Appendix B

Species of Conservation Concern Lists (Vegetation and Wildlife) and Maritimes Breeding Bird Atlas Information

| ATLAS OISEAUX NICHEURS MARITIM BREEDING BIRD AT |
|---|
| Target number of poilocated such that the e |
| SPECIES |
| Canada Goose Wood Duck |

Gadwall ±

Mallard

American Wigeon

Blue-winged Teal

Green-winged Teal

Ring-necked Duck

Greater Scaup †

Common Eider §

Common Goldeneye

Hooded Merganser

Common Merganser

Red-breast Merganser

Ring-necked Pheasant

Leach's Storm-Petrel ‡§

Great Cormorant ‡§

Great Blue Heron §

American Bittern

Green Heron †

Double-crest Cormorant §

Black-crown N.-Heron † §

Ruffed Grouse

Spruce Grouse

Wild Turkey †

Common Loon Pied-billed Grebe

American Black Duck

DES #species (1st atlas) #species (2nd atlas) #hours #pc done DES ES poss prob conf total poss prob conf total 1st 2nd road offrd 131 32 6 18 56 43 3.5 LAS int counts in this square: 13 road side, 2 off road (1 in Mature deciduous, 1 in Young forest). Please try to ensure that each off-road station is entire 100m radius circle is within the prescribed habitat. Code % SPECIES 1st 2nd 1st 2nd

27

38

0

8

5

13

22

0

33

35

22

13

15

54

15

38

3

22

3

18

28

6

Sora

Killdeer

Willet

Osprey

Bald Eagle #

Northern Harrier

Cooper's Hawk †

Northern Goshawk

Red-should Hawk †

Broad-winged Hawk

Semipalmated Plover †

Red-tailed Hawk

Piping Plover †

Spotted Sandpiper

Upland Sandpiper †

American Woodcock

Bonaparte's Gull ‡

Laughing Gull † §

Ring-billed Gull \$

Herring Gull &

Roseate Tern 18

Common Tern §

Common Murre \$§

Arctic Tern ±8

Razorbill ‡§

Black-legged Kittiwake \$

Great Black-backed Gull §

Wilson's Snipe

Sharp-shinned Hawk

12

38

1

14

52 62

> 9 20

23

31

34

0

26

4 1

31

41

19

41

17

4

39

1

7

25

1

23

36

14

1

1 30

FL

FL

FL

FL

P

H

P

FL

FL

H

T

H

H

FL

H

FL

H

Square Summary (19FL30)

Code 1st 2nd 1st 2nd ON P 61 NY

NB

H

T

T

Т

NE

T

FL

T

33

33

1

5

52

13

5

18

38

25

37

32

28

8

33

20

1

15 11

12

47

15

14

4 0

0 0

47

60

4 5

3

28

44

0

1 0

1

0

28

26

1

11

6 1

3

3

#squares

67

1st

63

Black Guillemot ‡§

Atlantic Puffin \$

Rock Pigeon

Mourning Dove

Yellow-billed Cuckoo ±

Eastern Screech-Owl ±

Black-billed Cuckoo

Great Horned Owl

Long-eared Owl †

Short-eared Owl †

Whip-poor-will

Chimney Swift †

Belted Kingfisher

North Saw-whet Owl

Common Nighthawk †

Ruby-thr Hummingbird

Red-head Woodpecker †

Yellow-bellied Sapsucker

Black-back Woodpecker

Olive-sided Flycatcher †

Eastern Wood-Pewee

Pileated Woodpecker

Am Three-toed Woodpecker †

Downy Woodpecker

Hairy Woodpecker

Northern Flicker

American Kestrel

Merlin

Barred Owl

SPECIES

Region summary (#11: Charlotte)

1st 2nd

163 186

#pc done target #pc

Code

ON V

NB H

FL

NY

FL

T

NE

NY V

NE H

ON H

AY H

ON H

ON H

ON

AY

ON

Т

T

251

1st 2nd 1st 2nd

20

1

15

46

0

31

0

26

23

6 6

3 0

20 27

38

17

31

44

52

46

50

4 0

26

66

33

50

12

44

30

1

32

71

3

20

3

23

47

33

10

16

72

49

0

40

71

72

13

84

47

40

33

27 44

42

616

#sq with data #species

2nd

59

| SPECIES | C | ode | | /o | SPECIES | Co | ode | | % | SPECIES | C | ode | , | % |
|---------------------------|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|
| Jr LoiL3 | 1st | 2nd | 1st | 2nd | SPECIES | 1st | 2nd | 1st | 2nd | SPECIES | 1st | 2nd | 1st | 2nd |
| Yellow-bellied Flycatcher | AY | | 53 | 69 | Winter Wren | Т | S | 66 | 84 | Chestn-sided Warbler | Т | S | 55 | 79 |
| Alder Flycatcher | T | S | 61 | 83 | Golden-crown Kinglet | FL | S | 57 | 81 | Blackpoll Warbler | | | 22 | 16 |
| Willow Flycatcher † | | | 1 | 5 | Ruby-crown Kinglet | Т | | 57 | 64 | Black-thr Blue Warbler | Т | S | 22 | 71 |
| Least Flycatcher | FL | | 50 | 62 | Eastern Bluebird † | Н | | 25 | 40 | Palm Warbler | | | 28 | 57 |
| Eastern Phoebe | NE | CF | 30 | 64 | Veery | T | S | 52 | 64 | Pine Warbler † | FL | FY | 11 | 28 |
| Gr Crested Flycatcher | Н | | 31 | 13 | Bicknell's Thrush † | | | 15 | 5 | Yellow-rumped Warbler | FL | | 71 | 81 |
| Eastern Kingbird | AY | | 46 | 37 | Swainson's Thrush | Α | | 68 | 74 | Black-thr Green Warbler | Т | S | 66 | 88 |
| Blue-headed Vireo | Т | | 61 | 81 | Hermit Thrush | Т | S | 61 | 83 | Canada Warbler † | Т | | 58 | 66 |
| Warbling Vireo † | AY | | 20 | 8 | Wood Thrush † | Т | | 25 | 3 | Wilson's Warbler | Н | | 38 | 33 |
| Philadelphia Vireo | | | 6 | 15 | American Robin | FL | CF | 84 | 91 | Eastern Towhee ‡ | | | 1 | 0 |
| Red-eyed Vireo | FL | FY | 66 | 86 | Gray Catbird | AY | FY | 60 | 72 | Chipping Sparrow | AY | S | 63 | 72 |
| <u>Gray Jay</u> | Н | | 30 | 33 | Northern Mockingbird † | AY | | 17 | 6 | Field Sparrow † | Т | | 4 | 0 |
| Blue Jay | NB | Н | 55 | 74 | Brown Thrasher † | AY | | 6 | 13 | Vesper Sparrow † | | | 15 | 6 |
| American Crow | ON | FY | 68 | 79 | European Starling | AY | P | 63 | 64 | Savannah Sparrow | T | | 52 | 61 |
| Common Raven | С | Н | 68 | 77 | Cedar Waxwing | NY | Н | 76 | 86 | Nelson's Shtail Sparrow | Т | | 11 | 6 |
| Horned Lark † | | | 4 | 3 | Ovenbird | Α | S | 65 | 77 | Song Sparrow | NE | S | 76 | 76 |
| Purple Martin | Н | | 4 | 0 | North Waterthrush | Н | | 42 | 50 | Lincoln's Sparrow | Т | | 49 | 42 |
| Tree Swallow | NY | FY | 82 | 66 | Black-white Warbler | FL | S | 66 | 84 | Swamp Sparrow | Т | | 44 | 64 |
| North Rgh-wing Swallow † | | | 6 | 1 | Tennessee Warbler | C | | 46 | 22 | White-throat Sparrow | FL | S | 80 | 86 |
| Bank Swallow § | ON | FY | 52 | 16 | Nashville Warbler | Т | | 61 | 81 | Dark-eyed Junco | NB | S | 66 | 79 |
| Cliff Swallow § | ON | FY | 60 | 30 | Mourning Warbler | AY | | 36 | 28 | Scarlet Tanager † | Т | | 23 | 18 |
| Barn Swallow | NY | FY | 77 | 50 | Common Yellowthroat | Т | CF | 80 | 86 | Northern Cardinal | FL | FY | 6 | 16 |
| Black-capp Chickadee | NE | FY | 66 | 86 | American Redstart | AY | P | 79 | 86 | Rose-breast Grosbeak | FL | | 53 | 23 |
| Boreal Chickadee | | | 33 | 38 | Cape May Warbler | Т | | 34 | 18 | Indigo Bunting | NE | S | 12 | 25 |
| Tufted Titmouse ‡ | | S | 0 | 1 | Northern Parula | NB | S | 63 | 83 | Bobolink | AY | | 42 | 28 |
| Red-breast Nuthatch | Т | H | 52 | 81 | Magnolia Warbler | AY | S | 68 | 86 | Red-wing Blackbird | AY | FY | 53 | 57 |
| White-breast Nuthatch | ON | | 19 | 8 | Bay-breasted Warbler | AY | | 50 | 49 | Eastern Meadowlark † | | | 3 | 0 |
| Brown Creeper | NE | | 36 | 35 | Blackburnian Warbler | Т | | 55 | 66 | Rusty Blackbird † | Т | | 39 | 13 |
| House Wren † | Т | CF | 4 | 5 | Yellow Warbler | FL | FY | 63 | 57 | Common Grackle | FL | Н | 60 | 77 |

 SPECIES
 Code %

 1st 2nd 1st 2nd

 Brown-head Cowbird
 FL H 44 16

 Baltimore Oriole
 ON 17 10

 Pine Grosbeak
 H 15 1

Maritimes Breeding Bird Atlas - Summary Sheet for Square 19FL30 (page 3 of 3)

House Finch † FL FY 6 Red Crossbill † NB 22 11 White-winged Crossbill 53 22 Pine Siskin FL 53 33 American Goldfinch NB P 61 76 **Evening Grosbeak** 57 16

FY

73 83

Purple Finch

Evening Grosbeak

C 57 16

House Sparrow

ON H 20 6

This list includes all species found during the Maritimes Breeding Bird Atlas (1st atlas: 1986-1990, 2nd atlas: 2006-2010) in the region #11 (Charlotte). Underlined species are those that you should try to add to this square (19FL30). They have not yet been reported during the 2nd atlas, but were found during the 1st atlas in this square or have been reported in more than 50% of the squares in this region during the 2nd atlas so far. "Code" is the code for the highest breeding evidence for that species in square 19FL30 during the 2nd and 1st atlas respectively. The % columns give the percentage of squares in that region where that species was reported during the 2nd and 1st atlas (this gives an idea of the expected chance of finding that species in region #11). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), † (rare in the Maritimes) or ¤ (rare in the Maritimes, documentation only required for confirmed records). Current as of 20/01/2020. An up-to-date version of this sheet is available from http://www.mba-aom.ca/isp/summaryform.jsp?squareID=19FL30?lang=en



metres / mêtres

Maritime Breeding Bird Atlas 2006 - 2010 Atlas des oiseaux nicheurs des Maritimes

Roadside Point Count Coordinates/ Coordonnées de points d'écoute

de bordure de route Easting/ Northing/ Abscisse Ordonnée 639,374 5,003,233 633.838 5.003.261 639,486 5,003,717 5.004.873 632,744 633,948 5,004,089 636,038 5,005,858 633,131 5,007,200 637,471 5,005,122 633,164 5,003,246 10 639.435 5,004,219 11 633.483 5.006.838 12 638,531 5,004,577 13 634.192 5,004,529 631,971 5,008,429 15 630,200 5,003,400 16 637,527 5,007,822 17 638.084 5,004,835 18 637.132 5.005.498 19 633.279 5,006,364 20 636,685 5,005,728 5,005,803 635,415 637.336 5,005,956 23 634.918 5,005,759 24 635.845 5,007,324 635.574 5,006,577 26 637,982 5,006,848 27 639,423 5,008,507 632,030 5,002,600 632,385 5,005,250 30 636.922 5,009,680 31 633,534 5,003,664

32 631,391 5,006,268 33 630,772 5,006,943 34 5,009,107 633.593 638,953 5,008,197 36 634,011 5,005,305 37 630,715 5,009,380 632,740 5,002,973 633,438 5,004,333 637,654 5,006,356

6° Universal Transverse Mercator (UTM) Projection; Zone 19 Central Meridian 69° West: North American Datum 1983 (NAD 83) © Crown Copyright, Province of New Brunswick, 2006, All rights reserved

Projection universelle transverse de Mercator (UTM) 6° Zone 19, méridien central 69° quest: Système de référence géodésique nord-américain 1983 (NAD 83) © Droit d'auteur de la Couronne, Province du Nouveau-Brunswick, 2006, Tous droits réservés

St. Stephen

19FL30

Region/région: 11

Legend/Légende Highway ---- Route Forest Road - Route forestière Seasonal Road ---- Chemin saisonnier Trail --- Sentier Railway, ____ Voie ferrée, Voie ferrée abandonnée ou sentier Abandoned Railway or Trail PipeLine £££Gazoduc ou conduite d'eau Transmission Line ---- Ligne électrique Contour 20 m Courbe de niveau 20 m Contour 100 m (index) Courbe de niveau 100 m (index) Ruisseau Stream -Lake, River, Ocean Lac, rivière, océan Open Wetland Marécage Bog, Fen or Shrub Wetland Tourbière ou marécage arbustif Mature Deciduous Forest Forêt de feuillus mature Mature Coniferous Forest Forêt de conifères mature Mature Pine Forest Forêt de pins mature Young Forest Jeune fôret **Upland Open Country** Terrain ouvert: agricole, non-boisé Occupied, Urban, Other Terrain occupé, zone urbaine, autre

> Cartographic production by New Brunswick Department of Natural Resources, Fish & Wildlife Branch, 2006 Disclaime

Gravière

Gravel Pit

The New Brunswick Department of Natural Resources accepts no liability for any errors, deficiencies, or faults on this map.

This map is for use in Maritime Breeding Bird Atlas work only

Production cartographique de la Province du Nouveau-Brunswick, Ministère des Ressources naturelles, Direction de la pêche sportive et de la chasse, 2006

Le Ministère des Ressources naturelles du Nouveau-Brunswick ne peut être tenu responsable pour des erreurs, défectuosités, ou anomalies dans la présente carte.

L'usage de cette carte est limité aux activités de l'Atlas des oiseaux nicheurs des Maritimes seulement.







Table B.1: Regionally Rare Plant Species Historically Observed within 5 km of the Project (AC CDC 2020)

| Species | Provincial S Rank | Status | Habitat and Flowering Times | Potential to Occur in LAA |
|--|----------------------|--------|---|---|
| Boehmeria cylindrica (Small-spike False-nettle) | \$3 | | Wet, alluvial woods and rocky shores (Hinds 2000). Flowers from July to September (Munro et al. 2014). | Probable - The species may grow on the rocky shore within the LAA, and has been identified growing on the wet shaded upper shore of the river within 500m of the LAA (AC CDC 2020). |
| Carex conoidea (Field Sedge) | \$3 | - | Damp, grassy areas (Hinds 2000). | Probable - This species was identified growing on a moist sheltered sandy soil pocket along a rocky shore of the river (AC CDC 2020). |
| Carex lupulina (Hop Sedge) | \$3 | - | Wet woods, swampy shores (Hinds 2000). Flowers and fruits in June (Munro et al. 2014). | Probable - This species was identified growing in wet shaded woods within 500 m of the LAA (AC CDC 2020). |
| Carex tuckermanii (Tuckerman's Sedge) | \$3 | - | Alluvial woods and wet borders (Hinds 2000). Fruiting from July to August (Munro et al. 2014). | Unlikely - The specimens that have been identified near the river were found in red ash and/or silver maple flood plains (AC CDC 2020). Significant representation of these floodplains are not anticipated within the LAA. |
| Cephalanthus occidentalis (Common Buttonbush) | S2 | - | Swamps and along stream margins (Hinds 2000). | Unlikely - The specimens that have been identified near the river were found in red ash and/or silver maple flood plains (AC CDC 2020). Significant representation of these floodplains are not anticipated within the LAA. |
| Ceratophyllum echinatum (Prickly Hornwort) | \$3 | - | Still waters (Hinds 2000). | Unlikely - The current of the river is anticipated to be fast within the LAA . |
| Cinna arundinacea (Sweet Wood Reed Grass) | S1 | - | Swampy alluvial woods (Hinds 2000). | Unlikely - Significant representation of floodplains are not anticipated within the LAA. |
| Clematis occidentalis (Purple Clematis) | \$3 | - | Calcareous ledges, rocky slopes in open woods (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Cornus obliqua (Silky Dogwood) | \$3 | - | Rocky shores and in wet thickets along streams (Hinds 2000). | Probable - The species may grow on the rocky shore habitat within the LAA, and it has been identified within 20 m of the PDA (AC CDC 2020). |
| Crataegus submollis (Quebec Hawthorn) | \$3? | - | Rich alluvial thickets and pastures (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Cyperus dentatus (Toothed Flatsedge) | \$3 | - | Sandy and rocky shores (Hinds 2000). Fruits in summer (Munro et al. 2014). | Known - The species has historically been identified on the sandy shore within the PDA (AC CDC 2020). |

Table B.1: Regionally Rare Plant Species Historically Observed within 5 km of the Project (AC CDC 2020)

| Species | Provincial S Rank | Status | Habitat and Flowering Times | Potential to Occur in LAA |
|---|----------------------|------------------------|---|---|
| Dichanthelium dichotomum (Forked Panic Grass) | S 1 | - | Sandy, open pine woods (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Dichanthelium linearifolium (Narrow-leaved Panic Grass) | S 2 | - | Sandy softwood groves on gravel banks and roadsides (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Eragrostis pectinacea (Tufted Love Grass) | \$2\$3 | - | Sandy shores and similar open areas (Hinds 2000). Fruiting from June to October (Munro et al. 2014). | Possible - There is potential for sandy shore habitat within the LAA; however, the only record* of this species was > 2000 m from the LAA in a railroad yard (AC CDC 2020). |
| Fallopia scandens (Climbing False Buckwheat) | \$3 | - | Alluvial meadows and thickets (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Fraxinus nigra (Black Ash) | \$4\$5 | COSEWIC: Threatened | Rich hardwoods (Hinds 2000). | Possible - There is hardwood habitat, which is unlikely to be considered "rich" within the LAA, and the closest record of this species is >3000 m from the LAA. |
| Geranium bicknellii (Bicknell's Crane's-bill) | \$3 | - | Disturbed soils, burns and clearings (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Glyceria obtusa (Atlantic Manna Grass) | S1 | - | Edges of bogs (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Hepatica americana (Round-lobed Hepatica) | S 2 | | Dryish mixed or hardwood stands often on slopes (Hinds 2000). Early spring wildflower (Hinds, 2000). | Possible- This habitat is potentially within the LAA; however, the only records* of this species were > 2000 m from the LAA (AC CDC 2020). |
| Limosella australis (Southern Mudwort) | \$3 | - | Brackish sands or mud (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| Lobelia cardinalis (Cardinal Flower) | \$3 | - | Shores and in adjacent meadows and swamps (Hinds 2000). | Probable - The species has been identified within 100 m of the LAA on the wet upper shore of the river (AC CDC 2020). |
| <i>Lysimachia hybrida</i> (Lowland Yellow Loosestrife) | S 1 | - | River banks, riparian forests, lake shores, wetland borders, wet ditches, low fields (Haines 2011). | Possible - The species may grow on the river bank within the LAA; however, the only records* of this species were > 3000 m from the LAA and primarily on silty soils (AC CDC 2020), which are not anticipated within the LAA. |
| Penthorum sedoides (Ditch Stonecrop) | \$3 | - | Muddy or gravelly shores (Hinds 2000). | Possible - The species may grow on the shores within the LAA; however, the local records* have been identified in floodplain habitats (AC CDC 2020), which are not anticipated within the LAA. |
| Persicaria punctata (Dotted Smartweed) | \$3 | - | Muddy or gravelly shores (Hinds 2000). | Possible - The species may grow on the shores within the LAA. However, the only record* of this species was found on a brackish tidal gravel shore (AC CDC 2020), and this habitat is not anticipated within the LAA. |

Table B.1: Regionally Rare Plant Species Historically Observed within 5 km of the Project (AC CDC 2020)

| | iistorically Ob | | Project (AC CDC 2020) |
|------------|---|---|--|
| S Rank | Status | Times | Potential to Occur in LAA |
| \$3 | - | Rocky shores and in wet meadows and similar wet open areas (Hinds 2000). Flowers in July (Munro et al. 2014). | Possible - The species may grow on the rocky shore within the LAA; however, the local records* have been identified in floodplain habitats (AC CDC 2020), which are not anticipated within the LAA. |
| \$2 | , | Submerged rocks or ledges in fast water (Hinds 2000). Flowers from July to September (Munro et al. 2014). | Probable - The LAA includes this habitat. |
| S2 | - | Moist acid, mixed woods (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| S1? | - | Waste areas, gardens and cultivated fields (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| S 3 | - | Still waters (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| S2 | - | Shallow, acid waters and on shores (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| \$1 | - | Wet ditches, low, damp ground and along upper edge of salt marshes (Hinds 2000). Flowers from May to August (Munro et al. 2014). | Known - The species has historically been identified within the PDA (AC CDC, 2020). The 1985 record* described the habitat as "wet gravels of backwater" (AC CDC 2020). |
| \$3\$4 | , | Quiet waters and borders of streams (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| \$2\$3 | - | Calcareous swamps and fens (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| S2 | - | Along stream margins, swamps and thickets (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| S 2 | - | Stream banks and in damp thickets (Hinds 2000). | Probable - The species has been identified growing amid boulders in shade, near shore of the river within 100 m of the LAA (AC CDC 2020). |
| \$3 | - | Peaty open areas and margins of bog ponds (Hinds 2000). | Unlikely - This habitat is not anticipated within the LAA. |
| | Provincial S Rank S3 S2 S2 S1? S3 S2 S1 S2 S2 S2 S2 S2 S2 | Provincial S Rank Status S3 - S2 - S1? - S3 - S2 - S1? - S2 - S1 - S354 - S2S3 - S2 - S2 - S2 - | S Rank Status Times Rocky shores and in wet meadows and similar wet open areas (Hinds 2000). Flowers in July (Munro et al. 2014). Submerged rocks or ledges in fast water (Hinds 2000). Flowers from July to September (Munro et al. 2014). S2 - Moist acid, mixed woods (Hinds 2000). S3 - Still waters (Hinds 2000). S3 - Still waters (Hinds 2000). S4 - Still waters (Hinds 2000). S5 - And on shores (Hinds 2000). Wet ditches, low, damp ground and along upper edge of salt marshes (Hinds 2000). Flowers from May to August (Munro et al. 2014). S3S4 - Quiet waters and borders of streams (Hinds 2000). S2S3 - Calcareous swamps and fens (Hinds 2000). S5 - Still waters (Hinds 2000). S1 - Calcareous swamps and fens (Hinds 2000). S2S3 - Calcareous swamps and fens (Hinds 2000). S5 - Still waters (Hinds 2000). S2S3 - Calcareous swamps and fens (Hinds 2000). S5 - Still waters (Hinds 2000). S6 - Calcareous swamps and fens (Hinds 2000). S7 - Still waters and borders of streams (Hinds 2000). S8 - Peaty open areas and margins of bog ponds (Hinds 2000). |

^{* &}quot;Record" or "records" refers to the 2020 AC CDC records of vascular plant SOCC identified within 5 km of the PDA.

Table B.2: Avian SOCC Historically Observed within 5 km of the Project (AC CDC 2020)

| Species | Provincial S Rank | Status | Breeding Habitat | Potential to occur in LAA |
|--|--------------------|--|---|---|
| Barrow's Goldeneye – Eastern Population (Bucephala islandica (Eastern pop.)) | S2M, S2N | COSEWIC: Special Concern SARA: Special Concern NB SARA: Special Concern | Barrow's goldeneye breed on shallow freshwater lakes, beaver ponds in alpine and sub-alpine settings. This species typically winters on sheltered saltwater habitats such as bays, estuaries and harbours (COSEWIC 2000, EC 2013). | This species is unlikely to occur in the LAA, although it is possible this species may use tidal areas of the St. Croix River (below the dam) to forage during winter months. |
| Eastern Wood- Pewee (Contopus virens) | S4B, S4M | COSEWIC: Special Concern SARA: Special Concern NB SARA: Special Concern | Most often associated with the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation. During migration, a variety of habitats are used, including forest edges and early successional clearings (COSEWIC 2012a). | This species may nest and forage within the LAA as suitable nesting habitat exists along the forested riverbanks. |
| Evening Grosbeak (Coccothraustes vespertinus) | S3B, S3S4N, SUM | COSEWIC: Special Concern SARA: Special Concern NB SARA: Not Listed | Breed in mature and second-growth coniferous forests, but will occasionally nest in orchards, parks and deciduous woodlands (Peterson 2002, Sibley 2016). | This species may nest and forage within the LAA as suitable nesting habitat exists along the forested riverbanks. |
| Red-shouldered Hawk (Buteo lineatus) | S2B, S2M | COSEWIC: Not at Risk SARA: Special Concern | Typically will re-use nests from past years and often inhabit deciduous lowlands, swamps and mixed wood forests (Peterson 2002, Sibley | This species may occur within the LAA as suitable nesting habitat does exist, however, no raptor nests |

| | | NB SARA: Not Listed | 2016). | are known in the vicinity. |
|--|--------------|--|---|---|
| Rusty Blackbird (Euphagus carolinus) | S3B, S3M | COSEWIC: Special Concern SARA: Special Concern NB SARA: Special Concern | Nests in coniferous-dominated forests adjacent to wetlands, such as slow-moving streams, peat bogs, sedge meadows, marshes, swamps and beaver ponds (COSEWIC 2017). | This species is unlikely to nest within the LAA as suitable habitat is limited, however, it is possible this species may forage within the LAA. |
| Red-necked Grebe (Podiceps grisegena) | \$3M, \$2N | COSEWIC: Not at Risk SARA: Not Listed NB SARA: Not Listed | Does not breed in New Brunswick, but overwinters along the coast, using shallow coves, harbours, and estuaries (Peterson 2002, Sibley 2016). | This species is unlikely to occur in the LAA, although it is possible this species may use tidal areas of the St. Croix River (below the dam) to forage during winter months. |
| Laughing Gull (Leucophaeus atricilla) | S1B, S1M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Colonial nester that will often form mixed colonies with terns and other gulls. Nests in saltmarshes, sandy beaches, dunes and islands, including those created from dredge spoils. (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Purple Martin (Progne subis) | S1B, S1M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nest in open areas in cavities (natural and human-made) always near water (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Green Heron (Butorides | S1S2B, S1S2M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in coastal and inland wetlands including swamps, marshes, lake margins, ponds, impoundments and any other wet habitat with | This species is unlikely to nest within the LAA as suitable nesting habitat is |

| virescens) | | | tree and shrub cover (Peterson 2002, Sibley 2016). | limited, however, it is possible this species may forage within the LAA. |
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| House Wren (Troglodytes aedon) | S1S2B, S1S2M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | House wrens are a cavity nesting species that will use human structures with nooks or openings as readily as they will natural cavities such as old woodpecker holes or the hollow that remains in a tree after a branch has fallen (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Northern Mockingbird (Mimus polyglottos) | S2B, S2M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in open, shrubby habitats, often near human developed and landscaping (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Brown Thrasher (Toxostoma rufum) | S2B,S2M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nest in shrubby environments, such as thickets, swales and edge habitats (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Pine Grosbeak (Pinicola enucleator) | S2B,S4S5N,S4S5M | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in mature coniferous to mixedwood forests, but can tolerate a wide variety of forested habitats (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Solitary Sandpiper (Tringa solitaria) | | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests near freshwater lakes, ponds, and creeks in areas of peatland with abundant spruce trees. (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may |

| | | | forage within the LAA. |
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| Cliff Swallow (Petrochelidon pyrrhonota) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Colonial nester, creates nests on buildings and other human-made structures suing available mud and their saliva (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Red Crossbill (Loxia curvirostra | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in conifer-dominated forests, especially those with older spruce, balsam fir and pine (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Pine Siskin (Spinus pinus) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in conifer-dominated forests (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Turkey Vulture (Cathartes aura) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests on steep, rocky cliffs where they use sheltered crevices/caves, occasionally will nest inside hollow trees, logs or man-made structures (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Killdeer (Charadrius vociferus) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nest on open ground in disturbed areas such as borrow pits, agricultural land and gravelled areas (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Black-billed | COSEWIC: Not Listed SARA: Not Listed | Nests in forest edges and tall shrub thickets, showing an association for young deciduous | This species may occur within the LAA as suitable |

| Cuckoo (Coccyzus erythropthalmus) | NB SARA: Not Listed | trees, often near water (Peterson 2002, Sibley 2016). | nesting habitat does exist. |
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| Warbling Vireo (Vireo gilvus) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Breeds mature riparian forests (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Scarlet Tanager (Piranga olivacea) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in mature, shade-tolerant hardwood forests (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Indigo Bunting (Passerina cyanea) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in shrubby areas, typically early successional or edge habitats (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Brown-headed Cowbird (Molothrus ater) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Parasitic nester, closely associated with agricultural grassland and livestock farming (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Baltimore Oriole (Icterus galbula) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in open, deciduous forest often along watercourse, but will also nests in urban areas (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Common Eider (Somateria | COSEWIC: Not Listed SARA: Not Listed | Colony nester of offshore islands. Winters along rocky coastlines (Peterson 2002, Sibley | This species is unlikely to occur in the LAA, although it is possible this species |

| mollissima) | NB SARA: Not Listed | 2016). | may use tidal areas of the St. Croix River (below the dam) to forage during winter months. |
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| Cape May Warbler (Setophaga tigrina) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in mature coniferous forests, typically black spruce (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is possible this species may forage within the LAA. |
| Bufflehead (Bucephala albeola) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Does not breed in New Brunswick, but overwinters along the coast, using sheltered coves, harbours, and estuaries (Peterson 2002, Sibley 2016). | This species is unlikely to occur in the LAA, although it is possible this species may use tidal areas of the St. Croix River (below the dam) to forage during winter months. |
| Eastern Kingbird (Tyrannus tyrannus) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in open, scrubby habitats along woodland edges, wetlands and watercourses (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Spotted Sandpiper (Actitis macularius) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Typically nests along the shoreline of major rivers, but are associated with almost any type of aquatic habitat (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |
| Wilson's Snipe (Gallinago delicate) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nests in freshwater wetlands (Peterson 2002, Sibley 2016). | This species is unlikely to nest within the LAA as suitable nesting habitat is limited, however, it is |

| | | | possible this species may forage within the LAA. |
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| Ring-billed Gull (Larus delawarensis) | COSEWIC: Not Listed SARA: Not Listed NB SARA: Not Listed | Nest in colonies from the tens to thousands of pairs. Typically will build their nests on the ground near freshwater in sparsely vegetated terrain, such as on sandbars, rocky beaches, driftwood, bare rock, concrete, or soil. (Peterson 2002, Sibley 2016). | This species may occur within the LAA as suitable nesting habitat does exist. |

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