

Species at Risk Conservation Fund: Species Conservation Charge Formulas and Costing (Proposed)

Supplementary materials to accompany
Environmental Registry of Ontario Notice Number 019-2636

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Ministry of the Environment, Conservation and Parks



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Résumé de l'annexe

Le présent document a été élaboré par le ministère de l'Environnement, de la Protection de la nature et des Parcs afin de fournir des renseignements supplémentaires sur la proposition de règlement 019-2636 figurant au Registre environnemental de l'Ontario.

Une description détaillée des formules et des coûts proposés pour le calcul des redevances pour la conservation des espèces à verser au Fonds pour la conservation des espèces en péril est présentée dans le présent document pour chacune des espèces proposées ciblées par le fonds de conservation. Les renseignements sur le coût de la composante fondée sur les biens-fonds des redevances pour la conservation des espèces, le cas échéant, sont également fournis dans une annexe au présent document.

Cette publication hautement spécialisée « Species at Risk Conservation Fund: Species Conservation Charge Formulas and Costing (Proposed) » n'est disponible qu'en anglais conformément au Règlement 671/92, selon lequel il n'est pas obligatoire de la traduire en vertu de la Loi sur les services en français. Pour obtenir des renseignements en français, veuillez communiquer avec le ministère de l'Environnement, de la Protection de la nature et des Parcs au ESAREg@ontario.ca.

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Introduction

This document was developed by the Ministry of the Environment, Conservation and Parks (MECP) to provide supplementary information for regulation proposal number 019-2636 on the Environmental Registry of Ontario:

019-2636: A proposal under the *Endangered Species Act* to enable use of the Species at Risk Conservation Fund and to streamline authorizations for certain activities that impact species at risk, while maintaining protections for species at risk.

Recent changes to the *Endangered Species Act* (ESA) allow for the use of a new option by proponents that are authorized to undertake activities that impact species at risk: instead of completing beneficial actions for species impacted by those activities, proponents will have the option of choosing to pay a species conservation charge to an Agency – the Species at Risk Conservation Trust – in relation to certain eligible species (the conservation fund species).

Proponents who choose to use the species conservation charges option would still be required to take action to avoid and minimize impacts on species at risk and their habitats, as required by law. Funds collected by the Agency would be invested in strategic, large-scale and coordinated protection and recovery actions that would support positive outcomes for the conservation fund species.

Proposed formulas and costing for calculating a species conservation charge

The proposed formulas and costing for calculating the species conservation charge payable into the Species at Risk Conservation Fund are presented in this document for each of the proposed conservation fund species. The Ministry intends to update the costing periodically to ensure the species conservation charge remains appropriate over time.

Information about the cost of land component of a species conservation charge, where required, is provided in Appendix A of this document.

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Barn Swallow

The species conservation charge for an activity that will impact Barn Swallow (*Hirundo rustica*) is proposed to be calculated based on:

- whether impacts will be to unoccupied nests only or to unoccupied nests and their structures
- the number of nests to be impacted
- the charge components listed in Table 1.

This species conservation charge was developed with consideration of requirements of the conditional exemption for Barn Swallow under section 23.5 of O. Reg. 242/08. For this reason, the charge option is proposed to be made available only where nests are unoccupied.

Proposed formulas:

For impacts to nests only:

$$\text{Species conservation charge} = [(N1 * C1_{\text{variable}}) + M1_{\text{fixed}} * IF] * A_{\text{variable}}$$

For impacts to nests and associated nest structures:

$$\text{Species conservation charge} = [(N2 * (C2_{\text{variable}} * IF) * BR) + (M2_{\text{fixed}} * IF)] * A_{\text{variable}} + [(N2 * CL_{\text{variable}} * BR) + CL_{\text{fixed}}]$$

Table 1: Index of variables for Barn Swallow charge formulas

Component	Variable	Description	Proposed amount/rate
Impact	N1	Number of nests to be impacted (N1 is used when impact is to nests <u>only</u>)	Number to be determined based on impact of activity
Impact	N2	Number of nests to be impacted (N2 is used when impact is to nests <u>and</u> associated nest structures)	Number to be determined based on impact of activity
Beneficial Action	C1 _{variable}	Cost to purchase and install one nest cup and monitor it for three years	\$250 per nest cup
Beneficial Action	M1 _{fixed}	Fixed cost per authorization ¹ to monitor nest cups for three years	\$3,300 per authorization

¹ The M1_{fixed} and M2_{fixed} costs are site-level monitoring and maintenance costs that would be incurred regardless of how many nest cups are required. Costs that would vary depending on an activity's required number of nest cups are represented by C1_{variable} and C2_{variable}.

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Component	Variable	Description	Proposed amount/rate
Beneficial Action	C2 _{variable}	Cost per nest cup to create a structure with nest cups and maintain and monitor the structure for three years	\$350 per nest cup
Beneficial Action	M2 _{fixed}	Fixed cost per authorization ¹ to maintain the structure in a condition that would provide suitable habitat for the species and monitor for three years	\$4,050 per authorization
Benefit Ratio	BR	Standard benefit ratio: for every unit of habitat to be impacted, 1.5 units are to benefit (1:1.5)	1.5
Cost of Land	CL _{variable}	Cost of land ² per nest including variable administrative costs (applicable only if the activity will impact nests and their associated structures) To be calculated as the cost of land per hectare at location of activity including variable administrative costs, divided by 10,000 m ² and multiplied by 78 (based on the area of land required for each nest, which is proposed to be 78 m ² per nest, consistent with the Category 2 habitat outlined in the Barn Swallow General Habitat Description)	See Appendix A for the proposed land costs by municipality or territorial district
Cost of Land	CL _{fixed}	Fixed administrative costs associated with acquiring land (applicable only if the activity will impact nests and their associated structures)	See Appendix A for the proposed administrative costs by municipality or territorial district

² Land value derived from Municipal Property Assessment Corporation data.

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Component	Variable	Description	Proposed amount/rate
Inflation	IF	Inflation factor ³ MECP to calculate annually, using the formula: $[1 + (I^A - I^B) / I^B]$, where: I^A = CPI in the calendar year prior to the date that the charge is being calculated; and I^B = CPI in calendar year that charge was established in regulation	Timing dependant; annual inflation factor to be published on Ontario.ca
Administration	$A_{variable}$	Cost of administration that would have otherwise incurred from carrying out beneficial actions is 10 percent	1.10

³ Based on Statistics Canada's Consumer Price Index (CPI) for Ontario (All-Items) (Table 18-10-0005-01).

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Bobolink and Eastern Meadowlark

The species conservation charge for an activity that will impact Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) is proposed to be calculated based on the number of hectares of habitat to be impacted and the charge components listed in Table 2.

<p>Proposed formula:</p> <p>Species conservation charge =</p> $[(N * (C1_{variable} * IF) * BR) + (C2_{fixed} * IF)] * A_{variable} + [(N * CL_{variable} * BR) + CL_{fixed}]$

Table 2: Index of variables in Bobolink/Eastern Meadowlark charge formula

Component	Variable	Description	Proposed amount/rate
Impact	N	Number of hectares of habitat to be impacted	Number to be determined based on impact of activity
Beneficial Action	C1 _{variable}	Cost per hectare to establish habitat, plus maintain and monitor for five years	\$9,750 per hectare
Beneficial Action	C2 _{fixed}	Fixed cost per authorization ⁴ to maintain and monitor habitat for five years	\$8,500 per authorization
Benefit Ratio	BR	Standard benefit ratio: for every unit of habitat to be impacted, 1.5 units are to benefit (1:1.5)	1.5
Cost of Land	CL _{variable}	Cost of land ⁵ per hectare at location of activity including variable administrative costs	See Appendix A for the proposed land costs by municipality or territorial district
Cost of Land	CL _{fixed}	Fixed administrative costs associated with acquiring land	See Appendix A for the proposed administrative costs by municipality or territorial district

⁴ C2_{fixed} is the site-level monitoring and maintenance costs that would be incurred regardless of how many hectares are required. Costs that would vary depending on an activity's required number of hectares are represented by C1_{variable}.

⁵ Land value derived from Municipal Property Assessment Corporation data.

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Component	Variable	Description	Proposed amount/rate
Inflation	IF	Inflation factor ⁶ MECP to calculate annually, using the formula: $[1 + (I^A - I^B) / I^B]$, where: I ^A = CPI in the calendar year prior to the date that the charge is being calculated; and I ^B = CPI in calendar year that charge was established in regulation	Timing dependant; annual inflation factor to be published on Ontario.ca
Administration	A _{variable}	Cost of administration that would have otherwise incurred from carrying out beneficial actions is 10 percent	1.10

⁶ Based on Statistics Canada's Consumer Price Index (CPI) for Ontario (All-Items) (Table 18-10-0005-01).

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Blanding's Turtle (populations occurring within the Canadian Shield physiographic region)

The species conservation charge for an activity that will impact Blanding's Turtle (*Emydoidea blandingii*) (populations occurring within the Canadian Shield physiographic region) is calculated based on the number of hectares of habitat to be impacted and the charge components listed in Table 3.

Proposed formula:

$$\text{Species conservation charge} = [(N_{\text{cat1-2}} * (C1_{\text{variable}} * \text{IF}) * \text{BR}) + (C2_{\text{fixed}} * \text{IF})] * A_{\text{variable}} + [(N_{\text{cat1-2}} * CL_{\text{variable}} * \text{BR}) + CL_{\text{fixed}}] + [(N_{\text{cat3}} * CL_{\text{variable}} * \text{BR}) + CL_{\text{fixed}}]$$

Table 3: Index of variables in Blanding's Turtle charge formula

Component	Variable	Description	Proposed amount/rate
Impact	N _{cat1-2}	Number of hectares of Category 1 or 2 habitat to be impacted by activity	Number to be determined based on impact of activity
Impact	N _{cat3}	Number of hectares of Category 3 habitat to be impacted by activity	Number to be determined based on impact of activity
Beneficial Action	C1 _{variable}	Cost per hectare to establish habitat, plus maintain for five years and monitor for three years	\$225,500 per hectare
Beneficial Action	C2 _{fixed}	Fixed cost per authorization ⁷ to maintain habitat for five years and monitor for three years	\$7,100 per authorization
Benefit Ratio	BR	Standard benefit ratio; for every unit of habitat to be impacted, 1.5 units are to benefit (1:1.5)	1.5
Cost of Land	CL _{variable}	Cost of land ⁸ per hectare at location of activity including variable administrative costs	See Appendix A for the proposed land costs by municipality or territorial district

⁷ C2_{fixed} is the site-level monitoring and maintenance costs that would be incurred regardless of how many hectares are required. Costs that would vary depending on an activity's required number of hectares are represented by C1_{variable}.

⁸ Land value derived from Municipal Property Assessment Corporation data.

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Component	Variable	Description	Proposed amount/rate
Cost of Land	CL _{fixed}	Fixed administrative costs associated with acquiring land	See Appendix A for the proposed administrative costs by municipality or territorial district
Inflation	IF	Inflation factor ⁹ MECP to calculate annually, using the formula: $[1 + (I^A - I^B) / I^B]$, where: I ^A = CPI in the calendar year prior to the date that the charge is being calculated; and I ^B = CPI in calendar year that charge was established in regulation	Timing dependant; annual inflation factor to be published on Ontario.ca
Administration	A _{variable}	Cost of administration that would have otherwise incurred from carrying out beneficial actions is 10 percent	1.10

⁹ Based on Statistics Canada's Consumer Price Index (CPI) for Ontario (All-Items) (Table 18-10-0005-01).

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Component	Variable	Description	Proposed amount/rate
Impact	N _{cat2C}	Number of large Category 2 trees to be harmed	Number to be determined based on impact of activity
Impact	N _{cat2D}	Number of small Category 2 trees to be killed/taken	Number to be determined based on impact of activity
Impact	N _{cat2E}	Number of medium Category 2 trees to be killed/taken	Number to be determined based on impact of activity
Impact	N _{cat2F}	Number of large Category 2 trees to be killed/taken	Number to be determined based on impact of activity
Impact	N _{cat3}	Number of Category 3 trees to be impacted	Number to be determined based on impact of activity
Impact	N _{habitat}	Number of hectares of habitat impacted	Number to be determined based on impact of activity
Beneficial Action	C1 _{variable}	Cost per seedling to be planted, including tending and monitoring for five years	\$850 per seedling
Beneficial Action	C2 _{variable}	Cost per Category 3 tree impacted by the activity	\$20,000 per tree
Benefit Ratio	BR _{cat2A}	Standard benefit ratio for harming small Category 2 trees; for every tree to be impacted, 1 seedling to be planted (1:1)	1
Benefit Ratio	BR _{cat2B}	Standard benefit ratio for harming medium Category 2 trees; for every tree to be impacted, 3 seedlings to be planted (1:3)	3
Benefit Ratio	BR _{cat2C}	Standard benefit ratio for harming large Category 2 trees; for every tree to be impacted, 10 seedlings to be planted (1:10)	10

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Component	Variable	Description	Proposed amount/rate
Benefit Ratio	BR _{cat2D}	Standard benefit ratio for killing or taking small Category 2 trees; for every tree to be impacted, 2 seedlings to be planted (1:2)	2
Benefit Ratio	BR _{cat2E}	Standard benefit ratio for killing or taking medium Category 2 trees; for every tree to be impacted, 5 seedlings to be planted (1:5)	5
Benefit Ratio	BR _{cat2F}	Standard benefit ratio for killing or taking large Category 2 trees; for every tree to be impacted, 20 seedlings to be planted (1:20)	20
Benefit Ratio	BR _{cat3}	Standard benefit ratio for impacting Category 3 trees; for every tree to be impacted, there is to be a benefit of 1.5 (1:1.5)	1.5
Benefit Ratio	BR _{habitat}	Benefit ratio for impacts to the habitat ¹⁰ that require authorization; for every hectare of habitat impacted, 17 seedlings to be planted (1:17)	17
Cost of Land	CL _{variable}	Cost of land per seedling including variable administrative costs To be calculated as cost of land ¹¹ per hectare at location of activity including variable administrative costs, divided by 200 (based on planting density of 200 seedlings per hectare as outlined in s. 23.7, O. Reg. 242/08)	See Appendix A for the proposed land costs by municipality or territorial district
Cost of Land	CL _{fixed}	Fixed administrative costs associated with acquiring land	See Appendix A for the proposed administrative costs by municipality or territorial district

¹⁰ The general habitat of a Butternut tree is defined as a 50 m (0.8 ha) buffer around the tree.

¹¹ Land value derived from Municipal Property Assessment Corporation data.

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Component	Variable	Description	Proposed amount/rate
Inflation	IF	Inflation factor ¹² MECP to calculate annually, using the formula: $[1 + (I^A - I^B) / I^B]$, where: I ^A = CPI in the calendar year prior to the date that the charge is being calculated; and I ^B = CPI in calendar year that charge was established in regulation	Timing dependant; annual inflation factor to be published on Ontario.ca
Administration	A _{variable}	Cost of administration that would have otherwise incurred from carrying out beneficial actions is 10 percent	1.10

¹² Based on Statistics Canada's Consumer Price Index (CPI) for Ontario (All-Items) (Table 18-10-0005-01).

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Eastern Whip-poor-will

The species conservation charge for an activity that will impact Eastern Whip-poor-will (*Antrostomus vociferus*) is calculated based on the number of hectares of habitat to be impacted and the charge components listed in Table 5.

<p>Proposed formula:</p> <p>Species conservation charge =</p> $[(N * (C1_{variable} * IF) * BR) + (C2_{fixed} * IF)] * A_{variable} + [(N * CL_{variable} * BR) + CL_{fixed}]$

Table 5: Index of variables in Eastern Whip-poor-will charge formula

Component	Variable	Description	Proposed amount/rate
Impact	N	Number of hectares of habitat impacted	Number to be determined based on impact of activity
Beneficial Action	C1 _{variable}	Cost per hectare to establish habitat, plus maintain and monitor for 5 years	\$10,900 per hectare
Beneficial Action	C2 _{fixed}	Fixed cost per authorization ¹³ to maintain and monitor habitat for 5 years	\$8,500 per authorization
Benefit Ratio	BR	For every unit of habitat to be impacted, 1.5 units are to benefit (1:1.5)	1.5
Land Value	CL _{variable}	Cost of land ¹⁴ per hectare at location of activity including variable administrative costs	See Appendix A for the proposed land costs by municipality or territorial district
Cost of Land	CL _{fixed}	Fixed administrative costs associated with acquiring land	See Appendix A for the proposed administrative costs by municipality or territorial district

¹³ C2_{fixed} is the site-level monitoring and maintenance costs that would be incurred regardless of how many hectares are required. Costs that would vary depending on an activity's required number of hectares are represented by C1_{variable}.

¹⁴ Land value derived from Municipal Property Assessment Corporation data.

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Component	Variable	Description	Proposed amount/rate
Inflation	IF	Inflation factor ¹⁵ MECP to calculate annually, using the formula: $[1 + (I^A - I^B) / I^B]$, where: I ^A = CPI in the calendar year prior to the date that the charge is being calculated; and I ^B = CPI in calendar year that charge was established in regulation	Timing dependant; annual inflation factor to be published on Ontario.ca
Administration	A _{variable}	Cost of administration that would have otherwise incurred from carrying out beneficial actions is 10 percent	1.10

¹⁵ Based on Statistics Canada's Consumer Price Index (CPI) for Ontario (All-Items) (Table 18-10-0005-01).

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Appendix A: Cost of land component of species conservation charge

The cost of land component of the charge would be based on the location of the proposed activity for which the proponent has an ESA authorization. Cost of land is a component of the species conservation charge only when costs associated with acquiring or repurposing land to provide habitat could have otherwise been incurred by a proponent as part of their ESA authorization.

The proposed land costs in the table below are derived from property assessment values obtained by the Ministry of the Environment, Conservation and Parks from the Municipal Property Assessment Corporation (MPAC), and also include administrative costs associated with acquiring and owning land. The variable land cost represents the value per hectare for certain property types (e.g., farm or managed forest), excluding the value of any infrastructure on the property (e.g., house or barn), and reflects variable administrative costs (e.g., provincial land transfer tax and property taxes). The fixed land cost includes administrative costs such as those related to property title (e.g., search, registration, and insurance) and legal fees. The costs proposed for the City of Toronto also reflect the municipal land transfer tax and associated administration fee to which that municipality is subject.

The proposed land costs are listed by municipality or territorial district. Where an activity extends into more than one municipality or territorial district, it may be necessary to calculate the species conservation charge separately for each area.

The Ministry intends to update these land costs periodically to ensure the value of the species conservation charge remains appropriate over time.

Table 6: Proposed cost of land by municipality or territorial district

Municipality or Territorial District	Land Cost: Variable (\$/ha)	Land Cost: Fixed (\$)
Algoma, District of	\$1,375	\$1,400
Barrie, City of	\$15,250	\$1,400
Belleville, City of	\$3,500	\$1,400
Brant, County of	\$19,250	\$1,400
Brantford, City of	\$19,250	\$1,400
Brockville, City of	\$3,500	\$1,400
Bruce, County of	\$6,875	\$1,400
Chatham-Kent, Municipality of	\$12,250	\$1,400
Cochrane, District of	\$750	\$1,400
Cornwall, City of	\$5,375	\$1,400
Dufferin, County of	\$16,250	\$1,400
Durham, Regional Municipality of	\$24,125	\$1,400
Elgin, County of	\$10,000	\$1,400
Essex, County of	\$16,250	\$1,400

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Municipality or Territorial District	Land Cost: Variable (\$/ha)	Land Cost: Fixed (\$)
Frontenac, County of	\$2,625	\$1,400
Gananoque, Town of	\$3,500	\$1,400
Greater Sudbury, City of	\$2,500	\$1,400
Grey, County of	\$8,250	\$1,400
Guelph, City of	\$20,750	\$1,400
Haldimand County	\$11,250	\$1,400
Haliburton, County of	\$2,750	\$1,400
Halton, Regional Municipality of	\$40,750	\$1,400
Hamilton, City of	\$24,250	\$1,400
Hastings, County of	\$3,500	\$1,400
Huron, County of	\$19,500	\$1,400
Kawartha Lakes, City of	\$5,500	\$1,400
Kenora, District of	\$750	\$1,400
Kingston, City of	\$2,625	\$1,400
Lambton, County of	\$16,250	\$1,400
Lanark, County of	\$3,000	\$1,400
Leeds And Grenville, United Counties of	\$3,500	\$1,400
Lennox And Addington, County of	\$2,875	\$1,400
London, City of	\$12,750	\$1,400
Manitoulin, District of	\$2,125	\$1,400
Middlesex, County of	\$12,750	\$1,400
Muskoka, District Municipality of	\$3,250	\$1,400
Niagara, Regional Municipality of	\$17,250	\$1,400
Nipissing, District of	\$1,625	\$1,400
Norfolk County	\$11,250	\$1,400
Northumberland, County of	\$7,750	\$1,400
Orillia, City of	\$15,250	\$1,400
Ottawa, City of	\$9,000	\$1,400
Oxford, County of	\$22,125	\$1,400
Parry Sound, District of	\$2,125	\$1,400
Peel, Regional Municipality of	\$48,375	\$1,400
Pelee, Township of	\$16,250	\$1,400
Pembroke, City of	\$2,875	\$1,400
Perth, County of	\$26,750	\$1,400
Peterborough, City of	\$4,750	\$1,400
Peterborough, County of	\$4,750	\$1,400
Prescott And Russell, United Counties of	\$8,750	\$1,400
Prescott, Town of	\$3,500	\$1,400
Prince Edward County, County of	\$5,125	\$1,400

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Municipality or Territorial District	Land Cost: Variable (\$/ha)	Land Cost: Fixed (\$)
Quinte West, City of	\$3,500	\$1,400
Rainy River, District of	\$375	\$1,400
Renfrew, County of	\$2,875	\$1,400
Simcoe, County of	\$15,250	\$1,400
Smiths Falls, Town of	\$3,000	\$1,400
St. Marys, Town of	\$26,750	\$1,400
St. Thomas, City of	\$10,000	\$1,400
Stormont, Dundas And Glengarry, United Counties of	\$5,375	\$1,400
Stratford, City of	\$26,750	\$1,400
Sudbury, District of	\$2,000	\$1,400
Thunder Bay, District of	\$2,125	\$1,400
Timiskaming, District of	\$2,250	\$1,400
Toronto, City of	\$41,250	\$1,500
Waterloo, Regional Municipality of	\$32,500	\$1,400
Wellington, County of	\$20,750	\$1,400
Windsor, City of	\$16,250	\$1,400
York, Regional Municipality of	\$45,500	\$1,400