

**Stantec**

**SUNCOR ENERGY ADELAIDE WIND POWER PROJECT**  
NATURAL HERITAGE ASSESSMENT & ENVIRONMENTAL IMPACT STUDY

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# **Appendix D**

## **Wildlife List**



**SUNCOR ENERGY ADELAIDE WIND POWER PROJECT**

2011 Incidental Wildlife List (Stan&Golder)

| COMMON NAME                      | SCIENTIFIC NAME                 | ONTARIO STATUS | GLOBAL STATUS | Stantec Observation | Golder Observation | COMMENTS   | Area Sensitive Reference |
|----------------------------------|---------------------------------|----------------|---------------|---------------------|--------------------|--|--------------------------|
| <b>AMPHIBIANS</b>                |                                 |                |               |                     |                    |  |                          |
| Tetraploid Gray Treefrog         | <i>Hyla versicolor</i>          | S5             | G5            |                     | x                  | Anuran Call Survey (Golder)  |                          |
| Western Chorus Frog (carolinian) | <i>Pseudacris triseriata</i>    | S4             | G5            | x                   |                    |  |                          |
| Northern Green Frog              | <i>Lithobates clamitans</i>     | S5             | G5            |                     | x                  | Anuran Call Survey (Golder)  |                          |
| <b>BIRDS</b>                     |                                 |                |               |                     |                    |  |                          |
| Canada Goose                     | <i>Branta canadensis</i>        | S5             | G5            |                     | x                  | Anuran Incidentals (Golder)  |                          |
| Tundra Swan                      | <i>Cygnus columbianus</i>       | S4             | G5            | x                   |                    | 25 flew overhead; above blade height; migration; November 10, 2011       |                          |
| Mallard                          | <i>Anas platyrhynchos</i>       | S5             | G5            |                     | x                  | Anuran Incidentals (Golder)  |                          |
| Bald Eagle                       | <i>Haliaeetus leucocephalus</i> | S2B,S4N        | G4            |                     |                    | Flew over farm field associated with Turbine 1 (Feature 26); 27-Oct-2011 |                          |
| Northern Harrier                 | <i>Circus cyaneus</i>           | S4B            | G5            |                     |                    | Flew over farm field associated with Feature 13                          | Sandilands 2005          |
| Red-tailed Hawk                  | <i>Buteo jamaicensis</i>        | S5             | G5            | x                   | x                  | Winter Raptor Survey (Golder)  |                          |
| Rough-legged Hawk                | <i>Buteo lagopus</i>            | S1B, S4N       | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| Golden Eagle                     | <i>Aquila chrysaetos</i>        | S2B            | G5            | x                   |                    | Migrating observation 11/8/2011  |                          |
| Rock Pigeon                      | <i>Columba livia</i>            | SNA            | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| Mourning Dove                    | <i>Zenaidura macroura</i>       | S5             | G5            | x                   | x                  | Winter Raptor Survey (Golder)  |                          |
| Great Horned Owl                 | <i>Bubo virginianus</i>         | S5             | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| Ruby-throated Hummingbird        | <i>Archilochus colubris</i>     | S5B            | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| Red-bellied Woodpecker           | <i>Melanerpes carolinus</i>     | S4             | G5            | x                   | x                  | Winter Raptor Survey (Golder)  |                          |
| Downy Woodpecker                 | <i>Picoides pubescens</i>       | S5             | G5            | x                   | x                  | Winter Raptor Survey (Golder)  |                          |
| Hairy Woodpecker                 | <i>Picoides villosus</i>        | S5             | G5            | x                   |                    |  |                          |
| Northern Flicker                 | <i>Colaptes auratus</i>         | S4B            | G5            | x                   |                    |  |                          |
| Pileated Woodpecker              | <i>Dryocopus pileatus</i>       | S5             | G5            | x                   |                    |  | Naylor et al., 1996      |
| Eastern Kingbird                 | <i>Tyrannus tyrannus</i>        | S4B            | G5            |                     | x                  | Anuran Incidentals (Golder)  |                          |
| Blue Jay                         | <i>Cyanocitta cristata</i>      | S5             | G5            | x                   | x                  | Winter Raptor Survey (Golder)  |                          |
| American Crow                    | <i>Corvus brachyrhynchos</i>    | S5B            | G5            |                     | x                  | Winter Raptor Survey   |                          |
| Horned Lark                      | <i>Eremophila alpestris</i>     | S5B            | G5            | x                   |                    |  |                          |
| Black-capped Chickadee           | <i>Poecile atricapillus</i>     | S5             | G5            | x                   | x                  |  |                          |
| Tufted Titmouse                  | <i>Baeolophus bicolor</i>       | S4             | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| White-breasted Nuthatch          | <i>Sitta carolinensis</i>       | S5             | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |
| Brown Creeper                    | <i>Certhia americana</i>        | S5B            | G5            |                     | x                  | Winter Raptor Survey (Golder)  |                          |

**SUNCOR ENERGY ADELAIDE WIND POWER PROJECT**

2011 Incidental Wildlife List (Stan&Golder)

| COMMON NAME            | SCIENTIFIC NAME               | ONTARIO STATUS | GLOBAL STATUS | Stantec Observation | Golder Observation | COMMENTS                      | Area Sensitive Reference |
|------------------------|-------------------------------|----------------|---------------|---------------------|--------------------|-------------------------------|--------------------------|
| Golden-crowned Kinglet | <i>Regulus satrapa</i>        | S5B            | G5            | x                   |                    |                               |                          |
| Veery                  | <i>Catharus fuscescens</i>    | S4B            | G5            | x                   |                    |                               |                          |
| American Robin         | <i>Turdus migratorius</i>     | S5B            | G5            | x                   |                    |                               |                          |
| European Starling      | <i>Sturnus vulgaris</i>       | SNA            | G5            | x                   | x                  | Winter Raptor Survey (Golder) |                          |
| Song Sparrow           | <i>Melospiza melodia</i>      | S5B            | G5            |                     | x                  | Winter Raptor Survey          |                          |
| White-throated Sparrow | <i>Zonotrichia albicollis</i> | S5B            | G5            | x                   | x                  | Winter Raptor Survey (Golder) |                          |
| Dark-eyed Junco        | <i>Junco hyemalis</i>         | S5B            | G5            | x                   | x                  | Winter Raptor Survey (Golder) |                          |
| Northern Cardinal      | <i>Cardinalis cardinalis</i>  | S5             | G5            | x                   | x                  | Winter Raptor Survey (Golder) |                          |
| Bobolink               | <i>Dolichonyx oryzivorus</i>  | S4B            | G5            |                     | x                  | Anuran Incidentals (Golder)   |                          |
| Red-winged Blackbird   | <i>Agelaius phoeniceus</i>    | S5             | G5            |                     | x                  | Anuran Incidentals (Golder)   |                          |
| Rusty Blackbird        | <i>Euphagus carolinus</i>     | S4B            | G5            | x                   |                    | During migration; 1-Nov-2011  |                          |
| American Goldfinch     | <i>Carduelis tristis</i>      | S5B            | G5            | x                   | x                  | Winter Raptor Survey (Golder) |                          |

**SUNCOR ENERGY ADELAIDE WIND POWER PROJECT**

2011 Incidental Wildlife List (Stan&Golder)

**MAMMALS**

|                   |                               |    |    |   |   |  |
|-------------------|-------------------------------|----|----|---|---|--|
| Grey Squirrel     | <i>Sciurus carolinensis</i>   | S5 | G5 | x |   |  |
| Beaver            | <i>Castor canadensis</i>      | S5 | G5 | x |   | Lodge with fresh sticks                        |
| Raccoon           | <i>Procyon lotor</i>          | S5 | G5 |   | x | Anuran Incidentals (Golder)                    |
| White-tailed Deer | <i>Odocoileus virginianus</i> | S5 | G5 | x | x | Deer bed observed; Anuran Incidentals (Golder) |

**SUMMARY**

Total Amphibians: 3  
 Total Reptiles: 0  
 Total Birds: 37  
 Total Breeding Birds: Unknown  
 Total Mammals: 4

**SIGNIFICANT SPECIES**

Global:  
 National:  
 Provincial:  
 Regional:  
 Local:

**Explanation of Status and Acronyms**

COSSARO: Committee on the Status of Species at Risk in Ontario  
 COSEWIC: Committee on the Status of Endangered Wildlife in Canada  
 REGION: Rare in a Site Region  
 S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)  
 S2: Imperiled—Imperiled in the province, very few populations (often 20 or fewer),  
 S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)  
 S4: Apparently Secure—Uncommon but not rare  
 S5: Secure—Common, widespread, and abundant in the province  
 SX: Presumed extirpated  
 SH: Possibly Extirpated (Historical)  
 SNR: Unranked  
 SU: Unrankable—Currently unrankable due to lack of information

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### SUNCOR ENERGY ADELAIDE WIND POWER PROJECT

#### 2011 Incidental Wildlife List (Stan&Golder)

SNA: Not applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

S#S#: Range Rank—A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species

S#B- Breeding status rank

S#N- Non Breeding status rank

?: Indicates uncertainty in the assigned rank

G1: Extremely rare globally; usually fewer than 5 occurrences in the overall range

G1G2: Extremely rare to very rare globally

G2: Very rare globally; usually between 5-10 occurrences in the overall range

G2G3: Very rare to uncommon globally

G3: Rare to uncommon globally; usually between 20-100 occurrences

G3G4: Rare to common globally

G4: Common globally; usually more than 100 occurrences in the overall range

G4G5: Common to very common globally

G5: Very common globally; demonstrably secure

T: Denotes that the rank applies to a subspecies or variety

Q: Denotes that the taxonomic status of the species, subspecies, or variety is **questionable**.

END: Endangered

THR: Threatened

SC: Special Concern

2, 3 or NS after a COSEWIC ranking indicates the species is either on Schedule 2, Schedule 3 or No Schedule of the Species At Risk Act (SARA)

NAR: Not At Risk

IND: Indeterminant, insufficient information to assign status

DD: Data Deficient

6: Rare in Site Region 6

7: Rare in Site Region 7

Area: Minimum patch size for area-sensitive species (ha)

H- highly significant in Hamilton Region (i.e. rare)

m- moderately significant in Hamilton Region (i.e. uncommon)

L1- extremely rare locally (Toronto Region)

L2- very rare locally (Toronto Region)

L3- rare to uncommon locally (Toronto Region)

HR- rare in Halton Region, highly significant

HU- uncommon in Halton Region, moderately significant

\* The Pileated Woodpecker will incorporate smaller woodlots into its homerange, therefore it may not be a true area-sensitive species (Naylor et al. 1996)

#### LATEST STATUS UPDATE

Butterflies: December 2011

Amphibians: March 2012

**SUNCOR ENERGY ADELAIDE WIND POWER PROJECT**

2011 Incidental Wildlife List (Stan&Golder)

Reptiles: December 2011

Birds: March 2012

Mammals: March 2012

S and G ranks and explanations: December 2011

**NOTE**

All rankings for birds refer to breeding birds unless the ranking is followed by N

**REFERENCES**

**COSSARO Status**

Endangered Species Act, 2007 (Bill 184). Schedules 1- 5. June 30 2008.

**COSEWIC Status**

COSEWIC. 2007. Canadian Species at Risk. Committee on the Status of Endangered Wildlife in Canada. September 11, 2007 with updates from COSEWIC Assessments to November 2010

**Local Status**

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2011 Incidental Wildlife List

| COMMON NAME                      | SCIENTIFIC NAME                 | ONTARIO STATUS | GLOBAL STATUS | COSSARO | COSEWIC | AREA SENSITIVITY (ha) | ECO REGION (OWES) | Local Status PIF Priority Species (BCR 13) | COMMENTS  | Area Sensitive Reference | Feature 1 | Feature 7 | Feature 9 | Feature 11 | Feature 14 | Feature 20 | Feature 23 | Feature 25 |   |
|----------------------------------|---------------------------------|----------------|---------------|---------|---------|-----------------------|-------------------|--|---|--------------------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|---|
|                                  |                                 |                |               |         |         |                       |                   |  | All observations were made during ELC surveys in November, 2011         |                          |           |           |           |            |            |            |            |            |   |
| <b>AMPHIBIANS</b>                |                                 |                |               |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            |   |
| Western Chorus Frog (carolinian) | <i>Pseudacris triseriata</i>    | S4             | G5            | NAR     | NAR     |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            | X |
|                                  |                                 |                |               |         |         |                       |                   |  |   |                          | X         |           |           |            |            |            |            |            | X |
| <b>BIRDS</b>                     |                                 |                |               |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            |   |
|                                  |                                 |                |               |         |         |                       |                   |  |   |                          | X         |           |           |            |            |            |            |            | X |
| Tundra Swan                      | <i>Cygnus colombianus</i>       | S4             | G5            |         |         |                       |                   |  | 25 flew overhead; above blade height; migration; November 10, 2011      |                          |           |           |           |            |            |            |            |            |   |
| Bald Eagle                       | <i>Haliaeetus leucocephalus</i> | S2B,S4N        | G4            | SC      | NAR     |                       |                   | X  | Flew over farm field associated with Turbine 1 (Feature 7); 27-Oct-2011 |                          |           |           |           |            |            |            |            |            |   |
| Northern Harrier                 | <i>Circus cyaneus</i>           | S4B            | G5            | NAR     | NAR     | 55                    |                   | X  | Flew over farm field associated with Feature 13                         | Sandlands 2005           |           |           |           |            |            |            |            |            |   |
| Red-tailed Hawk                  | <i>Buteo jamaicensis</i>        | S5             | G5            | NAR     | NAR     |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            |   |
| Golden Eagle                     | <i>Aquila chrysaetos</i>        | S2B            | G5            | END     | NAR     |                       |                   |  | Migrating observation 11/8/2011   |                          |           |           |           | X          |            |            |            |            |   |
| Mourning Dove                    | <i>Zenaidura macroura</i>       | S5             | G5            |         |         |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            |   |
| Red-bellied Woodpecker           | <i>Melanerpes carolinus</i>     | S4             | G5            |         |         |                       |                   |  |   |                          | X         |           |           | X          |            |            | X          | X          |   |
| Downy Woodpecker                 | <i>Picoides pubescens</i>       | S5             | G5            |         |         |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            | X |
| Hairy Woodpecker                 | <i>Picoides villosus</i>        | S5             | G5            |         |         | 10                    |                   |  |   |                          |           |           |           |            |            |            |            |            | X |
| Northern Flicker                 | <i>Colaptes auratus</i>         | S4B            | G5            |         |         |                       |                   | X  |   |                          |           |           | X         |            |            |            |            |            | X |
| Pileated Woodpecker              | <i>Dryocopus pileatus</i>       | S5             | G5            |         |         | 30-50*                |                   |  |   | Naylor et al., 1996      | X         |           |           |            |            |            |            |            |   |
| Blue Jay                         | <i>Cyanocitta cristata</i>      | S5             | G5            |         |         |                       |                   |  |   |                          |           |           |           |            |            | X          | X          |            |   |
| Horned Lark                      | <i>Eremophila alpestris</i>     | S5B            | G5            |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            |   |
| Black-capped Chickadee           | <i>Poecile atricapillus</i>     | S5             | G5            |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            | X |
| Golden-crowned Kinglet           | <i>Regulus satrapa</i>          | S5B            | G5            |         |         | 0                     | 7                 |  |   |                          |           |           |           |            |            |            |            |            | X |
| Veery                            | <i>Catharus fuscescens</i>      | S4B            | G5            |         |         | 10-20                 |                   |  |   |                          |           |           |           |            |            |            |            |            | X |
| American Robin                   | <i>Turdus migratorius</i>       | S5B            | G5            |         |         |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            |   |
| European Starling                | <i>Sturnus vulgaris</i>         | SNA            | G5            |         |         |                       |                   |  |   |                          |           |           |           | X          |            |            |            |            |   |
| White-throated Sparrow           | <i>Zonotrichia albicollis</i>   | S5B            | G5            |         |         | 20                    |                   |  |   |                          |           |           |           | X          | X          |            |            |            |   |
| Dark-eyed Junco                  | <i>Junco hyemalis</i>           | S5B            | G5            |         |         |                       | 7                 |  |   |                          | X         |           |           | X          |            |            |            |            |   |
| Northern Cardinal                | <i>Cardinalis cardinalis</i>    | S5             | G5            |         |         |                       |                   |  |   |                          | X         |           |           |            |            |            |            |            |   |
| Rusty Blackbird                  | <i>Euphagus carolinus</i>       | S4B            | G5            |         | SC      |                       | 6                 |  | Feature 23: during migration; 1-Nov-2011                                |                          |           |           |           |            |            |            |            | X          |   |
| American Goldfinch               | <i>Carduelis tristis</i>        | S5B            | G5            |         |         |                       |                   |  |   |                          | X         |           |           | X          |            |            |            |            |   |
|                                  |                                 |                |               |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            | X |
| <b>MAMMALS</b>                   |                                 |                |               |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            |   |
| Grey Squirrel                    | <i>Sciurus carolinensis</i>     | S5             | G5            |         |         |                       |                   |  |   |                          |           |           |           |            |            |            |            |            | X |



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|-------------------|-------------------------------|----------------|---------------|---------|---------|-----------------------|-------------------|--|-------------------------|--------------------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|--|
| Beaver            | <i>Castor canadensis</i>      | S5             | G5            |         |         |                       |                   |  | Lodge with fresh sticks |                          |           |           |           | X          |            |            |            |            |  |
| White-tailed Deer | <i>Odocoileus virginianus</i> | S5             | G5            |         |         |                       |                   |  | Deer bed observed       |                          |           |           |           |            | X          |            |            |            |  |
|                   |                               |                |               |         |         |                       |                   |  |                         |                          |           |           |           |            |            |            |            |            |  |
|                   |                               |                |               |         |         |                       |                   |  |                         |                          |           |           |           |            |            |            |            |            |  |
| <b>SUMMARY</b>    |                               |                |               |         |         |                       |                   |  |                         |                          |           |           |           |            |            |            |            |            |  |

Total Butterflies: 0  
 Total Amphibians: 1  
 Total Reptiles: 0  
 Total Birds: 23  
 Total Breeding Birds: Unknown  
 Total Mammals: 4

**SIGNIFICANT SPECIES**

Global: 0  
 National: 1  
 Provincial: 2  
 Regional: 0  
 Local: 0

**Explanation of Status and Acronyms**

COSSARO: Committee on the Status of Species at Risk in Ontario  
 COSEWIC: Committee on the Status of Endangered Wildlife in Canada  
 REGION: Rare in a Site Region  
 S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)  
 S2: Imperiled—Imperiled in the province, very few populations (often 20 or fewer),  
 S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)  
 S4: Apparently Secure—Uncommon but not rare  
 S5: Secure—Common, widespread, and abundant in the province  
 SX: Presumed extirpated  
 SH: Possibly Extirpated (Historical)  
 SNR: Unranked  
 SU: Unrankable—Currently unrankable due to lack of information  
 SNA: Not applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
 S#S#: Range Rank—A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species  
 S#B- Breeding status rank  
 S#N- Non Breeding status rank

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2011 Incidental Wildlife List

?: Indicates uncertainty in the assigned rank

G1: Extremely rare globally; usually fewer than 5 occurrences in the overall range

G1G2: Extremely rare to very rare globally

G2: Very rare globally; usually between 5-10 occurrences in the overall range

G2G3: Very rare to uncommon globally

G3: Rare to uncommon globally; usually between 20-100 occurrences

G3G4: Rare to common globally

G4: Common globally; usually more than 100 occurrences in the overall range

G4G5: Common to very common globally

G5: Very common globally; demonstrably secure

GU: Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.

T: Denotes that the rank applies to a subspecies or variety

Q: Denotes that the taxonomic status of the species, subspecies, or variety is **questionable**.

END: Endangered

THR: Threatened

SC: Special Concern

2, 3 or NS after a COSEWIC ranking indicates the species is either on Schedule 2, Schedule 3 or No Schedule of the Species At Risk Act (SARA)

NAR: Not At Risk

IND: Indeterminant, insufficient information to assign status

DD: Data Deficient

6: Rare in Site Region 6

7: Rare in Site Region 7

Area: Minimum patch size for area-sensitive species (ha)

H- highly significant in Hamilton Region (i.e. rare)

m- moderately significant in Hamilton Region (i.e. uncommon)

L1- extremely rare locally (Toronto Region)

L2- very rare locally (Toronto Region)

L3- rare to uncommon locally (Toronto Region)

HR- rare in Halton Region, highly significant

HU- uncommon in Halton Region, moderately significant

\* The Pileated Woodpecker will incorporate smaller woodlots into its homerange, therefore it may not be a true area-sensitive species (Naylor et al. 1996)

**LATEST STATUS UPDATE**

Butterflies: December 2011

Amphibians: December 2011

Reptiles: December 2011

Birds: December 2011

Mammals: December 2011

S and G ranks and explanations: December 2011

**NOTE**

All rankings for birds refer to breeding birds unless the ranking is followed by N

**REFERENCES**

**COSSARO Status**

Endangered Species Act, 2007 (Bill 184). Schedules 1- 5. June 30 2008.

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**COSEWIC Status**

COSEWIC. 2007. Canadian Species at Risk. Committee on the Status of Endangered Wildlife in Canada. September 11, 2007 with updates from COSEWIC Assessments to November 2010

**Local Status**

Dwyer, Jill K. 2003. Nature Counts Project Hamilton Natural Areas Inventory 2003. Species Checklists. Hamilton Naturalists Club.

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