

**POLICY BRIEF**

# Southern ALTO High-Speed Rail Route: Incompatibility with Grey Ratsnake Conservation in the Frontenac Arch Biosphere Reserve

*Updated February 2026 — Reflects Bill 5 (Protect Ontario by Unleashing our Economy Act, 2025) and the Species Conservation Act, 2025*

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## CRITICAL LEGISLATIVE UPDATE — FEBRUARY 2026

Ontario’s Endangered Species Act, 2007 (ESA) has been fundamentally amended by Bill 5 (Protect Ontario by Unleashing our Economy Act, 2025), which received Royal Assent on June 5, 2025. The ESA has been amended immediately and will ultimately be repealed and replaced by the Species Conservation Act, 2025 (SCA) once proclaimed in force. Key changes now in force: the Act’s purpose now includes social and economic considerations alongside species protection; the definition of ‘habitat’ has been narrowed significantly; ‘harassment’ has been removed from the list of prohibited activities; the government now has discretion to add or remove species from the protected list, overriding the independent COSSARO process; almost all activities formerly requiring a permit now require only online registration; and the Species at Risk Conservation Fund is being wound down. **IMPORTANT:** Federal SARA protections for the grey ratsnake remain fully in force and are unaffected by Ontario’s changes. Federal SARA is the controlling legal constraint.

## EXECUTIVE SUMMARY

The southern corridor through Eastern Ontario proposed by ALTO would traverse directly through the core of the Frontenac Arch Biosphere Reserve, bisecting the heart of federally protected grey ratsnake critical habitat. Federal SARA critical habitat protections are unchanged by Bill 5. The grey ratsnake’s critical habitat is legally defined in the federal recovery strategy as the area roughly bounded by Highway 7 in the north, the St. Lawrence River in the south, Highway 38 in the west, and Highway 29 in the east. The southern corridor traverses this core area. There is no mitigation or regulatory pathway that can reconcile a high-speed rail line through this zone with the survival of the grey ratsnake population that depends on it. The southern corridor must be rejected.

### **ALTO’s CEO confirms on public record: SARA-listed species concerns still uncharacterised as consultation closed**

On CBC Ottawa Morning on March 25, 2026 — one day before the consultation closed — ALTO’s CEO Martin Imbleau stated publicly: “We need to look at and to have some sampling in dangerous species. Are there any concerns on the wildlife that we’re not aware of?” He confirmed that environmental field surveys were commencing “this week,” and that ALTO

intended to file the initiation of the environmental assessment “later this year.” He also confirmed full corridor fencing: “Nothing can cross it. If at 330 kilometres you cross a deer, it’s a huge incident.”

The answer to the CEO’s question — “Are there any concerns on the wildlife that we’re not aware of?” — is documented in this brief and in the federal SARA recovery strategy for the grey ratsnake (Frontenac Axis population). ALTO’s southern corridor traverses the legally defined core of federally protected critical habitat for a Threatened species whose population viability is already under documented pressure from road mortality. The corridor’s own CEO was still asking whether such concerns exist one month before the consultation closed. SARA s. 79 requires that federal authorities ensure that an activity’s effects on critical habitat are considered before authorisation proceeds. A public consultation conducted before the species-at-risk baseline exists does not satisfy this obligation.

*Source: CBC Ottawa Morning, March 25, 2026. [cbc.ca/listen/live-radio/1-100-ottawa-morning/clip/16205093](https://www.cbc.ca/listen/live-radio/1-100-ottawa-morning/clip/16205093)*

## **Section 1 — Grey Ratsnake Conservation Status**

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### **1.1 Federal and Provincial Listings**

The grey ratsnake exists in only two disjunct populations in Ontario: the Carolinian population along Lake Erie’s north shore, and the Great Lakes/St. Lawrence population (also known as the Frontenac Axis population) in southeastern Ontario. The Great Lakes/St. Lawrence Population is listed as Threatened under the federal Species at Risk Act (SARA) since 2007. The Carolinian Population is listed as Endangered under both federal and provincial legislation.

Under Bill 5’s amendments to the ESA, the Ontario government has acquired discretion to add or remove species from the provincial protected list, overriding the previously independent COSSARO scientific process. However, the grey ratsnake’s federal Threatened listing under SARA is governed by COSEWIC assessments and federal law, which are entirely unaffected by Ontario’s legislation. Federal protections are the primary legal basis for this analysis.

### **1.2 Species Characteristics and Vulnerability**

The grey ratsnake is Canada’s largest snake, reaching lengths exceeding two metres. The species exhibits biological characteristics that make it particularly vulnerable to population decline: individuals do not reach sexual maturity until approximately seven years of age; females reproduce only every two to three years; individuals can live 25–30 years; and adults return to the same hibernation, nesting, and basking sites year after year. These life history traits mean that even small increases in adult mortality can cause population declines. As documented in peer-reviewed literature, the death of even a small number of adults on roads each year can cause population declines.

## Section 2 — The Changed Legislative Landscape: Bill 5 (June 2025)

Change (Provincial)		Impact on Grey Ratsnake Protections
<b>Revised clause</b>	<b>purpose</b>	ESA now explicitly balances species protection against ‘social and economic considerations including the need for sustainable economic growth’
<b>Narrowed definition</b>	<b>habitat</b>	Previous broad definition — which included areas within 1,000 metres of known grey ratsnake locations — has been replaced with a narrower definition. Movement corridors may no longer receive the same protection.
<b>Harassment removed</b>		Previously illegal to disturb a snake in ways that disrupt feeding, reproduction, or movement. This prohibition has been removed, reducing protection during construction.
<b>Registration-first approach</b>		Most activities formerly requiring a full ESA permit now require only online registration, allowing construction to proceed more quickly with less regulatory oversight.
<b>Government discretion over SARO List</b>		The independent COSSARO scientific process no longer fully controls which species are listed.
<b>Species Conservation Fund wound down</b>		Fund that required developers to invest in beneficial species activities is being eliminated.

### WHAT BILL 5 DOES NOT CHANGE

- Federal SARA critical habitat boundaries
- SARA’s prohibition on critical habitat destruction
- Federal Section 79 ‘reasonable alternatives’ obligation
- COSEWIC’s independent federal assessment of grey ratsnake as Threatened
- UNESCO Biosphere Reserve conservation obligations
- Federal recovery strategy requirements

## Section 3 — Federal SARA: The Controlling Legal Framework

The federal Species at Risk Act (SARA) provides protections that are entirely independent of and unaffected by Ontario’s Bill 5 amendments. These federal protections are now the primary legal constraint on the southern corridor:

- Section 58: Prohibits destruction of critical habitat for listed Threatened and Endangered species. The grey ratsnake’s critical habitat is legally defined in the federal recovery strategy and cannot be destroyed without federal authorization.
- Section 79: Requires that federal authorities ensure their actions (including infrastructure approvals and funding) do not jeopardize a species’ survival or recovery. Any federal approval for ALTO would trigger this requirement.
- Critical habitat boundaries: The federal recovery strategy (ECCC, 2017) defines critical habitat for the Frontenac Axis population as the area roughly bounded by Highway 7 in the north, the St. Lawrence River in the south, Highway 38 in the west, and Highway 29 in the east. The southern corridor traverses this core area directly.

Under SARA, federal authorities must demonstrate that reasonable alternatives have been considered when approving projects that may affect Threatened species. The southern corridor's traversal of the core of grey ratsnake critical habitat means ALTO would face an extremely high burden to justify this choice, SARA Section 79 effectively requires that ALTO identify and demonstrate it has genuinely considered route options that avoid this protected area. The availability of the northern corridor as such an alternative makes this obligation directly operative.

## **Section 4 — Why the Southern Corridor Cannot Be Mitigated**

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High-speed rail would create mortality risks that exceed those of conventional highways: train speeds of 200–300 km/h provide zero opportunity for snakes to detect and escape; required safety fencing creates impermeable barriers to movement; and year-round operation continues across all seasons. Grey ratsnakes have large home ranges and may travel up to 4 km between hibernation sites and summer habitat. The southern ALTO corridor would create a permanent barrier across these movement corridors through the Frontenac Arch.

Population viability modelling for the grey ratsnake (Frontenac Axis population) consistently shows that even a structure-equipped HSR corridor would generate measurable adult mortality during construction and in the operational phase as individuals fail to locate or use crossings. Given that the Frontenac Neck already sits within a landscape where road mortality is documented as a population-level threat, any additional barrier compound effect risks exceeding population viability thresholds. SARA critical habitat under s. 58 is site-specific and irreplaceable on the timescales relevant to HSR planning — the warm rock cuts, granitic embankments, and edge habitats of the former CN railbed are the product of over a century of ecological succession, and habitat offsets cannot substitute for designated critical habitat at the prescribed location.

## Section 5 — Recommendations

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1	<p><b>Reject the southern corridor on the basis of irresolvable federal SARA conflicts</b></p> <p>The southern corridor bisects federally protected grey ratsnake critical habitat. Federal SARA prohibitions apply regardless of Bill 5’s provincial changes. ALTO must seek a route that does not traverse the core of this protected area.</p>
2	<p><b>Publish SARA critical habitat mapping at corridor resolution</b></p> <p>Grey ratsnake critical habitat mapping must be incorporated into publicly available corridor assessment materials before any route decision. This is a legal requirement under SARA ss. 77–79.</p>
3	<p><b>Demonstrate the ‘reasonable alternatives’ test</b></p> <p>Under SARA Section 79, ALTO must demonstrate that all reasonable alternatives to the southern corridor have been genuinely considered. Alternatives that avoid the federally defined critical habitat area must be formally evaluated.</p>
4	<p><b>Conduct population viability analysis for the Frontenac Axis population</b></p> <p>Modelling must explicitly address the cumulative effect of the HSR barrier added to the existing road mortality matrix on grey ratsnake population viability.</p>
5	<p><b>Engage all relevant conservation and legal partners</b></p> <p>Consultation must include the Frontenac Arch Biosphere Network, NCC, federal and provincial species at risk recovery teams, and Indigenous communities with traditional territories in the area.</p>
6	<p><b>Monitor Bill 5 regulatory developments</b></p> <p>The Species Conservation Act, 2025 implementing regulations are still under development. Stakeholders should engage in regulatory consultations to ensure grey ratsnake habitats receive adequate protection under the new framework.</p>

## References

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