

Appendix D Habitat Assessment



D.1 Species at Risk



Appendix D.1 Species at Risk Habitat Assessment

Scientific Name ¹	Common Name ¹	S-Rank ²	SARO ³	COSEWIC ⁴	SARA ⁵	Source(s)	Habitat Description	Likelihood of Occurrence (Nil, Low, Medium, High, or Confirmed)	
								Subject Property	Study Area
PLANTS									
<i>Fraxinus nigra</i>	Black Ash	S4	END	THR	UC	Tree Atlas	Black Ash is predominantly a wetland species found in swamps, floodplains, and fens. Approximately 25% of the global range of Black Ash occurs in Ontario (COSEWIC 2018).	Low – although suitable habitat for Black Ash was observed in swamp communities within the Subject Property, no Black Ash trees were observed during the field investigations.	Low – although suitable habitat for Black Ash was observed in swamp communities within the Study Area, no Black Ash trees were observed during the field investigations.
FISHES									
<i>Acipenser fulvescens</i> pop. 3	Lake Sturgeon (Great Lakes - Upper St. Lawrence River population)	S2	END	THR	Not Listed	GEO, NHIC	Lake Sturgeon are typically associated with large lakes and rivers. They are found at depths ranging between 5-10 m but are consistently found in deeper waters in other areas of their range. Spawning sites are typically in fast flowing waters up to 5m in depth over either hardpan clay, sand, gravel, rubble, cobble or boulders and are typically found beneath obstructions (i.e., dams) or restrictions (e.g., rapids) within a system (COSEWIC 2006).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	High – multiple records in Lake Superior. Lake Superior may provide suitable habitat for Lake Sturgeon within the Study Area. No targeted fish community surveys were completed as part of the field program.
<i>Coregonus reighardi</i>	Shortnose Cisco	SH	END	END	END	DFO	Shortnose Cisco lives in clear, cold-water environments year-round and was collected in depths ranging from 22m to 110m. Nothing else is known about this species’ habitat preferences (COSEWIC 2005).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Nil – Lake Superior and its tributaries occur outside of known distribution of this species.
<i>Coregonus zenithicus</i>	Shortjaw Cisco	S2	THR	THR	Not Listed	GEO	In Lake Superior, Shortjaw Cisco generally inhabit waters between 55 to 183 m in depth (COSEWIC 2003).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Medium – recent records in Lake Superior. Lake Superior may provide suitable habitat for Shortjaw Cisco within the Study Area; however, this species prefers deeper waters. No targeted fish community surveys were completed as part of the field program.
BIRDS									
<i>Antrostomus vociferus</i>	Eastern Whip-poor-will	S4B	THR	SC	THR	COSEWIC 2009	Eastern Whip-poor-wills nest in forest habitat at the early stages of succession, forest edges with dense tree cover, rock or sand barrens with scattered trees, savannahs, old burns, and conifer plantations. Individuals forage for aerial insects at night over open habitat (e.g., wetlands, agricultural fields, meadows) (COSEWIC 2009, ECCC 2018).	Low – Although suitable nesting habitat for Eastern Whip-poor-will was observed within the Subject Property, no Eastern Whip-poor-will were recorded during targeted surveys.	Low – Although suitable nesting habitat for Eastern Whip-poor-will was observed within the Study Area, no Eastern Whip-poor-will were recorded during targeted surveys.



Scientific Name ¹	Common Name ¹	S-Rank ²	SARO ³	COSEWIC ⁴	SARA ⁵	Source(s)	Habitat Description	Likelihood of Occurrence (Nil, Low, Medium, High, or Confirmed)	
								Subject Property	Study Area
<i>Cardellina canadensis</i>	Canada Warbler	S5B	SC	SC	THR	OBBA	Canada Warblers nest in wet forest habitat with a well-developed shrub layer and are generally observed in shrubby marshes, conifer swamps, riparian woodlands, and regenerating forest (i.e., 6-30 years post-disturbance). Preferred habitats have abundant shrubs and groundcover, perch trees, and low canopy height near standing water or streams (COSEWIC 2020).	Confirmed – Canada Warbler were recorded in 2023 and 2025 in the mixed wood (B108) community within the Subject Property (Figure 3, Appendix A). Suitable nesting habitat for Canada Warbler was observed within the Subject Property in the B108.	Confirmed – Canada Warbler was recorded within the Subject Property. Mixed wood communities (B108) provide suitable nesting habitat for Canada Warbler on Adjacent Lands.
<i>Dolichonyx oryzivorus</i>	Bobolink	S4B	THR	THR	THR	NHIC, OBBA	Bobolink is a grassland obligate species that nests in a variety of open grassland habitats in Ontario including pastures, savannahs, alvar grasslands, and hayfields. They are mostly found in agricultural habitats (i.e., hayfields, pastures, fallow cropfields) in Ontario due to the loss of native grassland habitats. Sites with a higher ratio of grasses to forbs, abundant litter cover, and moderately dense vegetation cover with a low proportion of woody vegetation (e.g., shrubs, trees) are preferred for breeding (COSEWIC 2010).	Nil – no Bobolink were observed during the 2023 and 2025 surveys and there is no suitable nesting habitat present.	Nil – no Bobolink were observed during the 2023 and 2025 surveys and there is no suitable nesting habitat present.
<i>Hirundo rustica</i>	Barn Swallow	S4B	SC	SC	THR	OBBA	Barn Swallows are aerial insectivorous birds that have adapted to human altered landscapes and preferentially nest on/in anthropogenic structures. Before European settlement, Barn Swallows used caves, holes, crevices, and rocky cliff faces for nesting. Now, Barn Swallow nest in barns, garages, sheds, buildings with overhanging ledges, and under bridges and culverts (COSEWIC 2011).	Nil – no Barn Swallow were observed during the 2023 and 2025 surveys and there is no suitable nesting habitat present.	Nil – no Barn Swallow were observed during the 2023 and 2025 surveys and there is no suitable nesting habitat present.
MAMMALS									
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	S4	END	END	UC	AMO	Silver-haired Bats are aerial insectivores that are most closely associated with coniferous, mixed coniferous and deciduous forests, especially in old growth forests. They form maternity colonies almost exclusively in tree cavities or small hollows. Silver-haired bats are migratory and fly south for the winter to avoid sub-zero temperatures (COSEWIC 2023).	Confirmed – Silver-haired Bat calls were recorded during the bat acoustic survey community within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	Confirmed – Silver-haired Bat calls were recorded the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Study Area may provide suitable maternity/ summer roosting habitat for bats.
<i>Lasiurus borealis</i>	Eastern Red Bat	S4	END	END	UC	AMO	Eastern Red Bats are aerial insectivores that roost in the foliage of deciduous or sometimes evergreen trees. They are migratory and fly south for the winter to avoid sub-zero temperatures (COSEWIC 2023).	Confirmed – Eastern Red Bats were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	Confirmed – Eastern Red Bat calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Study Area may provide suitable maternity/ summer roosting habitat for bats.
<i>Lasiurus cinereus</i>	Hoary Bat	S4	END	END	UC	AMO	Hoary Bats are aerial insectivores that roost solitarily in tree foliage and prefer maple, oak, ash, elder, and hemlock. They are migratory and fly south for the winter to avoid sub-zero temperatures (COSEWIC 2023).	Confirmed – Hoary Bat calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	Confirmed – Hoary Bat calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Study Area may provide suitable maternity/ summer roosting habitat for bats.



Scientific Name ¹	Common Name ¹	S-Rank ²	SARO ³	COSEWIC ⁴	SARA ⁵	Source(s)	Habitat Description	Likelihood of Occurrence (Nil, Low, Medium, High, or Confirmed)	
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<i>Myotis leibii</i>	Eastern Small-footed Myotis	S2S3	END	No Status	No Status	AMO	Eastern Small-footed Myotis are aerial insectivores that can be found in a variety of habitats including forests, in rocky habitats, near waterbodies and wetlands, and in urban areas. Maternity roost sites occur in cracks and crevices in rock faces, cliffs, and rock barrens, and less commonly in buildings (attics, abandoned buildings, barns). Overwintering habitat includes caves and abandoned mines (Humphrey 2017).	High – potential Eastern Small-footed Myotis (<i>Myotis sp.</i>) calls were recorded during the bat acoustic survey community within the Subject Property. Large mature trees with peeling bark/ and or cavities and rock crevices/cracks within the Subject Property may provide suitable maternity/ summer roosting habitat for Eastern Small-footed Myotis.	High – potential Eastern Small-footed Myotis (<i>Myotis sp.</i>) calls were recorded the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities and rock crevices/cracks within the Study Area may provide suitable maternity/ summer roosting habitat for Eastern Small-footed Myotis.
<i>Myotis lucifugus</i>	Little Brown Myotis	S3	END	END	END	AMO	Little Brown Myotis is an aerial insectivore that can be found in a variety of habitats including forests, hay fields, pastures, near waterbodies, and in urban areas. Maternity roost sites occur in buildings (attics, abandoned buildings, barns), rock crevices, exfoliating tree bark, and cavities and crevices in trees. Overwintering habitat includes caves and abandoned mines (Humphrey 2019).	Confirmed – Little Brown Myotis calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	Confirmed – Little Brown Myotis calls were recorded the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Study Area may provide suitable maternity/ summer roosting habitat for bats.
<i>Myotis septentrionalis</i>	Northern Myotis	S3	END	END	END	AMO	Northern Myotis are aerial insectivores that will also glean prey. Northern Myotis are commonly found in forests and adjacent fields. Maternity roost sites occur in mature trees with loose bark or cavities, and rarely in buildings. Overwinter in caves and mines (Humphrey 2019).	High – potential Northern Myotis (<i>Myotis sp.</i>) calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities and rock crevices/cracks within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	High – potential Northern Myotis (<i>Myotis sp.</i>) calls were recorded the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities and rock crevices/cracks within the Study Area may provide suitable maternity/ summer roosting habitat for bats.
<i>Perimyotis subflavus</i>	Tri-colored Bat	S3?	END	END	END	AMO	Tri-colored Bats are aerial insectivores that can be found in a variety of forested habitats. Maternity roost sites occur in older forests with live or dead leaf clusters and occasionally in buildings. This species is strongly associated with forest watercourses and streamside vegetation. Overwinter in caves and mines (Humphrey 2019).	High – potential Tri-colored Bat calls were recorded during the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Subject Property may provide suitable maternity/ summer roosting habitat for bats.	High – potential Tri-colored Bat calls were recorded the bat acoustic survey within the Subject Property. Large mature trees with peeling bark/ and or cavities within the Study Area may provide suitable maternity/ summer roosting habitat for bats.
<i>Rangifer tarandus pop. 14</i>	Caribou (Boreal population)	S4	THR	THR	THR	NHIC	Boreal Caribou occupy coniferous forests to alpine tundra. In summer, they frequent open or semi-open habitat where forbs and sedges are available. Forested habitats of Boreal Caribou are typically conifer dominant (Spruce, Pine) with lichen-rich mature and old coniferous forest in a matrix with one or more of alpine/subalpine, subarctic (taiga), peatlands, or lakeshore (COSEWIC 2002b).	Nil – no suitable foraging habitat for Boreal Caribou present within the Subject Property; no evidence of the species present. The Subject Property lacks lichen-rich mature and old coniferous forests.	Nil – no suitable foraging habitat for Boreal Caribou present within the Subject Property; no evidence of the species present.. The Study Area lacks lichen-rich mature and old coniferous forests.
<i>Urocyon cinereoargenteus</i>	Gray Fox	S2	THR	THR	THR	AMO	Gray Foxes are considered habitat generalists and are partially tolerant of human disturbances. Gray Fox are closely associated with deciduous forest. Den sites occur in a variety of substrates and are typically located in dense brush close to a water source (COSEWIC 2015).	Low – the Subject Property may provide suitable denning habitat for Gray Fox; however, no Gray Foxes or dens were observed within the Subject Property during targeted wildlife surveys.	Low – the Subject Property may provide suitable denning habitat for Gray Fox; however, no Gray Foxes or dens were observed within the Study Area during targeted wildlife surveys.



Notes:

- ¹**Scientific Name** and **Common Name:** The scientific name, and English common name of a species as published by the Natural Heritage Information Centre hosted by the Ministry of Natural Resources.
- ²**S-Rank:** Subnational Rank is the conservation status of a species within a particular province, territory, or state. In this scenario, it is the provincial level ranking system as published by the Natural Heritage Information Centre hosted by hosted by the Ministry of Natural Resources / Land Information Ontario.
- ³**SARO Status:** Species at Risk in Ontario (Provincial Status as defined by the *Endangered Species Act, 2007* as amended).
- ⁴**COSEWIC Status:** Status as defined by the Committee on the Status of Endangered Wildlife in Canada.
- ⁵**SARA Status:** Federal status as defined by the *Species at Risk Act*.

References:

AMO: Dobbyn, J.S. 1994. Atlas of the Mammals of Ontario (AMO). Federation of Ontario Naturalists, Don Mills, Ontario, 120 pp.

COSEWIC 2002. COSEWIC assessment and update status report on the woodland caribou Rangifer tarandus caribou in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 98 pp.

COSEWIC 2003. COSEWIC assessment and update status report on the shortjaw cisco Coregonus zenithicus. Committee on the Status of Endangered Wildlife in Canada. Ottawa. viii + 19 pp.

COSEWIC 2005. COSEWIC assessment and update status report on the shortnose cisco Coregonus reighardi in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 14 pp.

COSEWIC 2006. COSEWIC assessment and update status report on the lake sturgeon Acipenser fulvescens in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 107 pp.

COSEWIC. 2008. COSEWIC assessment and update status report on the Lake Chubsucker Erimyzon sucetta in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 29 pp.

COSEWIC. 2009. COSEWIC assessment and status report on the Whip-poor-will Caprimulgus vociferus in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 28 pp.

COSEWIC. 2010. COSEWIC assessment and status report on the Bobolink Dolichonyx oryzivorus in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 43 pp.

COSEWIC. 2011. COSEWIC assessment and status report on the Barn Swallow Hirundo rustica in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 37 pp.

COSEWIC. 2012. COSEWIC assessment and status report on the American Eel Anguilla rostrata in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 109 pp.

COSEWIC. 2013. COSEWIC assessment and status report on the Pugnose Shiner Notropis anogenus in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 32 pp.

COSEWIC. 2015. COSEWIC assessment and status report on the Gray Fox Urocyon cinereoargenteus in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 54 pp.

COSEWIC. 2018. COSEWIC assessment and status report on the Black Ash Fraxinus nigra in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 95 pp.

COSEWIC. 2020. IN PRESS. COSEWIC assessment and status report on the Canada Warbler Cardellina canadensis in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 54 pp.

COSEWIC. 2023. COSEWIC assessment and status report on the Hoary Bat Lasiurus cinereus, Eastern Red Bat Lasiurus borealis and Silver-haired Bat, Lasionycteris noctivagans, in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxi + 100 pp.

DFO: Fisheries and Oceans Canada. 2025. Aquatic Species at Risk Map. Accessed July 2025, from Fisheries and Oceans Canada: <https://www.dfo-mpo.gc.ca/species-especies/sara-lep/map-carte/index-eng.html>

ECCC. 2018. Recovery Strategy for the Eastern Whip-poor-will (Antrostomus vociferus) in Canada. Species at Risk Act Recovery Strategy Series. Environment and Climate Change Canada, Ottawa. vi + 107 pp.

GOE: Geospatial Ontario On-line Natural Heritage Mapping and Natural Heritage Information Database. Retrieved July 2025 from: <https://geohub.lio.gov.on.ca/documents/10685ba12bcc48f1a45525fd8d67e1ba/about>

Humphrey C, Fotherby H. 2019. Recovery Strategy for the Little Brown Myotis (Myotis lucifugus), Northern Myotis (Myotis septentrionalis) and Tri-colored Bat (Perimyotis subflavus) in Ontario. Ontario Recovery Strategy Series. Prepared by the Ministry of the Environment, Conservation and Parks, Peterborough, Ontario. vii + 35 pp. + Appendix. Adoption of the Recovery Strategy for the Little Brown Myotis (Myotis lucifugus), the Northern Myotis (Myotis septentrionalis), and the Tri-colored Bat (Perimyotis subflavus) in Canada (Environment and Climate Change Canada 2018).

Humphrey, C. 2017. Recovery Strategy for the Eastern Small-footed Myotis (Myotis leibii) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. vii + 76 pp.

MECP. 2025. Tree Atlas. Accessed July 2025. <https://www.ontario.ca/page/tree-atlas>.

NHIC: Ministry of Natural Resources (MNR). 2025. Natural Heritage Information Centre (NHIC) database. Make a Map: Natural Heritage Areas. Accessed July 2025. https://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

OBBA: Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier. 2007. *The Atlas of the Breeding Birds of Ontario* [OBBA], 2001-2005. Bird Studies Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, Ontario Nature. Toronto, Ontario.

Endangered Species Act and Species at Risk Act Acronyms

- END:** Endangered
- THR:** Threatened
- SC:** Special Concern
- NAR:** Not at Risk
- UC:** Under Consideration for Addition and/or Status Change under Schedule 1 of SARA



Subnational Rankings (S RANK)

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

?: Indicates uncertainty in the assigned rank

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

B: Breeding: Conservation status refers to the breeding population of the species in the nation or state/province

N: Non-breeding: Conservation status refers to the non-breeding population of the species in the nation or state/province

M: Migrant: Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province



D.2 Species of Conservation Concern



Appendix D.2 Species of Conservation Concern Habitat Assessment

Scientific Name ¹	Common Name ¹	S-Rank ²	SARO ³	COSEWIC ⁴	SARA ⁵	Source(s)	Habitat Description	Likelihood of Occurrence (Nil, Low, Medium, High, or Confirmed)	
								Subject Property	Study Area
PLANTS									
<i>Pseudocyphellaria holarctica</i>	Yellow Specklebelly Lichen	S1?	Not Listed	No Status	Not Listed	iNaturalist	Yellow Specklebelly Lichen occurs in moist, shady, and often foggy habitats, with varied substrates that include (mossy rocks and a variety of trees) in mature hardwood and conifer forests.	Medium – no Yellow Specklebelly Lichen were observed within the Subject Property; however, suitable habitat for this species in the form of mossy rocks and trees is present within the Subject Property. Targeted lichen surveys were not part of the field program.	Medium – suitable habitat for Yellow Specklebelly Lichen may be present in forested communities on Adjacent Lands.
INSECTS									
<i>Danaus plexippus</i>	Monarch	S2N,S4B	SC	END	END	iNaturalist, OBA	Adult Monarchs feed on nectar from wildflowers in a variety of habitats, while larvae are confined to meadows and open areas with Milkweed (Asclepiadaceae sp.) plants (COSEWIC 2016a).	Medium – nectaring habitat (wildflowers) for Monarch is available throughout the Subject Property. No breeding habitat (Milkweed) was observed within the Subject Property. Transient adults may use patches of wildflowers within the Subject Property as nectaring habitat. Targeted insect surveys were not part of the field program.	Medium – nectaring habitat (wildflowers) for Monarch is available throughout the Study Area. Transient adults may use patches of wildflowers within the Study Area as nectaring habitat.
FISHES									
<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	S3	SC	SC	Not Listed	GEO	Northern Brook Lamprey spawn in riffle sections of rivers and streams with rocky or gravel substrate. Larvae drift downstream and burrow into soft sand or silt substrate; they prefer shallow areas with warm water. Adults over-winter in soft substrate before congregating in spawning habitat (COSEWIC 2007).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Low – recent records in Lake Superior tributaries; however, no watercourses within the Study Area. No targeted fish community surveys were completed as part of the field program.
<i>Ichthyomyzon unicuspis</i> pop. 1	Silver Lamprey (Great Lakes - Upper St. Lawrence populations)	S3	SC	SC	SC	GEO	Silver Lamprey spawn in riffle sections of rivers and streams with gravel and sand substrate. Larvae drift downstream to calmer waters with sand, silt and/or organic debris substrate and construct shallow burrows. After 4-7 years, the larvae metamorphose, emerge from their burrows and migrate downstream to a large river or lake with clear water where they parasitize many different host fish species (COSEWIC 2011).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Low – recent records in Lake Superior tributaries; however, no watercourses within the Study Area. No targeted fish community surveys were completed as part of the field program.
<i>Lethenteron appendix</i>	American Brook Lamprey	S3	Not Listed	No Status	Not Listed	GEO	American Brook Lamprey prefers cool, often spring-fed streams, ranging from small to medium size with clear water. Stream beds are sometimes made up of sand or small-sized gravel.	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Low – recent records in Lake Superior tributaries; however, no watercourses within the Study Area. No targeted fish community surveys were completed as part of the field program.
<i>Prosopium coulterii</i> pop. 5	Pygmy Whitefish, Great Lakes - Upper St. Lawrence populations	SU	Not Listed	THR	UC	GEO	Pygmy Whitefish typically inhabits cold, deep, boreal and montane lakes of low productivity typically at depths greater than 30 m, but has been located at depths <5 m and as great as 168 m (COSEWIC 2016b).	Nil – there are no watercourses or waterbodies within the Subject Property boundary.	Medium – recent records in Lake Superior. Lake Superior may provide suitable habitat for Pygmy Whitefish within the Study Area. No targeted fish community surveys were completed as part of the field program.



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								Subject Property	Study Area
HERPTILES									
<i>Chelydra serpentina</i>	Snapping Turtle	S4	SC	SC	SC	ORRA	Snapping Turtle inhabit a wide range of wetland habitats including ponds, sloughs, streams, rivers, and shallow bays that are characterized by slow moving water, soft bottoms, and dense aquatic vegetation. Adults will use streams to move between waterbodies especially during the mating season. Nesting sites are in open habitat with sandy or gravelly substrate and are often found in road shoulders (COSEWIC 2008).	Medium – there are multiple records in Lake Superior. Turtles may use the Subject Property for basking and travel. No turtles were observed incidentally during 2023 or 2025 field surveys, but turtle basking or nesting surveys were not completed.	High – there are multiple records in records in Lake Superior. There is potential for turtles to overwinter in Lake Superior. Turtles may also use Adjacent Lands for basking and travel.
BIRDS									
<i>Chordeiles minor</i>	Common Nighthawk	S4B	SC	SC	SC	COSEWIC 2018a	Common Nighthawks breed in a wide variety of open habitats where bare ground is available for nesting. Nesting habitat includes clear cuts, burns, rock outcrops, rocky areas, sandy costal habitats, and flat gravel rooftops. Nests are built on the ground in well-drained areas near shade (COSEWIC 2018a).	Confirmed – Common Nighthawk was recorded during surveys in 2023 at one ARU location in the mixed wood (B108) community within the Subject Property but was not detected in 2025 (Figure 3, Appendix A). Suitable nesting habitat for Common Nighthawk was observed within the Subject Property in the B108 community.	Confirmed – Common Nighthawk was recorded within the Subject Property. Mixed wood communities (B108) may provide suitable nesting habitat for Common Nighthawk on Adjacent Lands.
<i>Coccothraustes vespertinus</i>	Evening Grosbeak	S4	SC	SC	SC	OBBA	Evening Grosbeak breeding habitat contains large mature tree with a high proportion of fir, spruce, and aspen and an open canopy. Numbers and breeding density are closely linked to availability of spruce budworm, a primary prey species during the breeding season (COSEWIC 2016c).	Nil – although mixed forested communities may provide suitable nesting habitat for Evening Grosbeak within the Subject Property; no Evening Grosbeak were observed during the 2023 or 2025 targeted surveys.	Nil – although mixed forested communities may provide suitable nesting habitat for Evening Grosbeak within the Study Area; no Evening Grosbeak were observed during the 2023 or 2025 targeted surveys.
<i>Contopus cooperi</i>	Olive-sided Flycatcher	S4B	SC	SC	SC	OBBA	Olive-sided Flycatcher are associated with edges of coniferous or mixed forests with tall trees and snags near wet areas (e.g., rivers, muskeg, bogs, swamps), burned forest, and open areas (COESWIC 2018b).	Nil – although mixed forested communities may provide suitable nesting habitat for Olive-sided Flycatcher within the Subject Property; no Olive-sided Flycatchers were observed during the 2023 or 2025 targeted surveys.	Nil – although mixed forested communities may provide suitable nesting habitat for Olive-sided Flycatcher within the Study Area; no Olive-sided Flycatchers were observed during the 2023 or 2025 targeted surveys.
<i>Contopus virens</i>	Eastern Wood-pewee	S4B	SC	SC	SC	OBBA	Eastern Wood-pewee are found in the mid-canopy layer of deciduous and mixed wood forests with open understories and are commonly associated with edges and clearings. Forest size does not seem to be a critical factor in habitat selection; however, breeding numbers decrease with increasing development in surrounding habitat. (COSEWIC 2012).	Nil – although forested communities may provide suitable nesting habitat for Eastern Wood-pewee within the Subject Property; no Eastern Wood-pewee were observed during the 2023 or 2025 targeted surveys.	Nil – although forested communities may provide suitable nesting habitat for Eastern Wood-pewee within the Study Area; no Eastern Wood-pewee were observed during the 2023 or 2025 targeted surveys.
<i>Sturnella neglecta</i>	Western Meadowlark	S1B	Not Listed	No Status	Not Listed	NHIC	Western Meadowlarks occupy open grasslands, prairies, meadows, and some agricultural fields.	Nil – No Western Meadowlark and no suitable habitat for Western Meadowlark were observed during the 2023 or 2025 targeted surveys.	Nil – No Western Meadowlark and no suitable habitat for Western Meadowlark were observed during the 2023 or 2025 targeted surveys.



Notes:

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- ⁵**SARA Status:** Federal status as defined by the *Species at Risk Act*.

References:

COSEWIC. 2003. COSEWIC assessment and update status report on the fourhorn sculpin *Myoxocephalus quadricornis* (freshwater form) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa.

COSEWIC. 2007. COSEWIC assessment and update status report on the northern brook lamprey *Ichthyomyzon fossor* (Great Lakes – Upper St. Lawrence populations and Saskatchewan – Nelson population) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 30 pp.

COSEWIC. 2008. COSEWIC assessment and status report on the Snapping Turtle *Chelydra serpentina* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 47 pp.

COSEWIC. 2011. COSEWIC assessment and status report on the Silver Lamprey, Great Lakes – Upper St. Lawrence populations and Saskatchewan – Nelson Rivers populations *Ichthyomyzon unicuspis* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 55 pp.

COSEWIC. 2012. COSEWIC assessment and status report on the Eastern Wood-pewee *Contopus virens* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 39 pp.

COSEWIC. 2016a. COSEWIC assessment and status report on the Monarch *Danaus plexippus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 59 pp.

COSEWIC. 2016b. COSEWIC assessment and status report on the Pygmy Whitefish *Prosopium coulterii*, Southwestern Yukon Beringian populations, Yukon River populations, Pacific populations, Western Arctic populations, Great Lakes – Upper St. Lawrence populations, Waterton Lake populations and Saskatchewan - Nelson Rivers populations in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxxvi + 69 pp.

COSEWIC. 2016c. COSEWIC assessment and status report on the Evening Grosbeak *Coccothraustes vespertinus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 64 pp.

COSEWIC. 2018a. COSEWIC assessment and status report on the Common Nighthawk *Chordeiles minor* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 50 pp. COSEWIC. 2020a. COSEWIC assessment and status report on the Northern Brook Lamprey *Ichthyomyzon fossor* (Great Lakes - Upper St. Lawrence populations and Saskatchewan - Nelson River populations) and the Silver Lamprey *Ichthyomyzon unicuspis* (Great Lakes - Upper St. Lawrence populations, Saskatchewan - Nelson River populations and Southern Hudson Bay - James Bay populations) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 156 pp.

COSEWIC. 2018b. COSEWIC assessment and status report on the Olive-sided Flycatcher *Contopus cooperi* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 52 pp. eBird: ebird Canada. 2023. Ottawa- Retrieved September 2023 from GeoOn: Geospatial Ontario On-line Natural Heritage Mapping and Natural Heritage Information Database. Retrieved July 2025 from: <https://geohub.lio.gov.on.ca/documents/10685ba12bcc48f1a45525fd8d67e1ba/about>

iNaturalist: iNaturalist. 2023. “Homepage”. Accessed July 2025. <https://www.inaturalist.org/home>.

NHIC: Ministry of Natural Resources (MNR). 2025. Natural Heritage Information Centre (NHIC) database. Make a Map: Natural Heritage Areas. Retrieved July 2025 from: https://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

OBA: Ontario Butterfly Atlas (OBA) database review as published by the Toronto Entomologists’ Association (TEA). Retrieved July 2025 from <https://www.ontarioinsects.org/atlas/>

OBBA: Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier. 2007. *The Atlas of the Breeding Birds of Ontario* [OBBA], 2001-2005. Bird Studies Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, Ontario Nature. Toronto, Ontario.

ORAA: Ontario Nature. 2020. Ontario Reptile and Amphibian Atlas Program (ORAA). Retrieved July 2025 from http://www.ontarionature.org/protect/species/herpetofaunal_atlas.php.

Endangered Species Act and Species at Risk Act Acronyms

- END:** Endangered
- THR:** Threatened
- SC:** Special Concern
- NAR:** Not at Risk
- UC:** Under Consideration for Addition and/or Status Change under Schedule 1 of SARA

Subnational Rankings (S RANK)

- 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



Appendix E Fish Records

