wren	<i>Troglodytes troglodytes</i>	16	18	Green	Not Listed	Not Listed	Not Listed
Yellow Warbler	<i>Dendroica petechia</i>	2	4	Green	Not Listed	Not Listed	Not Listed
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>	3	5	Yellow	Not Listed	Not Listed	Not Listed
Yellow-rumped Warbler	<i>Dendroica coronata</i>	19	26	Green	Not Listed	Not Listed	Not Listed



Probable Breeder
Confirmed Breeder

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
21-06-2012	GB1	484023E 4956092N	Young Mixed	None	15	Mostly Clear	None	5:47AM	American Crow	2	100+	...
...	American Goldfinch	2	0-50	1P
...	American Robin	3	0-50	...
...	American Robin	4	50-100	...
...	American Robin	5	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-capped Chickadee	1	100+	...
...	Black-throated Green Warbler	2	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Blue Jay	2	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Chestnut-sided Warbler	1	0-50	...
...	Common Yellowthroat	1	0-50	...
...	Dark-eyed Junco	2	0-50	1P
...	Hermit Thrush	3	100+	...
...	Magnolia Warbler	2	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Magnolia Warbler	5	100+	...
...	Northern Parula	1	50-100	...
...	Red-eyed Vireo	2	100+	...
...	Song Sparrow	1	0-50	...
...	Swainson's Thrush	1	0-50	Calling Young
...	Swainson's Thrush	1	50-100	...
...	Swainson's Thrush	2	100+	...
...	Tree Swallow	2	0-50	...
...	White-throated Sparrow	1	100+	...
...	Winter Wren	1	0-50	...
...	Yellow-rumped Warbler	1	0-50	...
...	GB2	482785E 4955769N	Sandpit/ Cleared surrounded by young softwood	None	15	Mostly Clear	None	6:22AM	Alder Flycatcher	8	0-50	...
...	American Crow	2	0-50	...
...	American Crow	3	50-100	...
...	American Crow	3	100+	...
...	American Goldfinch	2	0-50	1P
...	American Robin	6	0-50	...
...	American Robin	5	50-100	...
...	American Robin	8	100+	...
...	Black-and-white Warbler	2	0-50	...
...	Black-and-white Warbler	1	50-100	...
...	Black-capped Chickadee	1	0-50	Adult
...	Black-capped Chickadee	4	0-50	Young
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	4	50-100	...
...	Black-throated Green Warbler	2	100+	...
...	Blue Jay	2	0-50	...
...	Blue Jay	2	50-100	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	2	50-100	...
...	Blue-headed Vireo	1	100+	...
...	Common Grackle	1	0-50	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Common Loon	2	100+	...
...	Common Merganser	1	FO W	...
...	Common Raven	3	FO NW	...
...	Common Raven	3	100+	...
...	Common Yellowthroat	2	0-50	1P
...	Common Yellowthroat	3	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Dark-eyed Junco	4	50-100	...
...	Golden-crowned Kinglet	4	0-50	Family
...	Great Blue Heron	1	F/O N	...
...	Hermit Thrush	3	50-100	...
...	Hermit Thrush	4	100+	...
...	Mourning Dove	1	50-100	...
...	Northern Flicker	1	100+	...
...	Northern Parula	2	0-50	...
...	Palm Warbler	1	0-50	...
...	Red-breasted Nuthatch	1	100+	...
...	Red-eyed Vireo	2	0-50	...
...	Red-eyed Vireo	2	50-100	...
...	Ring-billed Gull	1	FO NW	...
...	Song Sparrow	2	0-50	...
...	Swainson's Thrush	1	0-50	...
...	Swainson's Thrush	1	50-100	...
...	White-throated Sparrow	8	0-50	4P
...	White-throated Sparrow	3	50-100	...
...	Wilson's Warbler	1	0-50	...
...	Winter Wren	1	0-50	...
...	Winter Wren	1	50-100	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	2	100+	...
...	GB3	482527E 4955606N	Young mixed/ disturbance	None	15	Mostly Clear	None	6:46AM	Alder Flycatcher	2	0-50	...
...	Alder Flycatcher	4	50-100	...
...	American Crow	2	0-50	...
...	American Crow	2	50-100	...
...	American Crow	1	100+	...
...	American Goldfinch	4	0-50	...
...	American Redstart	1	50-100	...
...	American Robin	1	0-50	Adult
...	American Robin	3	0-50	...
...	American Robin	4	50-100	...
...	American Robin	1	100+	...
...	Black-and-white Warbler	1	50-100	...
...	Black-and-white Warbler	1	100+	...
...	Black-capped Chickadee	1	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	3	50-100	...
...	Dark-eyed Junco	2	0-50	...
...	Dark-eyed Junco	2	50-100	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Hermit Thrush	4	0-50	...
...	Hermit Thrush	4	50-100	...
...	Herring Gull	1	F/O NE	...
...	Magnolia Warbler	4	0-50	...
...	Magnolia Warbler	3	50-100	...
...	Magnolia Warbler	5	100+	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	1	50-100	...
...	Northern Flicker	1	0-50	Adult
...	Northern Flicker	1	0-50	Fledgling
...	Northern Parula	1	0-50	...
...	Northern Parula	2	50-100	...
...	Northern Parula	2	100+	...
...	Palm Warbler	1	0-50	...
...	Red-eyed Vireo	2	0-50	...
...	Red-eyed Vireo	2	50-100	...
...	Red-eyed Vireo	1	100+	...
...	Ruby-crowned Kinglet	1	100+	...
...	Song Sparrow	2	0-50	1P Carrying Food
...	Song Sparrow	1	0-50	...
...	Swainson's Thrush	1	0-50	...
...	Swainson's Thrush	2	50-100	...
...	White-throated Sparrow	2	0-50	1P
...	White-throated Sparrow	3	0-50	...
...	White-throated Sparrow	2	50-100	...
...	Wilson's Warbler	2	0-50	...
...	Winter Wren	2	50-100	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB4	483048E 4955711N	Regenerating	None	15	Mostly Clear	None	7:28AM	Alder Flycatcher	3	0-50	...
...	Alder Flycatcher	4	50-100	...
...	American Crow	2	50-100	...
...	American Crow	2	100+	...
...	American Goldfinch	2	0-50	1P
...	American Goldfinch	2	100+	...
...	American Robin	1	0-50	...
...	American Robin	2	50-100	...
...	American Robin	2	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	2	50-100	...
...	Black-capped Chickadee	2	0-50	Adults
...	Black-capped Chickadee	2	0-50	Fledgling
...	Blue Jay	1	0-50	...
...	Blue Jay	2	50-100	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Canada Warbler	2	0-50	1P
...	Cedar Waxwing	2	50-100	1P
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	4	50-100	...
...	Golden-crowned Kinglet	1	0-50	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Great Black-backed Gull	1	FO NE	...
...	Hermit Thrush	2	0-50	...
...	Hermit Thrush	5	50-100	...
...	Herring Gull	2	FO NE	...
...	Magnolia Warbler	6	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Mourning Dove	1	50-100	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	1	50-100	...
...	Northern Flicker	1	100+	...
...	Palm Warbler	2	0-50	1P
...	Palm Warbler	2	50-100	...
...	Pine Siskin	1	FO NE	...
...	Swainson's Thrush	1	0-50	...
...	Swainson's Thrush	2	50-100	...
...	White-throated Sparrow	6	0-50	3P
...	White-throated Sparrow	3	0-50	...
...	White-throated Sparrow	5	50-100	...
...	Wilson's Warbler	1	50-100	...
...	Winter Wren	1	0-50	...
...	Winter Wren	1	50-100	...
...	GB5	483341E 4955801N	Regenerating	None	19	Mostly Clear	None	8:04AM	White-throated Sparrow	8	0-50	4P
...	Alder Flycatcher	4	0-50	...
...	Alder Flycatcher	4	50-100	...
...	American Goldfinch	2	50-100	...
...	American Redstart	1	0-50	...
...	American Redstart	3	50-100	...
...	American Robin	1	0-50	Carrying Food
...	American Robin	3	0-50	...
...	American Robin	4	50-100	...
...	Black-and-white Warbler	3	0-50	...
...	Black-and-white Warbler	4	50-100	...
...	Black-capped Chickadee	1	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Blue-headed Vireo	1	0-50	...
...	Cedar Waxwing	2	0-50	1P
...	Common Yellowthroat	2	0-50	1P Carrying Food
...	Common Yellowthroat	4	0-50	2P
...	Common Yellowthroat	5	0-50	...
...	Hermit Thrush	2	0-50	1P
...	Hermit Thrush	4	50-100	...
...	Magnolia Warbler	2	0-50	1P Carrying Food
...	Magnolia Warbler	6	0-50	...
...	Magnolia Warbler	5	50-100	...
...	Mourning Dove	1	50-100	...
...	Northern Flicker	1	0-50	Adult
...	Northern Flicker	2	0-50	Fledgling
...	Palm Warbler	2	0-50	1P
...	Palm Warbler	2	0-50	...
...	Palm Warbler	2	50-100	...
...	Ruby-crowned Kinglet	1	50-100	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Song Sparrow	1	50-100	...
...	Swainson's Thrush	1	0-50	...
...	Swainson's Thrush	4	50-100	...
...	White-throated Sparrow	4	50-100	2P
...	Wilson's Warbler	1	0-50	...
...	Winter Wren	1	100+	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	1	100+	...
...	GB6	483809E 4953980N	Regenerating	None	19	Mostly Clear	None	9:10AM	Alder Flycatcher	1	0-50	...
...	Alder Flycatcher	2	50-100	...
...	American Crow	2	100+	...
...	Black-and-white Warbler	1	50-100	...
...	Black-capped Chickadee	1	50-100	Adult
...	Black-capped Chickadee	2	50-100	Fledgling
...	Blue Jay	1	100+	...
...	Common Loon	1	100+	...
...	Common Yellowthroat	2	0-50	1P
...	Common Yellowthroat	1	50-100	...
...	Hairy Woodpecker	1	100+	...
...	Magnolia Warbler	1	0-50	...
...	Mourning Dove	1	0-50	...
...	Ruby-throated Hummingbird	2	0-50	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	4	50-100	...
...	Winter Wren	1	0-50	...
...	GB7	482358E 4955614N	Lake	None	19	Mostly Clear	None	9:42AM	American Goldfinch	2	0-50	1P
...	American Robin	1	0-50	...
...	American Robin	1	50-100	...
...	American Robin	3	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	1	50-100	...
...	Black-capped Chickadee	1	50-100	...
...	Cedar Waxwing	2	0-50	...
...	Common Grackle	1	0-50	...
...	Common Yellowthroat	2	0-50	1P
...	Common Yellowthroat	3	0-50	...
...	Common Yellowthroat	3	50-100	...
...	Dark-eyed Junco	2	0-50	...
...	Magnolia Warbler	5	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Northern Parula	2	0-50	...
...	Northern Parula	1	50-100	...
...	Purple Finch	2	50-100	...
...	Song Sparrow	2	0-50	1P
...	Song Sparrow	1	0-50	...
...	White-throated Sparrow	8	0-50	4P
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	2	50-100	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	1	100+	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
12-07-2012	GB3	482527E 4955606N	Young mixed/ disturbance	None	13	Clear	None	4:50AM	Alder Flycatcher	2	0-50	...
...	Alder Flycatcher	4	50-100	...
...	American Crow	2	100+	...
...	American Redstart	2	50-100	...
...	American Robin	5	0-50	...
...	American Robin	4	50-100	...
...	American Robin	11	100+	...
...	Common Snipe	1	100+	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	4	50-100	...
...	Dark-eyed Junco	2	0-50	...
...	Dark-eyed Junco	1	50-100	...
...	Dark-eyed Junco	2	100+	...
...	Hermit Thrush	6	50-100	...
...	Hermit Thrush	13	100+	...
...	Magnolia Warbler	2	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Magnolia Warbler	2	100+	...
...	Mourning Dove	1	100+	...
...	Mourning Dove	1	50-100	...
...	Northern Parula	1	50-100	...
...	Northern Parula	1	100+	...
...	Song Sparrow	2	50-100	...
...	Song Sparrow	1	0-50	...
...	Swainson's Thrush	5	100+	...
...	White-throated Sparrow	3	0-50	...
...	White-throated Sparrow	6	50-100	...
...	Winter Wren	1	50-100	...
...	Winter Wren	1	100+	...
...	Yellow-rumped Warbler	2	0-50	...
...	Yellow-rumped Warbler	2	100+	...
...	GB4	483048E 4955711N	Regenerating	None	13	Clear	None	5:18AM	Alder Flycatcher	2	0-50	...
...	Alder Flycatcher	2	50-100	...
...	American Crow	4	100+	...
...	American Robin	2	0-50	...
...	American Robin	4	50-100	...
...	American Robin	4	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	2	50-100	...
...	Black-and-white Warbler	1	100+	...
...	Black-capped Chickadee	2	100+	...
...	Black-throated Green Warbler	2	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Blue Jay	4	100+	...
...	Canada Goose	2	100+	...
...	Cedar Waxwing	2	50-100	1P
...	Chestnut-sided Warbler	1	0-50	...
...	Chestnut-sided Warbler	1	100+	...
...	Common Grackle	2	50-100	...
...	Common Yellowthroat	4	0-50	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Common Yellowthroat	6	50-100	...
...	Dark-eyed Junco	1	50-100	...
...	Dark-eyed Junco	1	100+	...
...	Hermit Thrush	2	0-50	1P
...	Hermit Thrush	4	100+	...
...	Herring Gull	5	F/O East to West	...
...	Magnolia Warbler	4	0-50	Carrying food
...	Magnolia Warbler	3	50-100	...
...	Mourning Dove	2	100+	...
...	Northern Flicker	1	100+	...
...	Red-breasted Nuthatch	1	100+	...
...	Swainson's Thrush	4	0-50	2P
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	4	50-100	...
...	Winter Wren	2	0-50	1P
...	Yellow-bellied Flycatcher	2	0-50	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	2	50-100	...
...	GB1	484023E 4956092N	Young Mixed - Area Being Cleared	None	15	Clear	None	5:47AM	American Robin	2	0-50	...
...	American Robin	3	50-100	...
...	American Robin	6	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	1	100+	...
...	Black-capped Chickadee	1	0-50	...
...	Black-throated Green Warbler	2	0-50	1P
...	Black-throated Green Warbler	2	50-100	...
...	Black-throated Green Warbler	1	100+	...
...	Blue Jay	2	0-50	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	2	100+	...
...	Cedar Waxwing	4	0-50	2P
...	Common Raven	2	0-50	Immature
...	Common Yellowthroat	1	0-50	...
...	Dark-eyed Junco	8	0-50	Family
...	Dark-eyed Junco	1	0-50	...
...	Dark-eyed Junco	2	50-100	...
...	Hermit Thrush	2	50-100	...
...	Magnolia Warbler	3	0-50	...
...	Magnolia Warbler	3	50-100	...
...	Magnolia Warbler	2	100+	...
...	Mourning Dove	2	100+	...
...	Northern Parula	1	50-100	...
...	Northern Parula	1	100+	...
...	Red-breasted Nuthatch	1	50-100	...
...	Red-eyed Vireo	2	50-100	...
...	Red-eyed Vireo	4	100+	...
...	Red-tailed Hawk	1	100+	...
...	Ruby-crowned Kinglet	1	0-50	...
...	Song Sparrow	1	0-50	...
...	Swainson's Thrush	1	0-50	...
...	White-throated Sparrow	2	0-50	1P

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Willet	1	100+	...
...	Winter Wren	1	0-50	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	1	100+	...
...	GB6	483809E 4953980N	Regenerating	None	15	Clear	None	6:14AM	Alder Flycatcher	2	50-100	...
...	American Crow	1	100+	...
...	American Goldfinch	1	50-100	...
...	American Robin	2	0-50	...
...	American Robin	3	50-100	...
...	American Robin	4	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	1	50-100	...
...	Black-throated Green Warbler	2	0-50	...
...	Blue Jay	4	50-100	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Cedar Waxwing	2	0-50	1P
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	2	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Dark-eyed Junco	2	50-100	...
...	Hermit Thrush	4	50-100	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100+	...
...	Nashville Warbler	1	50-100	...
...	Northern Flicker	1	100+	...
...	Pine Siskin	2	0-50	1P
...	Song Sparrow	1	0-50	...
...	Swainson's Thrush	1	50-100	...
...	Swainson's Thrush	3	0-50	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	3	50-100	...
...	Winter Wren	1	0-50	...
...	GB5	483341E 4955801N	Regenerating	None	17	Clear	None	6:41AM	Alder Flycatcher	2	50-100	...
...	American Goldfinch	2	0-50	...
...	American Goldfinch	2	50-100	...
...	American Robin	4	0-50	...
...	American Robin	4	50-100	...
...	American Robin	4	100+	...
...	Black-and-white Warbler	2	0-50	1P
...	Black-and-white Warbler	1	50-100	...
...	Black-and-white Warbler	1	100+	...
...	Black-capped Chickadee	6	0-50	Family
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Blue Jay	4	50-100	...
...	Chestnut-sided Warbler	1	0-50	...
...	Chestnut-sided Warbler	1	50-100	...
...	Common Raven	1	100+	Immature

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Common Raven	1	100+	...
...	Common Yellowthroat	2	0-50	Family
...	Common Yellowthroat	4	0-50	...
...	Common Yellowthroat	5	50-100	...
...	Evening Grosbeak	1	100+	...
...	Hermit Thrush	4	0-50	...
...	Hermit Thrush	8	50-100	...
...	Magnolia Warbler	6	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Nashville Warbler	1	50-100	...
...	Swainson's Thrush	4	0-50	...
...	Swainson's Thrush	4	50-100	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	5	50-100	...
...	Yellow-bellied Flycatcher	1	0-50	...
...	Yellow-bellied Flycatcher	2	50-100	...
...	GB2	482785E 4955769N	Sandpit/ Cleared surrounded by young softwood	None	17	Clear	None	7:06AM	Alder Flycatcher	2	0-50	...
...	Alder Flycatcher	2	50-100	...
...	American Crow	1	50-100	...
...	American Robin	8	0-50	...
...	American Robin	10	100+	...
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	1	50-100	...
...	Black-capped Chickadee	4	50-100	...
...	Black-throated Green Warbler	2	50-100	...
...	Blue Jay	4	100+	...
...	Blue Jay	1	0-50	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Cedar Waxwing	6	0-50	...
...	Chipping Sparrow	1	0-50	...
...	Common Snipe	1	100+	...
...	Common Yellowthroat	5	0-50	...
...	Common Yellowthroat	2	50-100	...
...	Dark-eyed Junco	2	0-50	1P
...	Dark-eyed Junco	3	50-100	...
...	Dark-eyed Junco	2	100+	...
...	Golden-crowned Kinglet	1	0-50	...
...	Hermit Thrush	5	0-50	...
...	Hermit Thrush	7	50-100	...
...	Hermit Thrush	4	100+	...
...	Magnolia Warbler	3	0-50	...
...	Magnolia Warbler	4	50-100	...
...	Mourning Dove	1	50-100	...
...	Nashville Warbler	1	0-50	...
...	Palm Warbler	1	0-50	...
...	Pine Siskin	2	0-50	1P
...	Pine Siskin	4	0-50	...
...	Red-eyed Vireo	1	0-50	...
...	Red-eyed Vireo	3	50-100	...

Table B2: Detailed Results, Breeding Season Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Notes
				Wind	Temperature °C	Sky	Precipitation					
...	Red-eyed Vireo	2	100+	...
...	Song Sparrow	4	0-50	2P
...	Swainson's Thrush	4	0-50	...
...	Swainson's Thrush	4	50-100	...
...	White-throated Sparrow	5	0-50	...
...	White-throated Sparrow	6	50-100	...
...	Wilson's Warbler	1	0-50	...
...	Winter Wren	1	0-50	...
...	Winter Wren	1	50-100	...
...	Yellow Warbler	2	0-50	...
...	Yellow Warbler	2	50-100	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	2	50-100	...
...	Yellow-rumped Warbler	3	100+	...
...	GB7	482358E 4955614N	Lake	None	17	Clear	None	7:28	American Crow	6	0-50	Family
...	Black-and-white Warbler	1	0-50	...
...	Black-and-white Warbler	2	0-50	...
...	Black-capped Chickadee	8	0-50	...
...	Black-throated Green Warbler	1	50-100	...
...	Blue Jay	4	0-50	...
...	Blue-headed Vireo	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Cedar Waxwing	2	0-50	1P
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	4	50-100	...
...	Dark-eyed Junco	2	0-50	...
...	Hermit Thrush	1	0-50	...
...	Hermit Thrush	1	0-50	...
...	Magnolia Warbler	4	0-50	...
...	Magnolia Warbler	3	50-100	...
...	Northern Flicker	1	100+	...
...	Purple Finch	2	0-50	1P
...	Song Sparrow	2	0-50	...
...	White-throated Sparrow	3	0-50	...
...	White-throated Sparrow	2	50-100	...
...	Winter Wren	1	50-100	...

Table B3: Summarized Results, Shorebird Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Number of Observations	Total Individuals Observed	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Black Duck	9	91	<i>Anas rubripes</i>	Green	Not Listed	Not Listed	Not Listed
Belted Kingfisher	2	2	<i>Megaceryle alcyon</i>	Green	Not Listed	Not Listed	Not Listed
Black-bellied Plover	3	72	<i>Pluvialis squatarola</i>	Green	Not Listed	Not Listed	Not Listed
Greater Yellowlegs	4	65	<i>Tringa melanoleuca</i>	Yellow	Not Listed	Not Listed	Not Listed
Herring Gull	12	14	<i>Larus argentatus</i>	Green	Not Listed	Not Listed	Not Listed
Least Sandpiper	2	28	<i>Calidris minutilla</i>	Green	Not Listed	Not Listed	Not Listed
Lesser Yellowlegs	3	29	<i>Tringa flavipes</i>	Green	Not Listed	Not Listed	Not Listed
Osprey	3	3	<i>Pandion haliaetus</i>	Green	Not Listed	Not Listed	Not Listed
Semipalmated Plover	3	449	<i>Charadrius semipalmatus</i>	Green	Not Listed	Not Listed	Not Listed
Semipalmated Sandpiper	2	226	<i>Calidris pusilla</i>	Yellow	Not Listed	Not Listed	Not Listed
Short-billed Dowitcher	3	22	<i>Limnodromus griseus</i>	Green	Not Listed	Not Listed	Not Listed
Spotted Sandpiper	2	2	<i>Actitis macularius</i>	Yellow	Not Listed	Not Listed	Not Listed
Willet	3	5	<i>Tringa semipalmata</i>	Red	Not Listed	Not Listed	Not Listed

Table B4: Detailed Results, Shorebird Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Conditions				Time	Common Name	Number Observed	Flight Path	Notes
			Wind	Temperature °c	Sky	Precipitation					
22-08-2012	GBShore1	482358E 4955614N	20 km/h S	24	Mostly Clear	None	2:50 PM	START			
...	2:50 PM	American Black Duck	23		...
...	3:08 PM	Belted Kingfisher	1	SE to NW	...
...	3:16 PM	Belted Kingfisher	1	NW to E	Flying NW towards Chezzetcook Lake
...	3:23 PM	Herring Gull	1	S to SE	...
...	3:35 PM	Herring Gull	1	S to SW	...
...	3:53 PM	Osprey	1	SE to S	...
...	4:39 PM	Spotted Sandpiper	1	W to E	...
...	20 km/h S	25	Mostly Clear	None	4:50 PM	END			
...	GBShore2	0481324E 4950889N	20 km/h S	25	Mostly Clear	None	5:00 PM	Black-bellied Plover	34	N/A	...
...	Greater Yellowlegs	2	N/A	...
...	Lesser Yellowlegs	1	N/A	...
...	Semipalmated Plover	6	N/A	...
...	Semipalmated Sandpiper	6	N/A	...
...	Short-billed Dowitcher	7	N/A	...
...	Spotted Sandpiper	1	N/A	...
...	Willet	2	N/A	...
...	GBShore3	0482682E 4950603N	20 km/h S	25	Mostly Clear	None	5:15 PM	Black-bellied Plover	32	N/A	...
...	Greater Yellowlegs	15	N/A	...
...	Least Sandpiper	20	N/A	...
...	Lesser Yellowlegs	2	N/A	...
...	Semipalmated Plover	430	N/A	...
...	Semipalmated Sandpiper	220	N/A	...
...	Short-billed Dowitcher	8	N/A	...
...	Willet	2	N/A	...
...	GBShore4	0482758E 4955771N	20 km/h E	25	Mainly Clear	None	5:50 PM	START			
...	6:11 PM	American Black Duck	2	SW to SE	Directly over site
...	American Black Duck	15	SW to SE	...
...	6:16 PM	American Black Duck	1	SE to S	...
...	6:20 PM	American Black Duck	15	SE to SW	...
...	6:31 PM	American Black Duck	2	SE to SW	...
...	6:34 PM	American Black Duck	4	SW to SE	...
...	6:52 PM	Greater Yellowlegs	1	SE to SW	...
...	Herring Gull	1	S to SE	...
...	7:09 PM	Herring Gull	1	SE to S	...

Table B4: Detailed Results, Shorebird Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Conditions				Time	Common Name	Number Observed	Flight Path	Notes
			Wind	Temperature °C	Sky	Precipitation					
...	7:11 PM	Osprey	1	SW to S	...
...	7:48 PM	Semipalmated Plover	13	SE to S	...
...	10 km/h E	22	Mainly Clear	None	7:50 PM	END			
07-09-2012	GBShore4	0482758E 4955771N	15 km/h NW	17	Overcast	None	9:53 AM	START			
...	10:05 AM	American Black Duck	22	SW-NW	...
...	10:10 AM	Common Loon	2	W-NW	...
...	10:23 AM	Herring Gull	1	SW-NW	...
...	10:35 AM	Herring Gull	1	SW-NW	...
...	10:40 AM	Herring Gull	1	SW-W	...
...	10:50 AM	Herring Gull	1	SW-SE	...
...	11:33 AM	Osprey	1	NE-NW	...
...	10 km/h NW	19	Mainly Cloudy	None	11:53 AM	END			
...	GBShore5	0479731E 4953250N	15 km/h NW	19	Mainly Cloudy	None	12:17 PM	START			
...	Black-bellied Plover	6	N/A	...
...	Greater Yellowlegs	47	N/A	...
...	Least Sandpiper	8	N/A	...
...	Lesser Yellowlegs	26	N/A	...
...	Short-billed Dowitcher	7	N/A	...
...	Whimbrel	47	N/A	...
...	Willet	1	N/A	...
...	Unknown	Unknown	Unknown	Unknown	1:17 PM	END			
...	GBShore6	480901E 4947894N	5 km/h E	21	Partly Cloudy	None	1:50 PM	START			
...	1:51 PM	American Black Duck	7	N/A	Feeding
...	2:05 PM	Belted Kingfisher	1	N/A	Feeding
...	2:05 PM	Herring Gull	1	NW-SW	...
...	2:30 PM	Herring Gull	2	SW-NW	...
...	3:05 PM	Herring Gull	2	NW-SW	...
...	3:34 PM	Herring Gull	1	NW-SW	...
...	10 km/h NW	23	Partly Cloudy	None	3:50 PM	END			

Table B5: Summarized Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Black Duck	<i>Anas rubripes</i>	2	19	Green	Not Listed	Not Listed	Not Listed
American Crow	<i>Corvus brachyrhynchos</i>	27	98	Green	Not Listed	Not Listed	Not Listed
American Goldfinch	<i>Spinus tristis</i>	10	42	Green	Not Listed	Not Listed	Not Listed
American Redstart	<i>Setophaga ruticilla</i>	2	4	Green	Not Listed	Not Listed	Not Listed
American Robin	<i>Turdus migratorius</i>	9	37	Green	Not Listed	Not Listed	Not Listed
American Woodcock	<i>Scolopax minor</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Black-and-white Warbler	<i>Mniotilta varia</i>	5	10	Green	Not Listed	Not Listed	Not Listed
Blackburnian Warbler	<i>Dendroica fusca</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Black-capped Chickadee	<i>Poecile atricapillus</i>	17	104	Green	Not Listed	Not Listed	Not Listed
Blackpoll Warbler	<i>Dendroica striata</i>	6	18	Yellow	Not Listed	Not Listed	Not Listed
Black-throated Green Warbler	<i>Dendroica virens</i>	4	7	Green	Not Listed	Not Listed	Not Listed
Blue Jay	<i>Cyanocitta cristata</i>	16	39	Green	Not Listed	Not Listed	Not Listed
Blue-headed Vireo	<i>Vireo solitarius</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Boreal Chickadee	<i>Poecile hudsonicus</i>	11	55	Yellow	Not Listed	Not Listed	Not Listed
Cedar Waxwing	<i>Bombycilla cedrorum</i>	4	10	Green	Not Listed	Not Listed	Not Listed
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Common Grackle	<i>Quiscalus quiscula</i>	2	6	Green	Not Listed	Not Listed	Not Listed
Common Loon	<i>Gavia immer</i>	1	1	Red	Not at Risk	Not Listed	Not Listed
Common Merganser	<i>Mergus merganser</i>	1	3	Green	Not Listed	Not Listed	Not Listed
Common Nighthawk	<i>Chordeiles minor</i>	1	1	Red	Threatened	Threatened	Threatened
Common Raven	<i>Corvus corax</i>	6	8	Green	Not Listed	Not Listed	Not Listed
Common Yellowthroat	<i>Geothlypis trichas</i>	5	20	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	<i>Junco hyemalis</i>	14	112	Green	Not Listed	Not Listed	Not Listed
Downy Woodpecker	<i>Picoides pubescens</i>	4	5	Green	Not Listed	Not Listed	Not Listed
European Starling	<i>Sturnus vulgaris</i>	1	5	Exotic	Not Listed	Not Listed	Not Listed
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	1	2	Green	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	<i>Regulus satrapa</i>	11	58	Yellow	Not Listed	Not Listed	Not Listed
Gray Jay	<i>Perisoreus canadensis</i>	2	4	Yellow	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	<i>Picoides villosus</i>	5	7	Green	Not Listed	Not Listed	Not Listed
Hermit Thrush	<i>Catharus guttatus</i>	3	6	Green	Not Listed	Not Listed	Not Listed
Magnolia Warbler	<i>Dendroica magnolia</i>	9	23	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	<i>Zenaida macroura</i>	2	4	Green	Not Listed	Not Listed	Not Listed
Nashville Warbler	<i>Vermivora ruficapilla</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Northern Flicker	<i>Colaptes auratus</i>	6	7	Green	Not Listed	Not Listed	Not Listed
Northern Parula	<i>Parula americana</i>	3	3	Green	Not Listed	Not Listed	Not Listed

Table B5: Summarized Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Northern Waterthrush	<i>Seiurus noveboracensis</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Osprey	<i>Pandion haliaetus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Palm Warbler	<i>Dendroica palmarum</i>	11	30	Green	Not Listed	Not Listed	Not Listed
Pine Siskin	<i>Spinus pinus</i>	2	5	Yellow	Not Listed	Not Listed	Not Listed
Purple Finch	<i>Carpodacus purpureus</i>	8	22	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	<i>Sitta canadensis</i>	3	3	Green	Not Listed	Not Listed	Not Listed
Red-eyed Vireo	<i>Vireo olivaceus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Ruby-crowned Kinglet	<i>Regulus calendula</i>	7	17	Yellow	Not Listed	Not Listed	Not Listed
Ruffed Grouse	<i>Bonasa umbellus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Song Sparrow	<i>Melospiza melodia</i>	7	25	Green	Not Listed	Not Listed	Not Listed
Spruce Grouse	<i>Falcipennis canadensis</i>	1	2	Green	Not Listed	Not Listed	Not Listed
Swainson's Thrush	<i>Catharus ustulatus</i>	1	1	Green	Not Listed	Not Listed	Not Listed
White-throated Sparrow	<i>Zonotrichia albicollis</i>	9	39	Green	Not Listed	Not Listed	Not Listed
Winter Wren	<i>Troglodytes troglodytes</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Yellow Warbler	<i>Dendroica petechia</i>	1	1	Green	Not Listed	Not Listed	Not Listed
Yellow-rumped Warbler	<i>Dendroica coronata</i>	19	141	Green	Not Listed	Not Listed	Not Listed

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
17-09-2012	GB8	482478E 4955529N	Shrub hardwood by gravel pit	Calm	10	Clear	None	7:19 AM	American Black Duck	13	F/O NW	...
...	American Crow	2	0-50	...
...	American Crow	2	100+	...
...	American Goldfinch	2	50-100	...
...	Black-and-white Warbler	1	0-50	...
...	Black-capped Chickadee	6	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Blue Jay	2	0-50	...
...	Common Loon	1	100+	...
...	Common Nighthawk	1	F/O E-W	...
...	Common Raven	1	100+	...
...	Common Yellowthroat	4	0-50	...
...	Downy Woodpecker	1	0-50	...
...	Magnolia Warbler	3	0-50	...
...	Palm Warbler	2	0-50	...
...	Song Sparrow	2	0-50	...
...	Song Sparrow	2	50-100	...
...	Yellow-rumped Warbler	5	0-50	...
...	GB9	482769E 4955482N	Regenerating Growth	Calm	10	Clear	None	7:32 AM	American Crow	4	100+	...
...	American Goldfinch	2	50-100	...
...	American Robin	1	0-50	...
...	Black-and-white Warbler	2	0-50	...
...	Black-capped Chickadee	5	50-100	...
...	Blue Jay	2	50-100	...
...	Boreal Chickadee	4	50-100	...
...	Dark-eyed Junco	6	0-50	...
...	Golden-crowned Kinglet	4	0-50	...
...	Magnolia Warbler	2	0-50	...
...	Northern Flicker	2	0-50	...
...	Northern Flicker	1	50-100	...
...	Purple Finch	2	50-100	...
...	Ruby-crowned Kinglet	1	0-50	...
...	White-throated Sparrow	4	0-50	...
...	Yellow-rumped Warbler	2	50-100	...
...	GB10	483024E 4955448N	Softwood plantation	Calm	12	Clear	None	8:05 AM	American Crow	6	100+	...
...	American Goldfinch	8	100+	...
...	American Redstart	2	0-50	...
...	Black-and-white Warbler	2	0-50	...
...	Blackburnian Warbler	1	0-50	...
...	Black-capped Chickadee	6	50-100	...
...	Blackpoll Warbler	2	0-50	...
...	Black-throated Green Warbler	3	0-50	...
...	Blue Jay	4	0-50	...
...	Boreal Chickadee	5	0-50	...
...	Cedar Waxwing	4	0-50	...
...	Dark-eyed Junco	5	0-50	...
...	Golden-crowned Kinglet	6	0-50	...
...	Golden-crowned Kinglet	6	0-50	...
...	Magnolia Warbler	7	0-50	...
...	Nashville Warbler	1	0-50	...

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
...	Northern Parula	1	0-50	...
...	Northern Waterthrush	1	0-50	...
...	Purple Finch	4	50-100	...
...	Red-breasted Nuthatch	1	100+	...
...	Spruce Grouse	2	0-50	...
...	White-throated Sparrow	2	0-50	...
...	Yellow Warbler	1	0-50	...
...	Yellow-rumped Warbler	7	100+	...
...	GB11	483246E 495578N	Clearing adjacent to young mixed-woods	Calm	12	Clear	None	8:33 AM	American Crow	6	100+	...
...	Black-and-white Warbler	2	0-50	...
...	Black-capped Chickadee	6	100+	...
...	Blue Jay	4	50-100	...
...	Boreal Chickadee	2	0-50	...
...	Cedar Waxwing	2	0-50	...
...	Dark-eyed Junco	7	0-50	...
...	Golden-crowned Kinglet	6	0-50	...
...	Hermit Thrush	1	0-50	...
...	Magnolia Warbler	2	0-50	...
...	Mourning Dove	2	100+	...
...	Osprey	1	F/O SW-NW	...
...	Red-eyed Vireo	1	0-50	...
...	Ruby-crowned Kinglet	2	0-50	...
...	Winter Wren	1	100+	...
...	Yellow-rumped Warbler	2	0-50	...
...	Yellow-rumped Warbler	2	50-100	...
...	GB12	483511E 4955702N	Clearing	10 km/h W	12	Clear	None	9:09 AM	American Crow	6	100+	...
...	American Crow	2	F/O NW-SE	...
...	Black-capped Chickadee	13	0-50	...
...	Blackpoll Warbler	2	0-50	...
...	Blue Jay	1	0-50	...
...	Boreal Chickadee	4	0-50	...
...	Dark-eyed Junco	6	0-50	...
...	Magnolia Warbler	1	0-50	...
...	Northern Flicker	1	100+	...
...	Palm Warbler	4	0-50	...
...	Song Sparrow	2	0-50	...
...	Yellow-rumped Warbler	2	0-50	...
...	Yellow-rumped Warbler	2	100+	...
...	GB13	483766E 4955805N	Clearing adjacent to young mixed-woods	10 km/h W	13	Clear	None	9:37 AM	American Crow	2	0-50	...
...	American Crow	4	100+	...
...	American Goldfinch	10	0-50	...
...	American Robin	1	0-50	...
...	Black-capped Chickadee	2	0-50	...
...	Blackpoll Warbler	4	0-50	...
...	Blue Jay	2	F/O NE-SW	...
...	Blue Jay	2	100+	...
...	Chestnut-sided Warbler	1	0-50	...
...	Common Yellowthroat	2	0-50	...
...	Dark-eyed Junco	8	0-50	...
...	Magnolia Warbler	2	0-50	...

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
...	Palm Warbler	2	0-50	...
...	Purple Finch	2	100+	...
...	Ruby-crowned Kinglet	1	0-50	...
...	White-throated Sparrow	6	0-50	...
...	GB14	484043E 4955955N	Clearing	20 km/h W	15	Clear	None	10:32 AM	American Crow	2	50-100	...
...	American Crow	2	100+	...
...	Black-capped Chickadee	8	0-50	...
...	Blackpoll Warbler	4	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Blue Jay	2	100+	...
...	Blue-headed Vireo	1	0-50	...
...	Boreal Chickadee	8	0-50	...
...	Palm Warbler	3	0-50	...
...	Song Sparrow	6	0-50	...
...	Yellow-rumped Warbler	4	0-50	...
...	GB15	482693E 4955708N	Young mixed-woods	20 km/h W	15	Clear	None	10:55 AM	American Crow	4	100+	...
...	American Goldfinch	2	0-50	...
...	Black-capped Chickadee	2	0-50	...
...	Common Yellowthroat	6	0-50	...
...	Dark-eyed Junco	5	0-50	...
...	Magnolia Warbler	2	0-50	...
...	Northern Flicker	1	100+	...
...	Song Sparrow	1	0-50	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB7	482358E 4955614N	Lake	20 km/h W	15	Clear	None	11:12 AM	American Crow	2	50-100	...
...	American Crow	4	100+	...
...	American Crow	1	F/O NW-E	...
...	American Goldfinch	6	0-50	...
...	Black-capped Chickadee	8	0-50	...
...	Blackpoll Warbler	2	0-50	...
...	Blue Jay	2	0-50	...
...	Cedar Waxwing	2	0-50	...
...	Common Merganser	3	F/O SE-NW	...
...	Common Raven	1	F/O NW-E	...
...	Dark-eyed Junco	6	0-50	...
...	Purple Finch	2	50-100	...
...	Ruby-crowned Kinglet	1	50-100	...
...	Yellow-rumped Warbler	4	0-50	...
04-10-2012	GB8	482478E 4955529N	Shrub hardwood by gravel pit	20 km/h N	7	Clear	None	7:19 AM	American Crow	2	0-50	...
...	American Crow	4	50-100	...
...	American Crow	8	100+	...
...	American Goldfinch	6	50-100	...
...	American Redstart	2	0-50	...
...	American Robin	3	0-50	...
...	Blue Jay	2	0-50	...
...	Blue Jay	4	50-100	...
...	Boreal Chickadee	6	0-50	...
...	Common Yellowthroat	3	0-50	...
...	Dark-eyed Junco	8	0-50	...

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
...	Dark-eyed Junco	16	0-50	...
...	Downy Woodpecker	2	0-50	...
...	Golden-crowned Kinglet	8	0-50	...
...	Hairy Woodpecker	1	50-100	...
...	Northern Flicker	1	100+	...
...	Palm Warbler	2	0-50	...
...	Purple Finch	2	0-50	...
...	Purple Finch	2	50-100	...
...	Red-breasted Nuthatch	1	50-100	...
...	Song Sparrow	6	0-50	...
...	Swainson's Thrush	1	0-50	...
...	White-throated Sparrow	5	0-50	...
...	Yellow-rumped Warbler	11	0-50	...
...	GB9	482769E 4955482N	Regenerating Growth	20 km/h N	7	Clear	None	7:41 AM	American Crow	4	50-100	...
...	American Crow	6	100+	...
...	American Goldfinch	2	50-100	...
...	American Robin	3	0-50	...
...	Black-and-white Warbler	3	0-50	...
...	Black-capped Chickadee	6	50-100	...
...	Black-throated Green Warbler	2	0-50	...
...	Blue Jay	2	50-100	...
...	Boreal Chickadee	8	0-50	...
...	Cedar Waxwing	2	0-50	...
...	Common Grackle	5	100+	...
...	Common Yellowthroat	5	0-50	...
...	Dark-eyed Junco	14	0-50	...
...	Golden-crowned Kinglet	10	0-50	...
...	Hairy Woodpecker	2	0-50	...
...	Hermit Thrush	3	100+	...
...	Mourning Dove	2	100+	...
...	Palm Warbler	7	0-50	...
...	Pine Siskin	1	0-50	...
...	Purple Finch	6	0-50	...
...	Red-breasted Nuthatch	1	100+	...
...	Ruffed Grouse	1	0-50	...
...	White-throated Sparrow	5	100+	...
...	Yellow-rumped Warbler	32	0-50	...
...	GB10	483024E 4955448N	Softwood plantation	20 km/h N	7	Clear	None	8:03 AM	American Crow	4	50-100	...
...	American Robin	2	0-50	...
...	American Woodcock	1	0-50	...
...	Blue Jay	4	0-50	...
...	Boreal Chickadee	4	50-100	...
...	Dark-eyed Junco	6	50-100	...
...	Golden-crowned Kinglet	2	0-50	...
...	Magnolia Warbler	2	0-50	...
...	Ruby-crowned Kinglet	1	0-50	...
...	White-throated Sparrow	8	0-50	...
...	Yellow-rumped Warbler	20	0-50	...
...	GB11	483246E 4955578N	Clearing adjacent to young mixed-woods	20 km/h N	7	Clear	None	8:20 AM	American Goldfinch	2	0-50	...
...	American Robin	9	0-50	...

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
...	Black-capped Chickadee	2	100+	...
...	Boreal Chickadee	6	0-50	...
...	Common Grackle	1	F/O W-E	<100
...	Common Raven	1	100+	...
...	Dark-eyed Junco	10	0-50	...
...	Downy Woodpecker	1	0-50	...
...	European Starling	5	0-50	...
...	Palm Warbler	3	0-50	...
...	Yellow-rumped Warbler	8	0-50	...
...	GB12	483511E 4955702N	Clearing	20 km/h N	7	Clear	None	8:40 AM	American Robin	13	0-50	...
...	Black-capped Chickadee	4	0-50	...
...	Black-capped Chickadee	5	50-100	...
...	Boreal Chickadee	4	0-50	...
...	Golden-crowned Kinglet	1	0-50	...
...	Golden-crowned Kinglet	5	50-100	...
...	Gray Jay	1	0-50	...
...	Gray Jay	3	50-100	...
...	Hairy Woodpecker	1	0-50	...
...	Hairy Woodpecker	1	50-100	...
...	Magnolia Warbler	2	0-50	...
...	Northern Parula	1	0-50	...
...	Palm Warbler	1	0-50	...
...	Pine Siskin	4	0-50	...
...	Ruby-crowned Kinglet	1	0-50	...
...	White-throated Sparrow	4	0-50	...
...	Yellow-rumped Warbler	19	0-50	...
...	GB13	483766E 4955805N	Clearing adjacent to young mixed-woods	20 km/h N gusts 30 km/h	7	Clear	None	9:00 AM	American Crow	2	0-50	...
...	American Crow	3	100+	...
...	American Robin	1	0-50	...
...	Black-capped Chickadee	2	0-50	...
...	Black-capped Chickadee	7	0-50	...
...	Blue Jay	2	50-100	...
...	Dark-eyed Junco	9	0-50	...
...	Hermit Thrush	2	0-50	...
...	Palm Warbler	2	0-50	...
...	White-throated Sparrow	1	0-50	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB14	484043E 4955955N	Clearing	20 km/h N gusts 30 km/h	7	Clear	None	9:17 AM	American Crow	4	0-50	...
...	American Robin	4	0-50	...
...	Blackpoll Warbler	4	0-50	...
...	Common Raven	2	100+	...
...	Dark-eyed Junco	6	0-50	...
...	Downy Woodpecker	1	50-100	...
...	Golden-crowned Kinglet	2	0-50	...
...	Hairy Woodpecker	2	0-50	...
...	Northern Parula	1	0-50	...
...	Ruby-crowned Kinglet	10	0-50	...
...	Yellow-rumped Warbler	9	0-50	...

Table B6: Detailed Results, Fall Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)	Height of Flyover (m)
				Wind	Temperature °C	Sky	Precipitation					
...	GB15	482693E 4955708N	Young mixed-woods	20 km/h N gusts 30 km/h	14	Clear	None	10:09 AM	American Crow	2	50-100	...
...	American Crow	6	100+	...
...	Black-capped Chickadee	14	0-50	...
...	Blue Jay	2	0-50	...
...	Blue Jay	2	50-100	...
...	Common Raven	2	100+	...
...	Evening Grosbeak	2	0-50	...
...	Northern Flicker	1	100+	...
...	Palm Warbler	2	0-50	...
...	Purple Finch	2	100+	...
...	Song Sparrow	6	0-50	...
...	White-throated Sparrow	4	0-50	...
...	Yellow-rumped Warbler	1	0-50	...
...	GB7	482358E 4955614N	Lake	20 km/h N gusts 30 km/h	14	Clear	None	10:35 AM	American Black Duck	6	0-50	...
...	American Crow	4	100+	...
...	American Goldfinch	2	0-50	...
...	Black-capped Chickadee	8	0-50	...
...	Boreal Chickadee	4	0-50	...
...	Common Raven	1	100+	...
...	Golden-crowned Kinglet	8	0-50	...
...	Palm Warbler	2	0-50	...
...	Yellow-rumped Warbler	7	0-50	...

Table B7: Summarized Results, Winter Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	Number of Observations	Total Individuals Observed	SARA Status	NSESA Status	NSDNR Status	COSEWIC Status
American Black Duck	<i>Anas rubripes</i>	2	7	Not Listed	Not Listed	Green	Not Listed
American Crow	<i>Corvus brachyrhynchos</i>	6	16	Not Listed	Not Listed	Green	Not Listed
Black-capped Chickadee	<i>Poecile atricapillus</i>	6	15	Not Listed	Not Listed	Green	Not Listed
Boreal Chickadee	<i>Poecile hudsonicus</i>	2	4	Not Listed	Not Listed	Yellow	Not Listed
Common Raven	<i>Corvus corax</i>	2	4	Not Listed	Not Listed	Green	Not Listed
Common Redpoll	<i>Acanthis flammea</i>	3	10	Not Listed	Not Listed	Green	Not Listed
Golden-crowned Kinglet	<i>Regulus satrapa</i>	4	9	Not Listed	Not Listed	Yellow	Not Listed
Gray Jay	<i>Perisoreus canadensis</i>	1	1	Not Listed	Not Listed	Yellow	Not Listed
Herring Gull	<i>Larus argentatus</i>	1	1	Not Listed	Not Listed	Green	Not Listed
Snow Bunting	<i>Plectrophenax nivalis</i>	1	1	Not Listed	Not Listed	Green	Not Listed

Table B8: Detailed Results, Winter Survey, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind	Temperature °C	Sky	Precipitation				
15-01-2013	GB1	484023E 4956092N	Young Mixed Area Being Cleared	10 km/h NNW	-1	Cloudy	None	7:27 AM	American Crow	2	0-50
...	...	...	...	...	...	...	...	...	Common Raven	1	100+
...	GB6	483809E 4953980N	Regenerating	10 km/h NNW	-1	Cloudy	None	7:45 AM	American Crow	3	100+
...	...	...	...	...	...	...	...	...	American Crow	2	50-100
...	...	...	...	...	...	...	...	...	Black-capped Chickadee	2	50-100
...	...	...	...	...	...	...	...	...	Boreal Chickadee	2	50-100
...	...	...	...	...	...	...	...	...	Common Redpoll	4	50-100
...	...	...	...	...	...	...	...	...	Golden- crowned Kinglet	2	0-50
...	...	...	...	...	...	...	...	...	Snow Bunting	1	100+
...	GB5	483341E 4955801N	Regenerating	10 km/h NNW	1	Cloudy	None	8:16 AM	American Crow	2	0-50
...	...	...	...	...	...	...	...	...	Black-capped Chickadee	1	0-50
...	...	...	...	...	...	...	...	...	Black-capped Chickadee	2	0-50
...	...	...	...	...	...	...	...	...	Boreal Chickadee	2	0-50
...	...	...	...	...	...	...	...	...	Common Redpoll	1	100+
...	...	...	...	...	...	...	...	...	Golden- crowned Kinglet	4	0-50
...	...	...	...	...	...	...	...	...	Gray Jay	1	0-50
...	GB4	483048E 4955711N	Regenerating	10 km/h NNW	1	Clear	None	8:36 AM	American Crow	4	100+

Table B8: Detailed Results, Winter Survey, Gaetz Brook, NS

Project # 12-4428

Date	Location	Coordinates (UTM NAD83)	Habitat	Conditions				Time	Common Name	Number Observed	Distance to Observer (m)
				Wind	Temperature °C	Sky	Precipitation				
...	...	...	...	...	...	...	...	...	Black-capped Chickadee	5	0-50
...	...	...	...	...	...	...	...	...	Common Raven	3	100+
...	...	...	...	...	...	...	...	...	Golden- crowned Kinglet	2	0-50
...	GB2	482785E 4955769N	Sandpit/ Cleared surrounded by young softwood	10 km/h NNW	1	Clear	None	8:53 AM	Black-capped Chickadee	2	0-50
...	...	...	...	...	...	...	...	...	Common Redpoll	5	0-50
...	...	...	...	...	...	...	...	...	Golden- crowned Kinglet	1	0-50
...	GB3	482527E 4955606N	Young mixed/ disturbance	10 km/h NNW	1	Clear	None	9:07 AM	American Black Duck	6	FO E to W
...	...	...	...	...	...	...	...	...	American Black Duck	1	0-50
...	...	...	...	...	...	...	...	...	American Crow	3	100+
...	GB7	482358E 4955614N	Lake	10 km/h NNW	2	Sunny	None	9:23 AM	Black-capped Chickadee	3	0-50
...	...	...	...	...	...	...	...	...	Herring Gull	1	FO E to W

Table B9: Summarized Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	SARA Status	NSESA Status	COSEWIC Status	NSDNR Status	Number of Observations	Total Individuals Observed
Alder Flycatcher	<i>Empidonax alnorum</i>	Not Listed	Not Listed	Not Listed	Green	16	21
American Black Duck	<i>Anas rubripes</i>	Not Listed	Not Listed	Not Listed	Green	3	3
American Crow	<i>Corvus brachyrhynchos</i>	Not Listed	Not Listed	Not Listed	Green	20	35
American Goldfinch	<i>Spinus tristis</i>	Not Listed	Not Listed	Not Listed	Green	9	8
American Redstart	<i>Setophaga ruticilla</i>	Not Listed	Not Listed	Not Listed	Green	14	18
American Robin	<i>Turdus migratorius</i>	Not Listed	Not Listed	Not Listed	Green	23	28
Black-and-White Warbler	<i>Mniotilta varia</i>	Not Listed	Not Listed	Not Listed	Green	42	43
Black-capped Chickadee	<i>Poecile atricapillus</i>	Not Listed	Not Listed	Not Listed	Green	16	18
Blackpoll Warbler	<i>Dendroica striata</i>	Not Listed	Not Listed	Not Listed	Yellow	3	3
Black-throated Green Warbler	<i>Dendroica virens</i>	Not Listed	Not Listed	Not Listed	Green	45	57
Blue Jay	<i>Cyanocitta cristata</i>	Not Listed	Not Listed	Not Listed	Green	13	17
Blue-headed Vireo	<i>Vireo solitarius</i>	Not Listed	Not Listed	Not Listed	Green	10	10
Boreal Chickadee	<i>Poecile hudsonicus</i>	Not Listed	Not Listed	Not Listed	Yellow	4	4
Brown Creeper	<i>Certhia americana</i>	Not Listed	Not Listed	Not Listed	Green	1	2
Canada Warbler	<i>Wilsonia canadensis</i>	Threatened	Not Listed	Threatened	Red	1	1
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Not Listed	Not Listed	Not Listed	Green	1	2
Common Grackle	<i>Quiscalus quiscula</i>	Not Listed	Not Listed	Not Listed	Green	1	2
Common Loon	<i>Gavia immer</i>	Not Listed	Not Listed	Not at Risk	Red	5	7
Common Raven	<i>Corvus corax</i>	Not Listed	Not Listed	Not Listed	Green	2	4
Common Yellowthroat	<i>Geothlypis trichas</i>	Not Listed	Not Listed	Not Listed	Green	60	92
Dark-eyed Junco	<i>Junco hyemalis</i>	Not Listed	Not Listed	Not Listed	Green	33	36
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	Not Listed	Not Listed	Not at Risk	Green	2	7
Fox Sparrow	<i>Passerella iliaca</i>	Not Listed	Not Listed	Not Listed	Green	3	3
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Not Listed	Not Listed	Not Listed	Yellow	13	18
Great Blue Heron	<i>Ardea herodias</i>	Not Listed	Not Listed	Not Listed	Green	2	1
Hairy Woodpecker	<i>Picoides villosus</i>	Not Listed	Not Listed	Not Listed	Green	2	2
Hermit Thrush	<i>Catharus guttatus</i>	Not Listed	Not Listed	Not Listed	Green	28	38
Herring Gull	<i>Larus argentatus</i>	Not Listed	Not Listed	Not Listed	Green	2	3
Lincoln's Sparrow	<i>Melospiza lincolni</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Magnolia Warbler	<i>Dendroica magnolia</i>	Not Listed	Not Listed	Not Listed	Green	72	109
Mourning Dove	<i>Zenaidura macroura</i>	Not Listed	Not Listed	Not Listed	Green	7	9
Mourning Warbler	<i>Oporornis philadelphia</i>	Not Listed	Not Listed	Not Listed	Green	2	2
Nashville Warbler	<i>Vermivora ruficapilla</i>	Not Listed	Not Listed	Not Listed	Green	23	25
Northern Flicker	<i>Colaptes auratus</i>	Not Listed	Not Listed	Not Listed	Green	7	9

Table B9: Summarized Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

Common Name	Scientific Name	SARA Status	NSESA Status	COSEWIC Status	NSDNR Status	Number of Observations	Total Individuals Observed
Northern Goshawk	<i>Accipiter gentilis</i>	Not Listed	Not Listed	Not at Risk	Green	1	1
Northern Parula	<i>Parula americana</i>	Not Listed	Not Listed	Not Listed	Green	2	2
Osprey	<i>Pandion haliaetus</i>	Not Listed	Not Listed	Not Listed	Green	6	6
Palm Warbler	<i>Dendroica palmarum</i>	Not Listed	Not Listed	Not Listed	Green	42	62
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Purple Finch	<i>Carpodacus purpureus</i>	Not Listed	Not Listed	Not Listed	Green	12	12
Red-eyed Vireo	<i>Vireo olivaceus</i>	Not Listed	Not Listed	Not Listed	Green	8	8
Ring-necked Pheasant	<i>Phasianus colchicus</i>	Not Listed	Not Listed	Not Listed	Exotic	9	9
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	Not Listed	Not Listed	Not Listed	Green	1	1
Ruffed Grouse	<i>Bonasa umbellus</i>	Not Listed	Not Listed	Not Listed	Green	4	4
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Not Listed	Not Listed	Not at Risk	Green	1	1
Song Sparrow	<i>Melospiza melodia</i>	Not Listed	Not Listed	Not Listed	Green	17	17
Swainson's Thrush	<i>Catharus ustulatus</i>	Not Listed	Not Listed	Not Listed	Green	4	4
Swamp Sparrow	<i>Melospiza georgiana</i>	Not Listed	Not Listed	Not Listed	Green	3	3
Tennessee Warbler	<i>Oreothlypis peregrina</i>	Not Listed	Not Listed	Not Listed	Yellow	3	3
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Not Listed	Not Listed	Not Listed	Green	61	111
Winter Wren	<i>Troglodytes troglodytes</i>	Not Listed	Not Listed	Not Listed	Green	11	11
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>	Not Listed	Not Listed	Not Listed	Yellow	11	12
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Not Listed	Not Listed	Not Listed	Green	29	38

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
May 7/2013	GB1G	482534E, 4955604N	Gravel pit with softwood regeneration	Calm	8	Foggy	None	5:48 AM	American Crow	1	100 ⁺	...
...	American Robin	2	50-100	...
...	Black-and-White Warbler	1	0-50	...
...	Black-capped Chickadee	1	50-100	...
...	Boreal Chickadee	1	50-100	...
...	Common Loon	1	100 ⁺	...
...	Dark-eyed Junco	1	0	...
...	Dark-eyed Junco	1	50-100	...
...	Golden-crowned Kinglet	2	50-100	...
...	Hermit Thrush	4	50-100	...
...	Nashville Warbler	1	0-50	...
...	Northern Flicker	1	100 ⁺	...
...	Palm Warbler	3	0-50	...
...	Palm Warbler	3	100 ⁺	...
...	Song Sparrow	1	50-100	...
...	Swamp Sparrow	1	50-100	...
...	White-throated Sparrow	5	50-100	...
...	Winter Wren	1	100 ⁺	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB2G	482781E, 4955762N	Gravel pit with softwood regeneration	Calm	8	Foggy	Light Drizzle	6:06 AM	American Crow	3	FO SE	...
...	American Robin	3	50-100	...
...	Black-and-White Warbler	2	0-50	...
...	Black-capped Chickadee	2	0-50	...
...	Black-capped Chickadee	1	50-100	...
...	Boreal Chickadee	1	0-50	...
...	Hermit Thrush	2	0-50	...
...	Mourning Dove	1	100 ⁺	...
...	Osprey	1	FO S	...
...	Palm Warbler	3	0-50	...
...	Sharp-shinned Hawk	1	FO SE	...
...	White-throated Sparrow	2	0-50	...
...	Winter Wren	1	0-50	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB3G	482945E, 4955959N	Regenerating Softwood	5 km/h SE	10	Overcast	None	6:29 AM	American Goldfinch	1	0-50	...
...	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Hermit Thrush	2	50-100	...
...	Northern Flicker	2	0-50	...
...	Palm Warbler	5	0-50	...
...	Song Sparrow	1	50-100	...
...	White-throated Sparrow	4	50-100	...
...	Winter Wren	1	0-50	...
...	GB4G	483116E, 4956118N	Regenerating Softwood	Calm	10	Overcast	None	6:45 AM	American Crow	1	100 ⁺	...
...	American Robin	1	100 ⁺	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Blue-headed Vireo	1	0-50	...
...	Dark-eyed Junco	1	50-100	...
...	Hermit Thrush	1	100 ⁺	...
...	Palm Warbler	2	50-100	...
...	Purple Finch	1	100 ⁺	...
...	White-throated Sparrow	3	100 ⁺	...
...	Winter Wren	1	50-100	...
...	GB5G	483367E, 4956010N	Mixed-age softwood/Young mixedwoods	Calm	10	Overcast	None	7:07 AM	American Crow	1	100 ⁺	...
...	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	0-50	...
...	Black-capped Chickadee	1	100 ⁺	...
...	Blue Jay	1	100 ⁺	...
...	Boreal Chickadee	1	0-50	...
...	Dark-eyed Junco	1	0-50	...
...	Palm Warbler	1	50-100	...
...	Palm Warbler	2	0-50	...
...	Purple Finch	1	50-100	...
...	White-throated Sparrow	1	50-100	...
...	Yellow-rumped Warbler	1	0-50	...
...	GB6G	483641E, 4956033N	Regenerating Softwood bordered by Coastal Softwood	Calm	10	Overcast	None	7:25 AM	American Goldfinch	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	100 ⁺	...
...	Black-throated Green Warbler	1	50-100	...
...	Blue Jay	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Common Grackle	2	50-100	...
...	Palm Warbler	2	0-50	...
...	Ruffed Grouse	1	100 ⁺	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	1	100 ⁺	...
...	Winter Wren	1	50-100	...
...	GB7G	483828E, 4956070N	Mid-aged Balsam fir	Calm	13	Overcast	None	7:43 AM	Black-capped Chickadee	1	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Blue-headed Vireo	1	0-50	...
...	White-throated Sparrow	2	100 ⁺	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB8G	484115E, 4956149N	Clearing for MET Tower	10 km/h SE	13	Foggy	None	8:06 AM	Yellow-rumped Warbler	1	0-50	...
...	American Robin	1	50-100	...
...	American Robin	3	0-50	...
...	Black-capped Chickadee	1	100 ⁺	...
...	Black-throated Green Warbler	1	0-50	...
...	Blue-headed Vireo	1	50-100	...
...	Golden-crowned Kinglet	2	50-100	...
...	Palm Warbler	1	0-50	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Purple Finch	1	0-50	...
...	Song Sparrow	1	0-50	...
...	White-throated Sparrow	1	100+	...
...	Yellow-rumped Warbler	1	100+	...
...	GB9G	483975E, 4955875N	Scrubby mixedwood along existing road	10 km/h SE	13	Foggy	None	8:06 AM	Black-capped Chickadee	2	0-50	...
...	Blue Jay	1	100+	...
...	Dark-eyed Junco	2	0-50	...
...	Palm Warbler	1	100+	...
...	Palm Warbler	3	0-50	...
...	White-throated Sparrow	3	50-100	...
...	Yellow-rumped Warbler	4	0-50	...
...	GB10G	483685E, 4955806N	Scrubby mixedwood along existing road	5-10 km/h SE	13	Slight Fog/Overcast	None	8:30 AM	American Crow	2	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Song Sparrow	1	100+	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	1	100+	...
...	Yellow-rumped Warbler	1	100+	...
...	GB11G	483197E, 4955799N	Regenerating Softwood	5-10 km/h SE	13	Slight Fog/Overcast	None	8:54 AM	American Goldfinch	1	50-100	...
...	American Robin	2	100+	...
...	Dark-eyed Junco	1	100+	...
...	Mourning Dove	2	0-50	...
...	Northern Flicker	2	100+	...
...	Palm Warbler	2	50-100	...
...	White-throated Sparrow	4	0-50	...
...	White-throated Sparrow	2	50-100	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	2	50-100	...
...	GB12G	483135E, 4955533N	Along existing road, adjacent to wetland and small pond	5-10 km/h SE	13	Slight Fog/Overcast	None	9:20 AM	American Black Duck	1	0-50	...
...	American Goldfinch	1	0-50	...
...	Northern Flicker	1	0-50	...
...	Palm Warbler	1	50-100	...
...	Swamp Sparrow	1	50-100	...
...	White-throated Sparrow	3	100+	...
...	White-throated Sparrow	2	50-100	...
...	Yellow-rumped Warbler	2	0-50	...
...	GB13G	482351E, 4955516N	Lake	5-10 km/h SE	13	Overcast	None	9:50 AM	Double-crested Cormorant	1	0-50	...
May 22/2013	GB1G	482534E, 4955604N	Gravel pit with softwood regeneration	5-10 km/h SE	5	Heavy Overcast	Light Rain/Drizzle	5:26 AM	American Crow	1	0-50	...
...	American Crow	3	100+	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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-capped Chickadee	1	100 ⁺	...
...	Blue-headed Vireo	1	100 ⁺	...
...	Common Loon	1	100 ⁺	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	2	50-100	...
...	Common Yellowthroat	2	100 ⁺	...
...	Dark-eyed Junco	2	0-50	...
...	Dark-eyed Junco	1	100 ⁺	...
...	Hermit Thrush	1	100 ⁺	...
...	Magnolia Warbler	1	100 ⁺	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	2	50-100	...
...	Nashville Warbler	1	100 ⁺	...
...	Osprey	1	50-100	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	1	50-100	...
...	Ring-necked Pheasant	1	100 ⁺	...
...	Song Sparrow	1	100 ⁺	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	3	100 ⁺	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB2G	482781E, 4955762N	Gravel pit with softwood regeneration	5-10 km/h SE	5	Heavy Overcast	Light Rain/Drizzle	5:40 AM	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	0-50	...
...	Black-capped Chickadee	1	100 ⁺	...
...	Black-throated Green Warbler	2	50-100	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	2	100 ⁺	...
...	Common Yellowthroat	2	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Double-crested Cormorant	6	FO NE	...
...	Fox Sparrow	1	100 ⁺	...
...	Golden-crowned Kinglet	4	50-100	...
...	Hairy Woodpecker	1	100 ⁺	...
...	Hermit Thrush	1	0-50	...
...	Hermit Thrush	1	50-100	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	100 ⁺	...
...	Magnolia Warbler	2	50-100	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	1	100 ⁺	...
...	Nashville Warbler	1	50-100	...
...	Palm Warbler	2	50-100	...
...	Purple Finch	1	100 ⁺	...
...	Ring-necked Pheasant	1	100 ⁺	...
...	Song Sparrow	1	0-50	...
...	Swamp Sparrow	1	50-100	...
...	White-throated Sparrow	4	100 ⁺	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	GB3G	482945E, 4955959N	Regenerating Softwood	5-10 km/h SE	5	Heavy Overcast	Light Rain/Drizzle	6:00 AM	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	0-50	...
...	Blackpoll Warbler	1	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Common Loon	1	100 ⁺	...
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	2	50-100	...
...	Common Yellowthroat	3	100 ⁺	...
...	Hermit Thrush	1	50-100	...
...	Magnolia Warbler	2	0-50	...
...	Magnolia Warbler	3	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Palm Warbler	1	50-100	...
...	Ring-necked Pheasant	1	100 ⁺	...
...	Ruby-throated Hummingbird	1	0-50	...
...	Song Sparrow	1	50-100	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	2	100 ⁺	...
...	GB4G	483116E, 4956118N	Regenerating Softwood	5-10 km/h SE	5	Heavy Overcast	Light Rain/Drizzle	6:15 AM	American Crow	1	100 ⁺	...
...	American Goldfinch	1	50-100	...
...	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	100 ⁺	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	4	50-100	...
...	Common Yellowthroat	2	100 ⁺	...
...	Hermit Thrush	1	0-50	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	2	50-100	...
...	Palm Warbler	1	100 ⁺	...
...	Ring-necked Pheasant	1	50-100	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	3	100 ⁺	...
...	GB11G	483197E, 4955799N	Regenerating Softwood	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	6:34 AM	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Blue Jay	1	100 ⁺	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	3	100 ⁺	...
...	Golden-crowned Kinglet	1	50-100	...
...	Hermit Thrush	1	50-100	...
...	Magnolia Warbler	1	0-50	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100+	...
...	Mourning Dove	1	100+	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	1	100+	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	3	100+	...
...	GB5G	483367E, 4956010N	Mixed-age softwood/Young mixedwoods	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	6:54 AM	American Crow	1	100+	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	50-100	...
...	Blackpoll Warbler	1	50-100	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100+	...
...	Hermit Thrush	1	0-50	...
...	Hermit Thrush	1	50-100	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	2	100+	...
...	Palm Warbler	1	50-100	...
...	Purple Finch	1	50-100	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	2	100+	...
...	Winter Wren	1	100+	...
...	GB6G	483641E, 4956033N	Regenerating Softwood bordered by Coastal Softwood	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	7:13 AM	American Crow	1	100+	...
...	Black-capped Chickadee	2	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Blue Jay	1	100+	...
...	Blue-headed Vireo	1	50-100	...
...	Boreal Chickadee	1	50-100	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	2	100+	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	2	100+	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	1	50-100	...
...	Ruffed Grouse	1	50-100	...
...	GB7G	483828E, 4956070N	Mid-aged Balsam fir	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	7:29 AM	American Crow	1	100+	...
...	Black-throated Green Warbler	1	100+	...
...	Blue-headed Vireo	1	50-100	...
...	Common Yellowthroat	1	100+	...
...	Magnolia Warbler	2	100+	...
...	Purple Finch	1	50-100	...
...	White-throated Sparrow	1	100+	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	GB8G	484115E, 4956149N	Clearing for MET Tower	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	7:49 AM	American Robin	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	2	50-100	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Blue Jay	3	100 ⁺	...
...	Blue-headed Vireo	1	100 ⁺	...
...	Common Loon	1	FO W	...
...	Dark-eyed Junco	1	0-50	...
...	Golden-crowned Kinglet	1	50-100	...
...	Hermit Thrush	1	100 ⁺	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Nashville Warbler	1	100 ⁺	...
...	White-throated Sparrow	2	100 ⁺	...
...	Yellow-rumped Warbler	2	50-100	...
...	GB9G	483975E, 4955875N	Scrubby mixedwood along existing road	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	8:05 AM	American Black Duck	1	0-50	...
...	American Black Duck	1	50-100	...
...	American Crow	1	50-100	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	50-100	...
...	Blue Jay	1	100 ⁺	...
...	Dark-eyed Junco	1	50-100	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Nashville Warbler	1	0-50	...
...	Ring-necked Pheasant	1	100 ⁺	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	2	50-100	...
...	White-throated Sparrow	1	100 ⁺	...
...	Yellow-rumped Warbler	1	0-50	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB10G	483685E, 4955806N	Scrubby mixedwood along existing road	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	8:20 AM	American Crow	1	100 ⁺	...
...	American Goldfinch	1	100 ⁺	...
...	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	100 ⁺	...
...	Blackpoll Warbler	1	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	2	50-100	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Common Yellowthroat	1	100 ⁺	...
...	Dark-eyed Junco	1	0-50	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Dark-eyed Junco	1	50-100	...
...	Golden-crowned Kinglet	1	50-100	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Palm Warbler	2	0-50	...
...	Ring-necked Pheasant	1	100 ⁺	...
...	Song Sparrow	1	100 ⁺	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	1	100 ⁺	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB12G	483135E, 4955533N	Along existing road, adjacent to wetland and small pond	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	8:37 AM	American Goldfinch	...	...	...
...	American Robin	...	...	...
...	Black-throated Green Warbler	2	50-100	...
...	Black-throated Green Warbler	3	100 ⁺	...
...	Blue Jay	3	50-100	...
...	Blue Jay	1	100 ⁺	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	2	100 ⁺	...
...	Golden-crowned Kinglet	...	...	...
...	Great Blue Heron	...	...	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	2	100 ⁺	...
...	Nashville Warbler	...	...	...
...	Palm Warbler	...	...	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	1	100 ⁺	...
...	GB13G	482351E, 4955516N	Lake	5-10 km/h SE	8	Overcast	Light Rain/Drizzle	9:03 AM	American Crow	1	100 ⁺	...
...	American Redstart	1	50-100	...
...	American Redstart	1	100 ⁺	...
...	Black-and-White Warbler	1	100 ⁺	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100 ⁺	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Northern Parula	1	100 ⁺	...
...	Osprey	1	0-50	...
...	Song Sparrow	1	0-50	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	1	100 ⁺	...
May 30/2013	GB1G	482534E, 4955604N	Gravel pit with softwood regeneration	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	5:27 AM	Alder Flycatcher	1	50-100	...
...	American Robin	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Common Yellowthroat	3	0-50	...
...	Common Yellowthroat	2	50-100	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Dark-eyed Junco	1	50-100	...
...	Hermit Thrush	2	100 ⁺	...
...	Magnolia Warbler	2	50-100	...
...	Osprey	1	FO S	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	1	50-100	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	3	100 ⁺	...
...	GB2G	482781E, 4955762N	Gravel pit with softwood regeneration	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	5:37 AM	Alder Flycatcher	1	50-100	...
...	Alder Flycatcher	2	100 ⁺	...
...	American Redstart	1	100 ⁺	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	0-50	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Blue Jay	1	100 ⁺	...
...	Common Yellowthroat	2	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Dark-eyed Junco	1	50-100	...
...	Fox Sparrow	1	100 ⁺	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	3	100 ⁺	...
...	Nashville Warbler	1	50-100	...
...	Nashville Warbler	2	100 ⁺	...
...	Purple Finch	1	100 ⁺	...
...	Tennessee Warbler	1	50-100	...
...	White-throated Sparrow	2	0-50	...
...	White-throated Sparrow	1	100 ⁺	...
...	Winter Wren	1	100 ⁺	...
...	GB3G	482945E, 4955959N	Regenerating Softwood	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	5:51 AM	American Crow	1	50-100	...
...	American Redstart	1	50-100	...
...	American Robin	1	100 ⁺	...
...	Black-and-White Warbler	1	0-50	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Common Raven	3	FO S	...
...	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	4	100 ⁺	...
...	Hermit Thrush	1	50-100	...
...	Hermit Thrush	2	100 ⁺	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	2	100 ⁺	...
...	Palm Warbler	1	50-100	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	3	100 ⁺	...
...	Winter Wren	1	100 ⁺	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	GB4G	483116E, 4956118N	Regenerating Softwood	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	6:07 AM	Common Yellowthroat	1	0-50	...
...	Common Yellowthroat	2	50-100	...
...	Magnolia Warbler	3	50-100	...
...	Mourning Warbler	1	50-100	...
...	Ring-necked Pheasant	1	0-50	...
...	White-throated Sparrow	1	0-50	...
...	Winter Wren	1	50-100	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB11G	483197E, 4956799N	Regenerating Softwood	15-20 km/h	10	Slight Fog/Overcast	Light Rain	6:24 AM	Black-capped Chickadee	1	100 ⁺	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	2	100 ⁺	...
...	Dark-eyed Junco	1	0-50	Nest with 4 eggs
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	2	50-100	...
...	Purple Finch	1	100 ⁺	...
...	White-throated Sparrow	2	100 ⁺	...
...	Yellow-bellied Flycatcher	1	50-100	...
...	GB5G	483367E, 4956010N	Mixed-age softwood/Young mixedwoods	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	6:50 AM	Black-throated Green Warbler	1	50-100	...
...	Black-throated Green Warbler	2	50-100	...
...	Magnolia Warbler	3	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Palm Warbler	1	0-50	...
...	Palm Warbler	2	50-100	...
...	White-throated Sparrow	2	100 ⁺	...
...	GB6G	483641E, 4956033N	Regenerating Softwood bordered by Coastal Softwood	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	7:10 AM	American Goldfinch	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	0-50	...
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Mourning Dove	2	0-50	...
...	Northern Flicker	1	100 ⁺	...
...	Swainson's Thrush	1	0-50	...
...	GB7G	483828E, 4956070N	Mid-aged Balsam fir	15-20 km/h WSW	10	Slight Fog/Overcast	Light Rain	7:31 AM	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	1	50-100	...
...	Blue-headed Vireo	1	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100 ⁺	...
...	Dark-eyed Junco	2	50-100	...
...	Golden-crowned Kinglet	1	0-50	...
...	Magnolia Warbler	1	50-100	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Magnolia Warbler	1	100 ⁺	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	1	50-100	...
...	Nashville Warbler	1	100 ⁺	...
...	Purple Finch	1	50-100	...
...	White-throated Sparrow	1	100 ⁺	...
...	Yellow-bellied Flycatcher	1	50-100	...
...	GB8G	484115E, 4956149N	Clearing for MET Tower	15-20 km/h WSW	10	Low Fog	None	7:51 AM	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	50-100	...
...	Black-throated Green Warbler	1	100 ⁺	...
...	Common Yellowthroat	1	50-100	...
...	Dark-eyed Junco	1	0-50	...
...	Golden-crowned Kinglet	1	0-50	...
...	Golden-crowned Kinglet	1	50-100	...
...	Hermit Thrush	2	100 ⁺	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Magnolia Warbler	1	100 ⁺	...
...	Song Sparrow	1	50-100	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	2	100 ⁺	...
...	Winter Wren	1	100 ⁺	...
...	GB9G	483975E, 4955875N	Scrubby mixedwood along existing road	15-20 km/h WSW	10	Low Fog	None	8:03 AM	American Redstart	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Raven	1	0-50	...
...	Common Yellowthroat	1	50-100	...
...	Magnolia Warbler	2	50-100	...
...	Palm Warbler	1	50-100	...
...	Red-eyed Vireo	1	100 ⁺	...
...	Song Sparrow	1	100 ⁺	...
...	White-throated Sparrow	2	100 ⁺	...
...	Yellow-rumped Warbler	1	0-50	...
...	GB10G	483685E, 4955806N	Scrubby mixedwood along existing road	15-20 km/h WSW	10	Low Fog	None	8:18 AM	American Redstart	2	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	3	0-50	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Yellowthroat	2	100 ⁺	...
...	Dark-eyed Junco	1	50-100	...
...	Hermit Thrush	1	100 ⁺	...
...	Magnolia Warbler	3	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Magnolia Warbler	2	100 ⁺	...
...	Nashville Warbler	1	50-100	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Palm Warbler	1	50-100	...
...	Palm Warbler	1	100+	...
...	Red-eyed Vireo	1	100+	...
...	Swainson's Thrush	1	100+	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	2	50-100	...
...	Yellow-rumped Warbler	1	50-100	...
...	GB12G	483135E, 4955533N	Along existing road, adjacent to wetland and small pond	15-20 km/h WSW	10	Low Fog	None	8:35 AM	Alder Flycatcher	2	0-50	...
...	Alder Flycatcher	1	100+	...
...	American Robin	1	100+	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	2	0-50	...
...	Blue Jay	1	0-50	...
...	Canada Warbler	1	50-100	...
...	Magnolia Warbler	2	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Nashville Warbler	2	0-50	...
...	Tennessee Warbler	1	0-50	...
...	GB13G	482351E, 4955516N	Lake	10-20 km/h	10	Low Fog	None	9:02 AM	Alder Flycatcher	1	100+	...
...	American Redstart	2	50-100	...
...	American Robin	1	0-50	...
...	American Robin	1	100+	...
...	Black-and-White Warbler	1	100+	...
...	Black-throated Green Warbler	1	100+	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100+	...
...	Common Yellowthroat	1	100+	...
...	Hermit Thrush	1	100+	...
...	Herring Gull	1	100+	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Magnolia Warbler	2	100+	...
...	Northern Flicker	1	0-50	...
...	Song Sparrow	1	50-100	...
...	Tennessee Warbler	1	0-50	...
...	White-throated Sparrow	1	100+	...
...	Yellow-rumped Warbler	1	0-50	...
June 16/2013	GB1G	482534E, 4955604N	Gravel pit with softwood regeneration	5-10km/h SW	15	Clear	None	4:50 AM	Alder Flycatcher	1	50-100	...
...	Alder Flycatcher	1	100+	...
...	American Crow	7	0-50	...
...	American Redstart	3	100+	...
...	American Robin	1	50-100	...
...	Common Loon	3	100+	...
...	Common Yellowthroat	1	50-100	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	Common Yellowthroat	1	100+	...
...	Dark-eyed Junco	1	0-50	...
...	Dark-eyed Junco	1	50-100	...
...	Dark-eyed Junco	1	100+	...
...	Hermit Thrush	1	50-100	...
...	Hermit Thrush	2	100+	...
...	Lincoln's Sparrow	1	0-50	...
...	Magnolia Warbler	2	50-100	...
...	Nashville Warbler	1	100+	...
...	Osprey	1	100+	...
...	Palm Warbler	1	50-100	...
...	Red-eyed Vireo	1	100+	...
...	White-throated Sparrow	1	50-100	...
...	White-throated Sparrow	3	100+	...
...	GB2G	482781E, 4955762N	Gravel pit with softwood regeneration	5-10km/h SW	15	Clear	None	5:04 AM	Alder Flycatcher	2	50-100	...
...	Alder Flycatcher	1	100+	...
...	American Crow	2	100+	...
...	American Redstart	1	50-100	...
...	American Robin	1	100+	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	100+	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	2	100+	...
...	Dark-eyed Junco	1	50-100	...
...	Dark-eyed Junco	1	100+	...
...	Golden-crowned Kinglet	2	50-100	...
...	Magnolia Warbler	1	100+	...
...	Nashville Warbler	1	50-100	...
...	Palm Warbler	2	50-100	...
...	Song Sparrow	1	100+	...
...	White-throated Sparrow	3	100+	...
...	GB3G	482945E, 4955959N	Regenerating Softwood	5-10km/h SW	16	Clear	None	5:20 AM	Alder Flycatcher	2	100+	...
...	American Crow	2	100+	...
...	American Robin	1	100+	...
...	Black-and-White Warbler	1	100+	...
...	Black-throated Green Warbler	2	100+	...
...	Blue Jay	1	100+	...
...	Common Yellowthroat	2	0-50	...
...	Common Yellowthroat	2	100+	...
...	Dark-eyed Junco	1	100+	...
...	Hermit Thrush	1	100+	...
...	Herring Gull	2	100+	...
...	Magnolia Warbler	2	50-100	...
...	Magnolia Warbler	2	100+	...
...	Palm Warbler	1	100+	...
...	Red-eyed Vireo	1	100+	...
...	Song Sparrow	1	100+	...
...	White-throated Sparrow	2	100+	...
...	Yellow-rumped Warbler	1	0-50	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	GB4G	483116E, 4956118N	Regenerating Softwood	5-10km/h SW	16	Clear	None	5:40 AM	Alder Flycatcher	1	100+	...
...	American Crow	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Common Yellowthroat	1	50-100	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Magnolia Warbler	1	100+	...
...	Mourning Warbler	1	50-100	...
...	Northern Flicker	1	0-50	...
...	Ring-necked Pheasant	1	50-100	...
...	White-throated Sparrow	1	0-50	...
...	White-throated Sparrow	1	100+	...
...	Yellow-bellied Flycatcher	1	100+	...
...	GB5G	483367E, 4956010N	Mixed-age softwood/Young mixedwoods	5-10km/h SW	16	Clear	None	5:58 AM	Alder Flycatcher	2	100+	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100+	...
...	Dark-eyed Junco	1	50-100	...
...	Hairy Woodpecker	1	0-50	...
...	Magnolia Warbler	1	100+	...
...	Mourning Dove	1	100+	...
...	Pileated Woodpecker	1	100+	...
...	Winter Wren	1	100+	...
...	Yellow-bellied Flycatcher	1	50-100	...
...	Yellow-bellied Flycatcher	1	100+	...
...	GB6G	483641E, 4956033N	Regenerating Softwood bordered by Coastal Softwood	5-10km/h SW	16	Clear	None	6:23 AM	Alder Flycatcher	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Common Yellowthroat	2	50-100	...
...	Hermit Thrush	1	100+	...
...	Magnolia Warbler	1	100+	...
...	Magnolia Warbler	2	50-100	...
...	Nashville Warbler	1	0-50	...
...	Nashville Warbler	1	50-100	...
...	Palm Warbler	1	100+	...
...	Palm Warbler	1	50-100	...
...	Purple Finch	1	100+	...
...	Ruffed Grouse	1	0-50	...
...	Yellow-bellied Flycatcher	1	0-50	...
...	GB7G	483828E, 4956070N	Mid-aged Balsam fir	5-10km/h SW	16	Clear	None	6:39 AM	Black-and-White Warbler	1	0-50	...
...	Black-throated Green Warbler	1	0-50	...
...	Black-throated Green Warbler	1	100+	...
...	Blue-headed Vireo	1	0-50	...
...	Golden-crowned Kinglet	1	50-100	...
...	Hermit Thrush	2	100+	...
...	Magnolia Warbler	1	50-100	...
...	Mourning Dove	1	100+	...

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Project # 12-4428

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					
...	Nashville Warbler	1	0-50	...
...	White-throated Sparrow	1	100+	...
...	Yellow-bellied Flycatcher	2	100+	...
...	GB8G	484115E, 4956149N	Clearing for MET Tower	10-15km/h SW	17	Clear	None	6:59 AM	American Robin	1	100+	...
...	Black-and-White Warbler	1	50-100	...
...	Black-capped Chickadee	1	50-100	...
...	Black-throated Green Warbler	1	0-50	...
...	Common Yellowthroat	1	100+	...
...	Great Blue Heron	1	100+	...
...	Hermit Thrush	1	100+	...
...	Magnolia Warbler	1	50-100	...
...	Red-eyed Vireo	1	50-100	...
...	Swainson's Thrush	1	100+	...
...	Yellow-bellied Flycatcher	1	100+	...
...	Yellow-rumped Warbler	1	50-100	...
...	Yellow-rumped Warbler	1	100+	...
...	GB9G	483975E, 4955875N	Scrubby mixedwood along existing road	10-15km/h SW	17	Clear	None	7:16 AM	American Redstart	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Blue Jay	1	100+	...
...	Common Yellowthroat	1	50-100	...
...	Dark-eyed Junco	1	50-100	...
...	Hermit Thrush	1	100+	...
...	Magnolia Warbler	1	0-50	...
...	Magnolia Warbler	1	50-100	...
...	Northern Goshawk	1	0-50	...
...	Palm Warbler	1	50-100	...
...	Purple Finch	1	100+	...
...	Red-eyed Vireo	1	100+	...
...	Song Sparrow	1	100+	...
...	Yellow-bellied Flycatcher	1	50-100	...
...	GB10G	483685E, 4955806N	Scrubby mixedwood along existing road	10-15km/h SW	17	Clear	None	7:30 AM	Alder Flycatcher	1	100+	...
...	American Crow	3	100+	...
...	American Redstart	1	0-50	...
...	American Redstart	1	50-100	...
...	Black-throated Green Warbler	1	50-100	...
...	Common Yellowthroat	1	50-100	...
...	Common Yellowthroat	1	100+	...
...	Hermit Thrush	1	100+	...
...	Magnolia Warbler	1	50-100	...
...	Magnolia Warbler	1	100+	...
...	Red-eyed Vireo	1	50-100	...
...	Ring-necked Pheasant	1	100+	...
...	Ruffed Grouse	1	50-100	...
...	Song Sparrow	1	100+	...
...	Swainson's Thrush	1	100+	...
...	White-throated Sparrow	1	100+	...

Table B10: Detailed Results, Spring Migration Surveys, Gaetz Brook, NS

Project # 12-4428

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					
...	GB11G	483197E, 4955799N	Regenerating Softwood	10-15km/h SW	18	Clear	None	7:57 AM	Black-throated Green Warbler	1	100+	...
...	Dark-eyed Junco	1	50-100	...
...	Magnolia Warbler	1	0-50	...
...	Mourning Dove	1	100+	...
...	Palm Warbler	1	50-100	...
...	Yellow-bellied Flycatcher	1	50-100	...
...	Yellow-bellied Flycatcher	1	100+	...
...	GB12G	483135E, 4955533N	Along existing road, adjacent to wetland and small pond	10-15km/h SW	18	Clear	None	8:14 AM	American Goldfinch	1	100+	...
...	American Redstart	1	50-100	...
...	Black-and-White Warbler	1	0-50	...
...	Black-and-White Warbler	1	50-100	...
...	Black-and-White Warbler	1	100+	...
...	Black-throated Green Warbler	1	50-100	...
...	Black-throated Green Warbler	1	100+	...
...	Common Yellowthroat	1	50-100	...
...	Dark-eyed Junco	1	50-100	...
...	Fox Sparrow	1	100+	...
...	Golden-crowned Kinglet	1	100+	...
...	Hermit Thrush	1	100+	...
...	Nashville Warbler	1	0-50	...
...	Purple Finch	1	100+	...
...	Red-eyed Vireo	1	50-100	...
...	White-throated Sparrow	1	100+	...
...	Yellow-rumped Warbler	1	100+	...
...	GB13G	482351E, 4955516N	Lake	10-15km/h SW	18	Clear	None	8:41 AM	Alder Flycatcher	1	100+	...
...	American Redstart	1	50-100	...
...	Black-and-White Warbler	1	50-100	...
...	Black-throated Green Warbler	1	50-100	...
...	Brown Creeper	2	0-50	...
...	Cedar Waxwing	2	0-50	...
...	Dark-eyed Junco	1	50-100	...
...	Magnolia Warbler	1	100+	...
...	Northern Parula	1	0-50	...
...	Osprey	1	100+	...
...	Song Sparrow	1	100+	...
...	Yellow-rumped Warbler	1	50-100	...