Federal Court Cour fédérale

Date: 20250314

Docket: T-647-24

Citation: 2025 FC 472

Ottawa, Ontario, March 14, 2025

PRESENT: The Honourable Mr. Justice Zinn

BETWEEN:

KEBAOWEK FIRST NATION, CONCERNED CITIZENS OF RENFREW COUNTY AND AREA, CANADIAN COALITION FOR NUCLEAR RESPONSIBILITY and SIERRA CLUB CANADA

Applicants

and

ATTORNEY GENERAL OF CANADA and CANADIAN NUCLEAR LABORATORIES

Respondents

JUDGMENT AND REASONS

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[1] This is the first time that this Court has been called upon to conduct a substantive review of an administrative decision-maker's interpretation and application of subsection 73(3) of the *Species at Risk Act*, SC 2002, c 29 [the *Act*].

[2] This application for judicial review challenges the decision of the Minister of Environment and Climate Change Canada [the Minister] to issue a permit [Permit] under section 73 of the *Act*. The Permit authorizes Canadian Nuclear Laboratories Ltd. [CNL] to construct and operate a Near Surface Disposal Facility [NSDF] for low-level radioactive waste at

the Chalk River Laboratories property in Ontario [Chalk River Site]. The proposed facility will be located near the critical habitats of three species listed under Schedule 1 of the *Act*: the threatened Blanding's Turtle, the endangered Little Brown Myotis, and the endangered Northern Myotis.

[3] The central issue is the reasonableness of the Minister's decision to issue the Permit, particularly considering the statutory requirements under section 73 of the *Act*.

[4] The Applicants advance six arguments, which may be distilled into three grounds of challenge. First, they argue that the Minister's reasons fail to demonstrate compliance with the mandate of the *Act* to consider "all reasonable alternatives" to the project or to justify why the selected alternative represents the "best solution" for protecting at-risk species. Second, they allege that the decision disregarded contradictory evidence on key issues and provided logically contradictory reasoning, including the efficacy of bat boxes in maintaining safe temperature thresholds, the adequacy of proposed wildlife corridors in mitigating habitat fragmentation, and inconsistencies in the treatment of nests of threatened migratory birds and maternity roosts of endangered bats. Third, they contend that the Minister inadequately assessed risks to the newly listed Monarch Butterfly, and thus unreasonably narrowed the scope of the Permit as required by the *Act*.

[5] The Respondents, CNL and the Attorney General of Canada [AGC], maintain that the decision complies with the statutory requirements under the *Act*. They argue that the activities authorized by the Permit will not jeopardize the recovery of any listed species, that all reasonable alternatives have been considered and the best solution selected, and that all feasible mitigation

and monitoring measures have been implemented. They assert that the Minister properly addressed the contradictions in evidence and reasoning alleged by the Applicants. They further emphasize the deference owed to the Minister's expertise on technical assessments and the extensive record supporting the decision to issue the Permit.

[6] For the following reasons, this application for judicial review will be granted, and the decision set aside.

I. Background

A. *The parties*

[7] The Applicants are Kebaowek First Nation, Concerned Citizens of Renfrew County and Area, Canadian Coalition For Nuclear Responsibility, and Sierra Club Canada. The Kebaowek First Nation is the band government of the Eagle Village First Nation-Kipawa Reserve, located roughly 190 kilometers away from the Chalk River Site. The other Applicants are all incorporated non-profit organizations that focus on safe nuclear energy development, waste disposal, and environmental protection. Their joint position is that the Minister's decision to grant the Permit is unreasonable, as existing measures inadequately protect endangered or threatened species at the Chalk River Site.

[8] The Respondent CNL is a government-owned and contractor-operated research facility in Deep River. CNL manages the Chalk River Site on behalf of the property owner, Atomic Energy of Canada Limited [AECL], and is directly responsible for the proposed construction and operation of the NSDF. Its position is that the issuance of the Permit is reasonable, as shown by the extensive record containing explanatory internal memoranda and scientific assessments.

[9] The Respondent AGC represents the Minister, who oversees Environment and Climate Change Canada [ECCC] and delegates much of the technical and scientific review to ECCC when issuing permits under section 73 of the *Act*. The AGC takes no position on the outcome of this judicial review, but suggests that the Applicants' position is not supported by facts and law.

B. *The Near Surface Disposal Facility project*

[10] The Chalk River Site is a federal Crown property in Renfrew County, Ontario, with a total area over 3,800 hectares consisting of approximately 50 hectares of built-up area, with the rest largely being forest and wetland. For over 70 years, AECL and CNL have generated, and continue to generate, radioactive waste at the Site. Most of the radioactive waste at the Site is classified as low-level radioactive waste, which is characterized by radionuclide content exceeding established clearance levels, limited quantities of long-lived radionuclides, and containment requirements extending up to several hundred years.

[11] To address waste management needs, CNL proposed the construction and operation of the NSDF project on the Chalk River Site. The project can dispose of approximately one million cubic metres of low-level radioactive waste. CNL expects the project to require 37 hectares, less than 1% of the entire Site. Once closed, the project is set to occupy 17 hectares and blend into the landscape as a grassy outcrop.

[12] Activities central to the building and functioning of the NSDF project include vegetation clearing and grubbing, rock blasting, infrastructure development, and increased vehicle traffic for waste transport. As a result, some forested and grassland habitats will be incrementally and

permanently lost during construction. This habitat loss will impact species listed under Schedule 1 of the *Act*.

II. Facts

[13] On March 31, 2017, CNL applied for a permit under section 73 of the *Act* authorizing the incidental harm of any listed species or their residences that might be affected by NSDF construction. As part of its application, CNL submitted reports on site selection, environmental assessment, and project design. CNL provided submissions on the species affected by the project, identifying both directly and indirectly impacted species at risk, as well as other affected wildlife. For directly affected species at risk protected under the *Act*, the materials acknowledged a range of risks associated with the project, including potential critical habitat loss for impacted species, increased road mortality risk for Blanding's Turtles, and the removal of possible maternity roost habitat for endangered bat species.

[14] For the project site selection, CNL initially shortlisted several AECL-owned properties in different provinces. It ultimately narrowed the list down to three locations: Chalk River in Ontario, Whiteshell Laboratories in Manitoba, and the Nuclear Power Demonstration site in Rolphton, Ontario. From a purely ecological perspective, the non-Chalk River locations offered better protection for species at risk. However, CNL decided that the Chalk River Site was the most suitable after weighing at-risk species protection with factors such as cost, proximity, existing infrastructure, and the location of existing waste storage facilities. Within the Chalk River Site, CNL further evaluated two potential sub-areas. The final choice of the East Mattawa Road site [EMR Site] was based on factors such as cost-effectiveness, access to an existing

infrastructure corridor, and the ability to avoid construction in sensitive wetlands. At the EMR Site, approximately 28 hectares of forest or grassland will be cleared for the NSDF.

[15] To minimize the impact of the project on protected species, CNL has proposed multiple mitigation measures. These include exclusion fencing, permanent road signage, and reduced traffic speeds to protect Blanding's Turtles; construction timing restrictions to limit clearing outside the main roosting season of the endangered bat species; installation of bat boxes in alternative forested areas; implementation of a Sustainable Forest Management Plan to preserve remaining habitat at Chalk River; and the creation of wildlife corridors, such as culverts, to facilitate safe passage for the protected turtles and other fauna under roads.

[16] In January 2024, Kebaowek First Nation wrote to the Minister, expressing concerns about the adequacy of mitigation measures proposed for the NSDF project. It specifically highlighted doubts regarding the efficacy of wildlife corridors, noting that engineered turtle tunnels in the area have inadvertently become hunting grounds for wolves, which endangers the turtles listed under the *Act*. They questioned the viability of bat boxes due to risks from temperature fluctuations and noise pollution potentially displacing endangered bat species for years. The letter also voiced broader ecological concerns, including the lack of adequate studies on multiple species listed under the *Act*. It urged the Minister to halt processing CNL's section 73 permit until these issues were addressed through more meaningful consultation and rigorous assessment of species' presence, habitat fidelity, and the project's cumulative effects.

[17] Before the permit was finalized, another species in the NDSF project area, the Monarch Butterfly, *Danaus plexippus*, was uplisted from special concern to endangered on December 8,

2023. While CNL initially conducted a review of potential harms to the Monarch Butterfly as a special concern species in its 2017 permit application, it did not seek a section 73 permit covering the butterfly with its new endangered status.

III. Decisions Below

[18] After seven years of reviews conducted by the ECCC, on March 8, 2024, the Minister issued the Permit under section 73 of the *Act*, authorizing CNL to proceed with the construction and operation of the NSDF at the Chalk River Site. While no formal written reasons accompany this decision, a collection of documents from the extensive decision-making record forms the basis of this judicial review: (1) the Permit, along with the Decision Letter, issued on March 8, 2024; (2) the Decision Memo sent to and approved by the ECCC on March 8, 2024; (3) the Public Notice containing information to be published on the Species at Risk public registry; and (4) the Science Review conducted by ECCC consisting of regional and national reviews conducted between 2021 and 2024. Administrative decision-makers are entitled to adopt the reasoning of subordinate bodies like the ECCC in this case: *Canada (Citizenship and Immigration) v Mason*, 2021 FCA 156 [*Mason*] at para 31; *Sketchley v Canada (Attorney General)*, 2005 FCA 404 at para 37−39. These decision materials collectively constitute the Minister's reasons for the Permit decision.

A. *The Permit and the Decision Letter*

[19] The Permit issued to CNL authorizes incidental harm, harassment, or killing of three species listed under Schedule 1 of the *Act* due to activities linked to constructing the NSDF at the Chalk River Site. The species covered are Blanding's Turtle, *Emydoidea blandingii*, classified as threatened; Little Brown Myotis, *Myotis lucifugus*, classified as endangered; and Northern

Myotis, *Myotis septentrionalis*, classified as endangered. Valid from March 8, 2024, to December 31, 2033, the Permit imposes conditions such as temporary and permanent exclusion fencing, seasonal restrictions on vegetation clearing, awareness training for construction staff, monitoring by a qualified Environmental Specialist, and noise and blasting regulations to minimize disruption to implicated species. To comply, CNL must notify ECCC before major project activities begin, complete daily or weekly inspections for at-risk species, and submit comprehensive reports on any species encounters, road kills, or mitigation actions to the Canadian Wildlife Service–Ontario [CWS-ON]. Some requirements are aimed specifically at the bat species, such as pre-removal surveys to protect roost trees, and some at the turtles, including checking equipment for nesting animals, reorienting lighting away from sensitive habitats, and halting work if any at-risk species, nest, or habitat is discovered, pending guidance from CWS-ON. The Permit also explicitly states that it does not authorize impacts on species other than those named in the document.

[20] The Decision Letter is the Minister's formal notification to CNL of the permit issuance and its legal obligations under the *Act*. It outlines the main rationale for issuing the Permit, CNL's compliance requirements, and the need for amendments to the Permit and relevant conditions when there are future changes, such as updates in the status of Eastern Wolf or other at-risk species. It also guides the implementation of avoidance measures to protect at-risk species that are not covered by the Permit, but could still be affected by permitted activities. These measures are designed to prevent harm to such species when properly followed.

B. *The Decision Memo*

[21] The Decision Memo is an internal recommendation that outlines for the Minister the broader scientific, regulatory, and operational context of the application. It explains that the project was initially subject to an environmental assessment under the *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52 [the *CEAA 2012*], overseen by the Canadian Nuclear Safety Commission. For reviews relating to section 73 of the *Act*, the Memo sets out how CNL, in coordination with ECCC, considered alternative facility designs, site placement, and layout to lessen harm to species at risk. It summarizes key mitigation strategies, including road mortality prevention, seasonal clearance restrictions, and bat roost conservation measures, finding that with these strategies in place, the NSDF will "not jeopardize the survival or recovery" of the listed species. It further acknowledges that Kebaowek First Nation and other Indigenous communities voiced concerns over wildlife corridors and bat box temperature control, but indicates the Canadian Nuclear Safety Commission found the consultation adequate, and that these issues did not impede issuing the Permit. The final recommendation advises the Minister to issue the Permit, concluding that preconditions under the *Act* were met and any adverse effects mitigated.

C. *The Public Notice*

[22] The Public Notice contains mostly the same information as is described above. It states that the Permit authorizes the construction of a NSDF for low-level radioactive waste at Chalk River Laboratories in Ontario. It states that associated activity may result in harm, harassment, or killing of protected species and the destruction of their habitats. It confirms that CNL has demonstrated compliance with regulatory requirements under the *Act*, having considered all

reasonable alternatives and committed to implementing feasible mitigation measures to minimize harm to at-risk species. It provides a concise overview of these measures, including species monitoring, habitat connectivity improvements, seasonal construction restrictions, and protective fencing. Finally, it explains that with the described mitigation efforts in place, the project is not expected to jeopardize the survival or recovery of the affected species.

D. *The Science Review*

[23] The Science Review provides most of the scientific evidence and technical evaluation relating to the decision-making process. It lends support to both the Decision Memo and the Decision Letter on matters of alternative site and design considerations, feasibility of mitigation measures, and the likelihood of species recovery. It provides detailed review of both risks and mitigation strategies. For risks, ECCC's evaluation of ecological harm includes identifying hotspots and road mortality statistics for Blanding's Turtle, analyzing bat roost surveys, and investigating the historical population viability of the protected organisms. For mitigation measures, ECCC examined a wide range of proposed measures and determined that they align with official recovery strategies. The ECCC found the residual risk to the species' survival is low.

[24] The Science Review also provides a thorough in-depth look at potential threats and mitigation responses at a species-by-species level. For the Blanding's Turtle, ECCC identified road mortality, particularly the loss of adult females, as the primary threat. Although the NSDF project may boost construction traffic and habitat fragmentation, ECCC considered the planned installation of permanent fencing, culverts, and wildlife corridors, plus monitoring, to be sufficient to curtail road fatalities and protect the turtle's long-term viability.

[25] For Little Brown Myotis and Northern Myotis, ECCC found the project will result in the clearing of about 28 hectares of forest, which risks displacing bats and removing roosting trees. To mitigate these effects, proposed measures include seasonal restrictions barring tree-felling and high-noise activities, roost surveys identifying and protecting occupied sites, and habitat offset measures supporting roosting habitat. ECCC concluded that adherence to these protocols, along with available surrounding habitat and monitoring, would minimize harm and not jeopardize species survival or recovery.

[26] Overall, the Science Review explains that CNL's studies, such as telemetry studies, roost surveys, and habitat models, are robust enough to facilitate focused and effective mitigation plans. With these measures, the cumulative effects of the NSDF project on the three species are deemed to generate low risk, which is used to reinforce the view that the Permit should be approved.

IV. Issue

[27] The reasonableness of the Minister's decision to issue the Permit is the sole issue before this Court. The Applicants submit that the Minister acted unreasonably in assessing the evidence and interpreting subsection 73(3) of the *Act*. In broad strokes, I will analyze the decision by considering four questions:

1) Whether the Minister unreasonably concluded that "all reasonable alternatives" had been considered under paragraph 73(3)(a) of the *Act*, given the Applicants' claim that many potential site locations and mitigation measures were overlooked or inadequately assessed;

2) Whether the Minister unreasonably determined that, among the shortlisted options, the one selected best reduces the impact on the species pursuant to paragraph 73(3)(a) of the *Act*;

3) Whether the Minister acted unreasonably in determining that the permitted activities and associated mitigation strategies would not jeopardize the survival or recovery of the species expressly covered by the Permit pursuant to paragraphs 73(3)(b) and (c) of the *Act*, specifically in light of alleged contradictory evidence regarding unsuitable bat box temperatures, wildlife corridor risks affecting turtle predation, and alleged inconsistent treatment of residences of threatened bird species; and

4) Whether the Minister's failure to assess the Monarch Butterfly led to an unreasonable determination of the scope of the Permit.

[28] There are also two secondary issues. First, the AGC raises concerns over the Applicants' failure to demonstrate proper standing. Second, the Applicants challenge the admissibility of paragraph 28 of the affidavit of Sarah Wren, the Director of the Species at Risk Implementation Division at ECCC.

V. Standard of Review

[29] For substantive review, I agree with the parties that the Minister's decision to grant permits under section 73 of the *Act* is reviewable on the standard of reasonableness, as articulated by the Supreme Court of Canada in *Canada (Minister of Citizenship and Immigration) v Vavilov*, 2019 SCC 65 [*Vavilov*].

[30] Reasonableness is a deferential, yet robust, standard of review: *Vavilov* at paras 12-13. The court must give considerable deference to the decision-maker, recognizing that this entity is empowered by Parliament and equipped with specialized knowledge and understanding of the "purposes and practical realities of the relevant administrative regime" and "consequences and the operational impact of the decision" that the reviewing court may not be attentive towards: *Vavilov* at para 93. Judicial intervention is warranted only when the flaws or shortcomings are "sufficiently serious… such that [the decision] cannot be said to exhibit the requisite degree of justification, intelligibility and transparency:" *Vavilov* at para 100. Absent exceptional circumstances, reviewing courts must not interfere with the decision maker's factual findings and cannot reweigh and reassess evidence considered by the decision-maker: *Vavilov* at para 125.

[31] Reasonableness review is not a mere "rubber-stamping" process: *Vavilov* at para 13. It is the reviewing court's task to assess whether the decision is one that is based on an internally coherent and rational chain of analysis and that is justified in relation to the facts and law that constrain the decision-maker: *Vavilov* at para 85.

[32] When conducting reasonableness review of decisions involving highly scientific and technical subject matters, courts must pay careful attention to the decision-maker's expertise: *Vavilov* at paras 92 and 93. This expertise warrants judicial deference in the assessment of facts: *Vavilov* at para 125; *Safe Food Matters Inc. v Canada (Attorney General)*, 2023 FC 1471 [*Safe Food Matters*] at para 121; *Dias v. Canada (Attorney General)*, 2018 FCA 126 at para 8. Similarly, deference is also warranted in the interpretation of law, particularly when it pertains to the decision-maker's home statutes: *Safe Food Matters* at paras 8 and 111; *Balogh v Canada (Citizenship and Immigration)*, 2022 FC 447 at para 18. However, as clarified in *Vavilov*, such

expertise must be demonstrated by the decision-makers for the judiciary to afford it deference: *Vavilov* at para 93; *Mason* at para 70.

VI. Legal Framework

[33] Parliament enacted the *Act* to safeguard wildlife species facing extirpation, endangerment, or threat of extinction. Pursuant to section 6, the primary purpose of the *Act* is the protection and preservation of biodiversity through the encouragement, management, and prohibition of relevant human activities, particularly focusing on endangered species and their habitats. The Federal Court of Appeal has affirmed that this legislation reflects Canada's commitment to fulfilling its obligations under the *United Nations Convention on the Conservation of Biological Diversity*: *Canada (Fisheries and Oceans) v David Suzuki Foundation*, 2012 FCA 40 at para 12.

[34] Subsection 2(1) of the *Act* defines key terms central to its operation. A "wildlife species" includes any animal, plant, or organism, excluding bacteria and viruses, that is either native to Canada or has naturally established itself in the wild for at least 50 years. The "List of Wildlife Species at Risk" in Schedule 1 identifies which species are extirpated, endangered, threatened, or of special concern. An "endangered species" is one facing "imminent extirpation or extinction," while a "threatened species" is one likely to become endangered absent timely intervention. Of relevance to this application is the definition of a "residence," which encompasses dens, nests, or other locations habitually occupied during critical life stages such as breeding, rearing, wintering, or feeding.

[35] The core protections in the *Act* are anchored in prohibitions against harming listed species and their residences. Subsection 32(1) provides that no person shall "kill, harm, harass, capture or take" an individual of a wildlife species listed as extirpated, endangered, or threatened; subsection (2) similarly prohibits the possession, collection, purchase, or sale of any such individual, or any of its parts or derivatives. Section 33 goes further, barring any person from damaging or destroying the residence of a listed endangered or threatened species, or of an extirpated species if a recovery strategy recommends that species be reintroduced to the wild in Canada. To enforce these provisions, sections 97 and 98 empower the Minister to impose fines or imprisonment on violators. Together, these provisions operationalize Parliament's intention to prevent direct harm to both at-risk species and the habitat on which they rely.

[36] While the top priority of the *Act* is biodiversity protection, Parliament has also recognized the potential need to harmonize conservation with societal and economic realities stemming from human activities. The preamble to the *Act* explicitly acknowledges this balance, stating that "there will be circumstances under which the cost of conserving species at risk should be shared" and "community knowledge and interests, including socio-economic interests, should be considered in developing and implementing recovery measures."

[37] Parliament has set up the *Act* to allow the authorization of activities that technically violate the general protections under sections 32 and 33 but are nonetheless justified when viewed in the broader context. Subsection 73(1) allows the competent minister to enter into an agreement or issue a permit if, in the minister's opinion, the activity, whether for scientific research, beneficial intervention, or merely incidental to otherwise lawful undertakings, meets the threshold criteria in subsections (2) and (3). Subsection (2) states that the minister must be

satisfied that the proposed activity either (a) constitutes scientific research essential to conservation; (b) directly benefits the species or enhances its survival prospects; or (c) is merely incidental while carrying out another lawful activity. Subsection (3) then imposes preconditions on issuing any such authorization, requiring that (a) "all reasonable alternatives" be examined and the best solution chosen; (b) "all feasible measures" be taken to minimize any harm; and (c) the project "will not jeopardize the survival or recovery of the species." Section 73 thus carves out a tightly bounded space in which otherwise prohibited activities may be conducted, but only if the *Act*'s protective mandates are advanced.

[38] Section 73 reflects that the legislative intent that preserving at-risk species is done not in a vacuum but implemented within the context of human undertakings—scientific, socio-economic, or otherwise—that may purposely or incidentally affect these species. Nonetheless, it must be remembered that such balance is circumscribed by the *Act*: exemptions under section 73 are permissible only where the minister transparently and intelligibly justifies compliance with the requirements under the provision. Where the minister does not find compliance, or if no feasible mitigation exists to ensure that no jeopardy arises for the species, the general prohibitions in sections 32 and 33 prevail to render any prohibited activities unlawful. In this way, the *Act* maintains conservation as its paramount objective while accommodating human activity under strictly defined conditions.

VII. Analysis

A. *Preliminary issues: standing and admissibility of affidavit content*

[39] In its written submission, the AGC notes, but does not challenge, the fact that the Applicants have not shown standing. After considering the evidence, applicable law, and the

submissions by the Applicants' counsel during the hearing, I am satisfied that the Applicants meet the three-part public interest standing test set out in *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at paragraph 28: they raise a serious justiciable issue, they have a genuine interest in the matter, and this application for judicial review is a reasonable and effective means of bringing the issues to court.

[40] Regarding paragraph 28 of the Wren Affidavit, I do not need to determine its admissibility, as I assign it no weight. While the parties dispute whether the content in that paragraph aligns with the principles articulated in *Association of Universities and Colleges of Canada v Canadian Copyright Licensing Agency (Access Copyright)*, 2012 FCA 22, I find that it primarily summarizes the record and reiterates information included in the Respondents' submissions for this judicial review. Even assuming its admissibility under the "background information" exception, it does not impact my analysis.

B. *The Minister erred in finding that CNL considered "all reasonable alternatives" in site selection*

[41] Are the Minister's reasons justified, transparent, and intelligible in concluding "all reasonable alternatives" had been considered pursuant to paragraph 73(3)(a)? For the following reasons, I find that the Minister has not sufficiently justified the conclusion that CNL's site selection process adequately considered all reasonable alternatives.

[42] The Applicants contend that numerous site locations, facility designs, or mitigation measures were excluded or only superficially assessed, resulting in a perfunctory approach to paragraph 73(3)(a). They note that CNL's original application restricted its site selection to only

AECL-owned properties, without considering federally or privately owned lands elsewhere in Canada.

[43] During the hearing, the Applicants' counsel directed me to evidence in the record showing that CNL representatives had "confirmed to the [Canadian Nuclear Safety] Commission that CNL would have expanded its approach had a suitable site on AECL-owned property not been identified." The Applicants argue that this self-imposed restriction demonstrates an analysis driven by *a priori* bias rather than the comparative, evidence-based analysis required by the *Act*. The direct result of this flawed analysis, according to the Applicants, is that CNL has undermined its statutory obligation to objectively assess all reasonable alternatives. The Applicants emphasize that the Minister's failure to engage with and justify CNL's methodology constitutes a reviewable error.

[44] CNL and the AGC both submit that paragraph 73(3)(a) does not require a proponent to exhaustively examine every imaginable option by "searching every corner of Canada." Instead, they say that the requirement is to consider "all reasonable alternatives that would reduce the impact on the species" and then select the best solution from those options that are feasible. They rely on the record showing that CNL evaluated several potential sites on AECL land in different regions, including the Chalk River Site, the Whiteshell Laboratories site [Whiteshell], and the Nuclear Power Demonstration site [NPD]. CNL explains that these locations were identified as the only viable options after evaluating key technical, safety, and regulatory requirements, especially when considering factors such as minimizing the transportation of highly toxic nuclear waste, leveraging existing waste disposal infrastructure, and possessing sufficient geological knowledge of the sites.

[45] The Applicants insist that dismissing options not already under AECL ownership was an arbitrary constraint, especially when CNL itself has indicated that it has consciously limited its eligibility criteria due to the availability of suitable sites on AECL-owned lands. CNL and the AGC, however, point out that selecting a site which lacks existing licensing and infrastructure would generate extensive new road traffic and handling hazards for listed species, as low-level radioactive waste would need to be relocated over longer distances. They maintain that the record demonstrates the Minister undertook a comprehensive, science-based review of CNL's site selection rationale, as informed by the ECCC's Science Review. The AGC cites the earlier Environment Assessment conducted under *CEAA 2012*, which requires examinations of only those alternatives that were both technically and economically feasible. The AGC relies on the results from that Environment Assessment as providing context for CNL's decision to shortlist the "all reasonable alternatives," asserting that the Minister reasonably accepted CNL's process given the contextual insights provided by the assessment that was available before him.

[46] CNL emphasized during the hearing that transportation-related impacts were a critical factor, particularly given that road mortality is a primary threat to species such as the Blanding's Turtle and that the risk of waste spillage may increase with transportation distance. CNL argues that, if properly considered, which it maintains the Minister did, minimizing transportation is the most effective way to reduce harm to at-risk species. On this basis, CNL contends that the reasonable range of alternative sites was appropriately limited to AECL-owned lands, which were ultimately shortlisted.

[47] I questioned CNL's counsel whether the statutory language of paragraph 73(3)(a) of the *Act* and its surrounding scheme dictates that transportation considerations should only become

relevant after identifying alternative sites that minimize the impact on at-risk species. Counsel responded that transportation must be integrated into the site selection process from the outset, as excessive transportation could ultimately outweigh other environmental concerns. When I inquired about the absence of a quantitative analysis comparing distance-based transportation impacts across AECL-owned and non-AECL-owned sites, CNL's counsel argued that the lack of such analysis in the record suggests that transportation considerations overwhelmingly outweigh other factors. Counsel further maintained that this Court should not overstep its role by reassessing the technical conclusions of the Scientific Review.

[48] I find the Applicants' position more compelling. During both the hearing and public consultation with the Canadian Nuclear Safety Commission, CNL conceded that it would only consider non-AECL properties if no suitable AECL-owned site was identified. This admission confirms that CNL's default approach was to confine its search to AECL lands unless compelled to broaden it. This methodology is directly at odds with the statutory mandate under paragraph 73(3)(a). The Minister failed to reconcile this self-imposed limitation with the statutory requirement for a comparative assessment of ecological impacts on protected species. I am of the view that, even if a non-AECL site posed greater logistical challenges, such as increased transportation distances, the *Act* would still require CNL to consider it if it offered reduced harm to at-risk species. Administrative or logistical difficulties do not absolve the project's proponent of its duty to evaluate such alternatives under paragraph 73(3)(a), even if those factors later justify rejecting them.

[49] Indeed, as the Applicants' counsel pointed out during the hearing, neither CNL's application materials nor the Minister's decision documents contain any meaningful analysis of

transportation distance or impact. There is no data or analysis supporting CNL's assumption that transportation risks for nuclear waste would invariably outweigh the ecological benefits of alternative non-AECL owned sites. The Decision Memo, for instance, simply states that CNL reviewed various sites and selected Chalk River due to minimal nuclear transportation. It fails to indicate whether any formal comparison was conducted, such as measuring transportation mileage or mapping Blanding's Turtle habitats at alternative non-AECL sites. Although some decision materials briefly touch on transportation hazards for at-risk species like Blanding's Turtle, they contain no substantive analysis regarding the conservation pros and cons of the entire class of non-AECL sites.

[50] Had the Minister conducted a reasoned analysis showing that non-AECL sites offered no meaningful conservation advantage, the decision might withstand judicial scrutiny. Instead, the Minister uncritically adopted CNL's constrained process without verifying its compliance with paragraph 73(3)(a). The result is a decision grounded in unexamined and unjustified assumptions that non-conservation factors outweigh potential conservation benefits in the shortlisting of "all reasonable alternatives." Combined with CNL's admission of its restrictive methodology, this failure leaves a fatal gap in the Minister's reasoning.

[51] The AGC's reliance on the earlier Environmental Assessment under *CEAA 2012* cannot fill this gap. While that earlier process applied a narrower standard of "technical and economic feasibility," it cannot substitute for the Minister's independent obligation under the *Act* to look at "all reasonable alternatives" from a species-conservation lens. Critically, the Minister's reasoning contains no clear explanation of how, if at all, the evaluation under *CEAA 2012* aligned with or was used to satisfy the requirements of paragraph 73(3)(a) of the *Act*. While I

understand that the AGC presents the *CEAA 2012* Environmental Assessment as a contextual aid, I find its relevance is limited. That evaluation was conducted under legislation focused on broader project-level impacts, not the *Act*'s targeted biodiversity protection mandates. It thus provides no meaningful insight into whether non-AECL sites could reduce harm to at-risk species.

[52] Finally, as a matter of statutory interpretation, I find it unreasonable to read paragraph 73(3)(a) as allowing the categorical exclusion of entire classes of potential alternatives, in this case non-nuclear facility sites, on non-conservation grounds if those alternatives could reduce harm to at-risk species. The statutory text and scheme make clear that ecological considerations must drive the identification of "all reasonable alternatives." To interpret the provision otherwise at this step would undermine its purpose: to guide the shortlisting of *all* reasonable alternatives for biodiversity conservation. The Respondents argue that non-conservation concerns, such as transportation hazards, can justify the outright exclusion of otherwise viable sites. However, this interpretation is fundamentally inconsistent with the statutory requirement. While transportation-related risks, such as the road mortality of Blanding's Turtle, are valid considerations, they must be assessed within the broader context of the sites' direct ecological impact, not used as a standalone reason for dismissing alternatives. By categorically excluding non-AECL sites without evidence that such alternatives offered no net conservation benefit, CNL's approach inverted the statutory hierarchy by elevating logistical concerns above ecological imperatives in the evaluation of "all reasonable alternatives". The Minister's failure to justify this inversion renders the decision unreasonable.

C. *The Minister improperly determined that CNL's selected site was the "best solution"*

[53] To satisfy paragraph 73(3)(a) of the *Act*, the site ultimately chosen must also be the "best solution" among potential choices. I am of the view that the Minister failed to provide a reasonable explanation as to why the Chalk River Site, combined with specific avoidance measures, was the best option as required by the *Act*.

[54] The Applicants argue that even among the shortlisted alternatives, the evidence from CNL itself suggests that NPD and Whiteshell were "most favourable" in terms of reducing impacts on species at risk. They contend that the Minister's conclusion that the Chalk River Site represents the best solution indicates either a misapprehension of CNL's evidence or a misinterpretation of the statutory requirement. It appears that, in their view, the "best solution" must be defined solely by the extent to which it most effectively reduces impacts on species, irrespective of technical, economic, or operational constraints. They assert that the *Act*'s conservation mandate precludes balancing competing interests at this stage, rendering the Minister's reliance on practicality an unreasonable interpretation of the statutory language.

[55] To support their arguments, the Applicants point to ECCC's Science Review, which they contend demonstrates that the Minister adopted an interpretation of "best solution" that does not absolutely prioritize conservation:

> Facility Location (on-site at Chalk River Laboratories (CRL) vs off-site at either Whiteshell Laboratories (WL) site, in Manitoba or Nuclear Power Demonstration (NPD) site, in Rolphton) was considered. Both the WL and NPD sites are scheduled for site closure within the next 5 years, therefore, no infrastructures and support services would be available for the operation of the NSDF. For this reason, the CRL site is the best option as the operating costs would be much lower. Most of the Low-level Radioactive

> Waste planned to be directed to the NSDF are located at the CRL site therefore, the additional transportation required for the operation of the NSDF off-site, at either WL or NPD, would significantly increase the air emissions, the risk for wildlife-vehicle collisions, transportation costs and the impact on Chimney Swifts (NPD site).
>
> [emphasis added]

They also cite paragraph 15 of the Wren Affidavit, which, in their view, confirms that the Minister's delegates at ECCC have consistently interpreted the "best solution" as one that "best advances conservation of species at risk," and thus "must be adopted."

[56] I agree with the Applicants that the Minister's failure to justify this shift in interpretation is a reviewable error. The Wren Affidavit describes "the framework for SARA as it is understood and implemented by ECCC," which treats the advancement of species conservation as the paramount objective when identifying the "best solution." Yet, the decision materials lack any clear analysis reconciling that approach with the broader balancing of practicality and socio-economic factors employed by the Minister for the present application. While the Minister and his delegates are not bound by ECCC's interpretation or past decisions adopting it, the law requires a clear justification for rejecting an established practice and for the decision to depart from it: *Vavilov* at para 130-131; *Canada (Attorney General) v Honey Fashions Ltd*., 2020 FCA 64 at paras 38-40. No such explanation has been provided.

[57] Had the Minister explained how non-ecological factors could be integrated into the "best solution" investigation without conflicting with the conservation objectives of the *Act*, a more expansive reading of paragraph 73(3)(a) might well have been defensible. Such an approach could permit limited balancing of ecological and non-ecological considerations. Contrary to the

Applicants' position, the provision does not compel a rigid, conservation-absolute interpretation. Applying the modern principle of statutory interpretation, I find that "best solution" is open to multiple reasonable meanings when read contextually, in harmony with the *Act*'s scheme, object, and Parliament's intent: *Vavilov* at para 117, citing *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 SCR 27 at para 21. A broader interpretation that considers factors beyond conservation objectives in determining the best solution is not necessarily inconsistent with the *Act*.

[58] For example, the text of paragraph 73(3)(a) reflects deliberate flexibility. Parliament's choice of wording is instructive. By using "reduce" instead of stricter terms like "minimize" or "eliminate," and by leaving "best solution" unqualified, the paragraph contains a pragmatic intent. The term "reduce" implies a comparative mitigation of harm relative to a baseline, not its eradication. Similarly, the plain meaning of "solution" can be said to inherently incorporate feasibility, as an option can hardly be characterized as a "solution" if it is technically or operationally undesirable, let alone a "best" one. Consequently, "best solution" may refer to an option that is ecologically superior while still feasible from a socio-economic and operational perspective, rather than one that is so impractical as to be meaningless. In my view, this textual ambiguity grants administrative decision-makers discretion to weigh socio-economic and logistical factors when interpreting "reasonable alternatives." However, the Minister must transparently justify how such considerations align with the *Act*'s conservation mandate, particularly when deviating from established past interpretive practices.

[59] Similarly, the structure of subsection 73(3) supports this flexibility. It outlines a graded permit review framework: paragraph (a) requires selecting the "best solution" among alternatives that reduce harm from "reasonable alternatives," paragraph (b) mandates minimizing harm

within the chosen path, and paragraph (c) prohibits activities that jeopardize survival or recovery. Taken together, one sees a progressive framework, in which paragraph (3)(a) does not demand the absolute lowest ecological harm required in paragraph (b), but an effective reduction, leaving space for possible balancing of non-ecological factors. Importantly, these contextual clues alone cannot anchor a new interpretive direction absent an explicit rationale. The *Act* is simply silent on precisely how one transitions from "reduce" in (a) to "minimize" in (b). Either approach, purely ecological or partially pragmatic, might fit the text, so long as it is justified by the Minister based on the facts and law at hand.

[60] The purpose of the *Act* likewise intensifies this ambiguity. On the one hand, the primary objective of the *Act*, as outlined by section 6, remains solely the protection and recovery of at-risk species, which may support a conservation-absolute reading. On the other, Parliament's acknowledgment in the preamble that "community knowledge and interests, including socio-economic interests, should be considered" implies that the statutory scheme is not completely impervious to operational realities or socio-economic costs. Neither interpretive position unequivocally resolves how "best solution" must be weighed. The purpose of the *Act* therefore leaves room for interpretation, allowing the Minister and his delegates to exercise discretion in applying the provision, provided their decisions are based on a reasoned explanation and informed by their technical expertise and their vantage point as first-instance factfinders operating within their home statute.

[61] Regrettably, the Minister has not provided such a reasoned explanation. The Minister has adopted a more expansive "pragmatic balancing" reading of the provision, but has failed to explain the departure from ECCC's prior interpretation and address the gaps between harm

reduction for at-risk species and socio-economic considerations—gaps arising from the open-ended nature of the text, context, and purpose of the *Act*. While paragraph 73(3)(a) allows for some interpretive flexibility, it does not absolve the Minister of the duty to justify the novel interpretation adopted in this case. Without such justification, the conclusion that the Chalk River Site is the "best solution" is unreasoned and thus unreasonable.

D. *There is no contradiction in the Minister's assessment of bat boxes, wildlife corridors, and bird residences*

[62] The Applicants argue that the Minister failed to properly address two pieces of contradictory evidence when assessing, pursuant to paragraphs 73(3)(b) and (c) of the *Act*, whether the permitted activities would not jeopardize the survival or recovery of Blanding's Turtle, Little Brown Myotis, or Northern Myotis considering the relevant impact minimization measures. First, they highlight the fact that unnaturally high or unstable bat box temperatures could force bats to abandon maternity roosts or disrupt pup growth, ultimately threatening endangered bat populations. Second, they argue that newly installed wildlife corridors along roadways may inadvertently assist predators, such as wolves or raccoons, in ambushing and preying on turtles, thereby undermining any intended benefit to Blanding's Turtles.

[63] The Applicants also point to an internal contradiction in the Minister's reasons. Specifically, they contend that vacated nests of threatened migratory bird species were not treated consistently with the *Act*'s definitions of "residences," as no permits were issued or required for authorizing their destruction. The Applicants assert that the Minister's acceptance of protections for unoccupied bat roosts directly contradicts the decision not to require a permit for the nests of these migratory birds once they have been vacated.

[64] In response, CNL and the AGC counter that the record provides a foundation that sufficiently supports the Minister's decision, and that each alleged instance of "contradictory" evidence was duly considered. For bat box temperatures, the Science Review and permit application materials cite acoustic surveys, roost telemetry data, and documented roost-switching behaviours to explain why intermittent fluctuations outside an "ideal" 22°C threshold are not fatal to bat pup survival. As for the wildlife corridors, both CNL and ECCC rely on camera-trap data and a multi-year Blanding's Turtle movement study revealing scant evidence that predators have adapted to "ambushing" turtles. While Kebaowek First Nation's observations are not discounted, the Minister found no systematic and scientific indication of increased turtle predation.

[65] With respect to the nests of threatened migratory birds, the AGC explains that these species generally do not re-use their nests after a breeding season, meaning that once vacated, a nest no longer constitutes a "residence" under the *Act*. This, the AGC argues, makes these nests categorically unlike bat roosts, where individual bats may reoccupy in future seasons.

[66] After reviewing the alleged contradictions in the evidence and considering them within the broader record, I find the Respondents' arguments persuasive. The claimed inconsistencies are easily reconcilable, and thus the Minister is not obligated to address them. I will address each specific piece of evidence in detail below.

(1) Contradictory evidence on temperature of bat boxes

[67] The Applicants' principal contention on the bat box is based on CNL's own data, which indicates that the temperatures in the bat boxes frequently deviated from the Science Review's

asserted survival threshold of 22°C for bat pups. Recorded weekly temperatures between July 15 and August 26 ranged from as low as 11.6°C to as high as 38.1°C. The Applicants argue that these extremes could lead to pup mortality or prompt bats to abandon their maternity roosts, thereby directly contradicting the Minister's conclusion that the mitigation measures are "adequate."

[68] First, and most importantly, I do not view the observed temperature fluctuations as inherently contradictory evidence. It is only the pups of the bats that require an ambient temperature near 22°C for optimal survival and development. The Applicants have not pointed to any evidence on the record demonstrating that the maternity and pup-rearing season for the protected bats coincides with the period during which these temperature fluctuations were recorded. Nor have they provided any scientific modelling or projections to show that such deviations persist beyond the period tested. Furthermore, the master's thesis research titled *Forest Roost Use by Little Brown Bats (Myotis lucifugus) in Ontario*, which the ECCC relied upon in the Science Review, establishes that adult bats can tolerate temperatures ranging from 0°C to 45°C. Accordingly, temperature readings that deviate from the 22°C benchmark do not, in and of themselves, undermine the conclusion that the bat boxes function as a feasible risk mitigation measure.

[69] Even if I assume, for argument's sake, that the maternity and pup-rearing season falls entirely within the period when these temperature fluctuations occurred, the evidence still does not rise to a level that contradicts the Minister's findings. Although the Science Review acknowledges that approximately 22°C is optimal for pup development and survival, it also explicitly observes that bats can mitigate short-term temperature fluctuations through adaptive

behaviors such as huddling and roost-switching. Moreover, the bat boxes represent only one element of a broader suite of mitigation strategies proposed and implemented by CNL. The installation of 16 bat boxes across the site, combined with a comprehensive mitigation plan that includes the preservation of 3,568 hectares of surrounding forested habitat containing known maternity roosts, supports the Minister's conclusion that the bat box is a feasible mitigation measure.

[70] Therefore, there is no contradiction between the bat box temperature evidence and the other materials relied upon by the Minister in issuing the Permit. Even if any apparent inconsistencies exist, the Science Review provides sufficient clarification. The reasonableness of the Minister's decision is not undermined by the bat box temperature data, given that administrative decision-makers are presumed to have thoroughly reviewed the evidence before them, and that they are not required to provide explicit reasoning for every aspect of their decision: *Florea v Canada* (*Minister of Employment and Immigration*) *(FCA)*, [1993] FCJ No 598 (FCA); *Sing v Canada (Minister of Citizenship and Immigration)*, 2005 FCA 125 at para 90; *Newfoundland and Labrador Nurses' Union v Newfoundland and Labrador (Treasury Board)*, 2011 SCC 62 at para 16.

(2) Contradictory evidence on predations near wildlife corridors

[71] The Applicants argue that the Minister unreasonably dismissed Kebaowek First Nation's evidence that wildlife corridors, such as the eco-passages, increase predation on Blanding's Turtles. They highlight Kebaowek First Nation's observations of wolves routinely checking

eco-passages for prey and contend that the Minister failed to explain why this evidence would not undermine the conclusion that eco-passages were feasible mitigation measures.

[72] While I have no reason to doubt the authenticity of Kebaowek First Nation's observations, the Applicants have not advanced any substantive evidence to demonstrate that these eco-passages have actually led to increased turtle predation. Their argument relies entirely on the unsupported assumption that the presence of wolves near the corridors naturally results in a higher incidence of predation on the endangered turtles. I agree with the AGC, that the Kebaowek First Nation's observation merely confirms the presence of predators in the vicinity. It does not provide concrete evidence that these predators are, in fact, preying on the turtles because of the corridors, or if they are preying on the turtles at the corridors at all.

[73] The Applicants' position becomes more tenuous when I examine the record, specifically CNL's report of *Eco-passages Preliminary Observations of Success at CRL*. This report explains that CNL's 2021–2022 camera-trap study recorded 12 Blanding's Turtles and 153 potential predators near the corridors. Even though potential predator observations comprised 9.7% of all recorded observations, the study documented no instances of actual predation events. While the Applicants assert that "data showing few predators visit the corridors does not mean that when they visit, they do not hunt," such an assertion is neither supported by the study, nor is it consistent with the relevant discussions. In fact, the report explicitly confirms that although predators such as raccoons and foxes have been known to exploit funnel points for foraging in other contexts, no such behaviour was observed in connection with Blanding's Turtles at the Chalk River Site.

[74] Given that the ECCC has considered the camera trap study and indicated so in the Science Review, I determine that there is no contradiction between Kebaowek First Nation's observations of predator presence near the wildlife corridors and the fact that no predation events have been recorded in a one-year long camera trap study.

(3) Logical contradiction on residences of threatened bird species

[75] The Applicants argue that the Minister's treatment of the nests of the four threatened migratory bird species as "residences" under the *Act* is inconsistent with the statutory definitions and, therefore, unreasonable. They essentially contend that because "residence" for purposes of the *Act* refers to any dwelling-place occupied or habitually occupied by at-risk species during their life cycle, the nests of these birds should qualify as residences and subject to the protections of the *Act*, regardless of whether they are vacated. In their view, the Minister's approach of protecting unoccupied bat roosts while permitting the destruction of vacated bird nests creates an arbitrary distinction that undermines the *Act*'s conservation objective.

[76] While I accept that the Minister's approach does distinguish between bat roosts and bird nests, I do not consider that distinction to be arbitrary. By permitting the destruction of threatened migratory bird nests when they are empty, the Minister adopts an interpretation of "habitually occupied" that requires recurrent use across nesting and breeding seasons. I agree with the AGC that this interpretation is appropriately grounded in both a textual reading of the *Act* and the biological reality of these species.

[77] According to the *Oxford English Dictionary*, "habitually" means "in the way of habit or settled practice; constantly, usually, customarily" and "occupied" means "to live in and use a

place as its tenant or regular inhabitant." A plain reading of the terms "habitually occupied" with these definitions in mind supports the conclusion that a dwelling-place qualifies as a "residence" only if it is regularly and repeatedly used by the species. Applying this understanding, the record shows that species such as Little Brown Myotis and Northern Myotis routinely reuse the same roosts for their maternity colonies, thereby meeting the "habitually occupied" criterion. In contrast, the threatened migratory birds relevant here like the Canada Warbler and Wood Thrush do not reuse their nests once the breeding season has concluded. In short, once vacated, these nests become biologically inert and fail to satisfy the requirement of habitual occupancy.

[78] Upon reviewing the records, I find that the Applicants' identification of internal contradiction might be stemming from their misquoting of ECCC's rationale set out in the Science Review. The Applicants cite in their submissions the relevant statement by the ECCC as "[t]he activities most likely to affect residence nests […] should not affect residences," and claim that this reflects a fatal logical flaw. With respect, the omitted portion of the quote makes it clear, in my view, that no such contradiction exists:

> The activities most likely to affect residence nests (tree clearing, vegetation removal, and grubbing) are planned to occur outside of the time migratory birds are present at the site and therefore should not affect residences. The Applicant will be following ECCC's guidance to Avoiding harm to migratory birds.
>
> [emphasis added]

The full rationale demonstrates that the ECCC determined any nests impacted by these activities would already be vacated and, therefore, would not meet the definition of "residences" under the *Act*. This is consistent with my above analysis of the Minister's interpretation of "habitually occupied."

E. *The Minister appropriately excluded the Monarch Butterfly from the scope of the Permit*

[79] Does the exclusion of the Monarch Butterfly from the Minister's assessment, following its uplisting from a species of special concern to endangered under Schedule 1 of the *Act*, render the scope of the Permit unreasonable? I find that it was not. The Minister's exclusion of the Monarch Butterfly was appropriate in evaluating and issuing the Permit.

[80] The Applicants argue that the Minister's failure to consider the impact of construction activities on the Monarch Butterfly amounted to an oversight undermining the proper scope of the Permit. They assert that, because of the uplist during the period leading to the Minister's decision, the Minister was required to address any potential harm to the species under the strict prohibitions in the *Act*. The Respondents, however, maintain that no contravention of sections 32 or 33 of the *Act* arises with respect to the Monarch Butterfly. Their rationale is that the project's design, including its footprint and timing for vegetation clearing, does not impact Monarchs or their residences in any manner that would trigger the prohibitions in the *Act*. Therefore, no permit was required to authorize any activity that might impact them. Accordingly, because CNL did not seek a permit to affect the Monarch, the AGC emphasizes that the default protection of the *Act* remains in full force for the species.

[81] I agree with the Respondents. I find the Minister's decision not to include the Monarch Butterfly in the Permit or provide extensive discussion of it in the relevant materials is transparently and intelligibly justified in a way that respects the protective objectives of the *Act*.

[82] The record shows that CNL identified suitable habitat primarily through milkweed distribution and site surveys indicating whether Monarchs at different life stages, such as eggs or

larvae, were present in areas slated for clearing. Based on these data, CNL, with ECCC's concurrence, concluded that any Monarch habitat within the project zone would either remain intact or be effectively avoided through standard mitigation measures. Furthermore, the Minister acknowledged that if future project modifications were to present any risk of contravening sections 32 or 33 of the *Act* with respect to any protected species, including the Monarch Butterfly, CNL would be required to apply for an amended Permit or fresh authorization. Thus, the current design of the project poses no threat to Monarch Butterflies or their residences. This logically obviates the need for any permit coverage for this species.

[83] Although the Applicants question whether the Minister addressed the Monarch Butterfly's new endangered status with sufficient rigour, the decision materials demonstrate that ECCC's scientific reviewers thoroughly examined the species' habitat requirements. They observed that the scheduled timing of vegetation clearing, and the implemented fencing strategy would pre-empt any direct or incidental harm to Monarch habitat. This indicates that the project would not disrupt any portion of the Monarch Butterfly's essential habitat or life cycle. Considering that the general prohibitions in sections 32 and 33 of the *Act* apply only where there is an actual risk of "killing, harming, harassing, capturing or taking" listed species, or "damaging or destroying" their residences, the Minister's decision not to require a permit for activities potentially affecting the Monarch is consistent with the principle that such a permit is only required if an otherwise prohibited activity is likely to occur. This protective principle also renders irrelevant the Applicants' argument that Monarch Butterflies might move and establish new habitats within the Chalk River Site, as CNL is prohibited from harming them without an authorizing permit, regardless of whether the colony is pre-existing or newly established.

[84] In light of the foregoing, I find the fact that the Monarch Butterfly has not been covered by the Permit is reasonable under *Vavilov*. The Minister recognized the Monarch Butterfly's newly endangered status, but also concluded, based on habitat data and temporal restrictions on site work, that the project raised no material risk to impact the species in a way that jeopardizes its survival or recovery. The Applicants have not pointed to any unaddressed or contradictory information suggesting that milkweed or critical Monarch Butterfly breeding areas would indeed be impacted by the project in a way that is prohibited by the *Act*. On the contrary, the Decision Letter confirms that if material changes occur to CNL's operations that might jeopardize the Monarch Butterfly, a permit or authorization would then become necessary. Hence, I conclude that the exclusion of the Monarch Butterfly from the Permit's scope is neither arbitrary nor ill-informed.

VIII. Conclusion

[85] I conclude that the Minister's decision is unreasonable due to fatal flaws in the interpretation and application of key elements under paragraph 73(3)(a) of the *Act*. The record shows that CNL restricted its site selection to AECL-owned properties, artificially narrowing the scope of "reasonable alternatives" as required by the *Act*. Despite this self-imposed restriction, the Minister approved CNL's approach without explaining how it satisfied the statutory requirement to assess all viable alternatives capable of reducing harm to protected species. This unreasoned approval undermines the Minister's conclusion that CNL sufficiently complied with the statutory requirement under paragraph 73(3)(a). Further, the Minister provided no rationale for abandoning ECCC's prior practice of interpreting "best solution" through a conservation-first lens. While the *Act* may permit flexibility in weighing ecological and non-ecological factors,

such an interpretation requires explicit justification to meet the standard of reasonableness under *Vavilov*. The Minister's silence on these points constitutes a reviewable error.

[86] Notwithstanding these fatal flaws in the site selection process, other aspects of the Minister's reasoning stand on firmer ground. I find no reviewable errors in how the Minister concluded that bat box temperature fluctuations do not jeopardize pup survival, or that wildlife corridor installations have not demonstrably increased turtle predation. Nor is it unreasonable for the Minister to interpret "residences" for threatened migratory birds as excluding nests once vacated, given the statutory definitions and the record's evidence on nesting habits. Those parts of the decision reflect a defensible interpretation and application of paragraphs 73(3)(b) and (c).

[87] Similarly, the decision to exclude the Monarch Butterfly from the scope of the Permit is also justified. Although the species was uplisted to endangered, the Minister's decision materials show that any potential habitat of the species was accounted for through milkweed surveys and properly protected by tailored avoidance measures. Under sections 32 and 33 of the *Act*, a permit is only required if there is an actual risk of prohibited harm. The Minister found no such risk, and this conclusion is reasonably supported by the evidence.

[88] Because of the Minister's failure to justify the interpretation and application of paragraph 73(3)(a) of the *Act*, I grant this application for judicial review. In accordance with the parties' agreement that costs of $11,160 are to be awarded to the successful party, I award the Applicants their costs in that amount.

JUDGMENT in T-647-24

THIS COURT'S JUDGMENT is that this application is granted, the decision under review is set aside, the issuance of a Permit is to be reconsidered by the decision-maker, in accordance with these Reasons, and the Applicants are awarded their costs in the amount of $11,160.

"Russel W. Zinn"
Judge

APPENDIX

Species at Risk Act, SC 2002, c 29

Preamble	**Préambule**
Recognizing that	Attendu :
Canada's natural heritage is an integral part of our national identity and history,	que le patrimoine naturel du Canada fait partie intégrante de notre identité nationale et de notre histoire;
wildlife, in all its forms, has value in and of itself and is valued by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons,	que les espèces sauvages, sous toutes leurs formes, ont leur valeur intrinsèque et sont appréciées des Canadiens pour des raisons esthétiques, culturelles, spirituelles, récréatives, éducatives, historiques, économiques, médicales, écologiques et scientifiques;
Canadian wildlife species and ecosystems are also part of the world's heritage and the Government of Canada has ratified the United Nations Convention on the Conservation of Biological Diversity,	que les espèces sauvages et les écosystèmes du Canada font aussi partie du patrimoine mondial et que le gouvernement du Canada a ratifié la Convention des Nations Unies sur la diversité biologique;
providing legal protection for species at risk will complement existing legislation and will, in part, meet Canada's commitments under that Convention,	que l'attribution d'une protection juridique aux espèces en péril complétera les textes législatifs existants et permettra au Canada de respecter une partie des engagements qu'il a pris aux termes de cette convention;
the Government of Canada is committed to conserving biological diversity and to the principle that, if there are threats of serious or irreversible damage to a wildlife species, cost-effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific certainty,	que le gouvernement du Canada s'est engagé à conserver la diversité biologique et à respecter le principe voulant que, s'il existe une menace d'atteinte grave ou irréversible à une espèce sauvage, le manque de certitude scientifique ne soit pas prétexte à retarder la prise de mesures efficientes pour prévenir sa disparition ou sa décroissance;
responsibility for the conservation of wildlife in Canada is shared among the governments in this country and that it is important for them to work cooperatively to pursue the establishment of complementary legislation	que la conservation des espèces sauvages au Canada est une responsabilité partagée par les gouvernements du pays et que la collaboration entre eux est importante en vue d'établir des lois et des programmes complémentaires pouvant assurer la

and programs for the protection and recovery of species at risk in Canada,

protection et le rétablissement des espèces en péril au Canada;

it is important that there be cooperation between the governments in this country to maintain and strengthen national standards of environmental conservation and that the Government of Canada is committed to the principles set out in intergovernmental agreements respecting environmental conservation,

que la coopération entre les gouvernements du pays pour le maintien et le renforcement des normes nationales de conservation de l'environnement est importante et que le gouvernement du Canada est attaché aux principes énoncés dans les accords intergouvernementaux en matière de conservation de l'environnement;

the Canadian Endangered Species Conservation Council is to provide national leadership for the protection of species at risk, including the provision of general direction to the Committee on the Status of Endangered Wildlife in Canada in respect of that Committee's activities and general directions in respect of the development, coordination and implementation of recovery efforts,

que le Conseil canadien pour la conservation des espèces en péril a la responsabilité d'établir les orientations pour l'ensemble du pays en matière de protection des espèces en péril, notamment en ce qui concerne les activités du Comité sur la situation des espèces en péril au Canada et l'élaboration et la coordination des mesures de protection et de rétablissement de ces espèces;

the roles of the aboriginal peoples of Canada and of wildlife management boards established under land claims agreements in the conservation of wildlife in this country are essential,

qu'est essentiel le rôle que peuvent jouer les peuples autochtones du Canada et les conseils de gestion des ressources fauniques établis en application d'accords sur des revendications territoriales dans la conservation des espèces sauvages dans ce pays;

all Canadians have a role to play in the conservation of wildlife in this country, including the prevention of wildlife species from becoming extirpated or extinct,

que tous les Canadiens ont un rôle à jouer dans la conservation des espèces sauvages, notamment en ce qui a trait à la prévention de leur disparition du pays ou de la planète;

there will be circumstances under which the cost of conserving species at risk should be shared,

que, dans certains cas, les frais de la conservation des espèces en péril devraient être partagés;

the conservation efforts of individual Canadians and communities should be encouraged and supported,

que les efforts de conservation des Canadiens et des collectivités devraient être encouragés et appuyés;

stewardship activities contributing to the conservation of wildlife species and their habitat should be supported to prevent species from becoming at risk,

que les activités d'intendance visant la conservation des espèces sauvages et de leur habitat devraient bénéficier de l'appui voulu

	pour éviter que celles-ci deviennent des espèces en péril;
community knowledge and interests, including socio-economic interests, should be considered in developing and implementing recovery measures,	que la connaissance et les intérêts — notamment socioéconomiques — des collectivités devraient être pris en compte lors de l'élaboration et de la mise en oeuvre des mesures de rétablissement;
the traditional knowledge of the aboriginal peoples of Canada should be considered in the assessment of which species may be at risk and in developing and implementing recovery measures,	que les connaissances traditionnelles des peuples autochtones du Canada devraient être prises en compte pour découvrir quelles espèces sauvages peuvent être en péril et pour l'élaboration et la mise en oeuvre des mesures de rétablissement;
knowledge of wildlife species and ecosystems is critical to their conservation,	que la connaissance des espèces sauvages et des écosystèmes est essentielle à leur conservation;
the habitat of species at risk is key to their conservation, and	que l'habitat des espèces en péril est important pour leur conservation;
Canada's protected areas, especially national parks, are vital to the protection and recovery of species at risk,	que les aires protégées au Canada, plus particulièrement les parcs nationaux, sont importants pour la protection et le rétablissement des espèces en péril,
NOW, THEREFORE, Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:	Sa Majesté, sur l'avis et avec le consentement du Sénat et de la Chambre des communes du Canada, édicte :
…	[…]
Definitions	**Définitions**
…	[…]
residence means a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating. (*résidence*)	***Résidence*** Gîte — terrier, nid ou autre aire ou lieu semblable — occupé ou habituellement occupé par un ou plusieurs individus pendant tout ou partie de leur vie, notamment pendant la reproduction, l'élevage, les haltes migratoires, l'hivernage, l'alimentation ou l'hibernation. (*residence*)

…

Purposes

6 The purposes of this Act are to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened.

…

Measures to Protect Listed Wildlife Species

General Prohibitions

Killing, harming, etc., listed wildlife species

32 (1) No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.

Possession, collection, etc.

(2) No person shall possess, collect, buy, sell or trade an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species, or any part or derivative of such an individual.

Deeming

(3) For the purposes of subsection (2), any animal, plant or thing that is represented to be an individual, or a part or derivative of an individual, of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species is deemed, in

[…]

Objet

6 La présente loi vise à prévenir la disparition — de la planète ou du Canada seulement — des espèces sauvages, à permettre le rétablissement de celles qui, par suite de l'activité humaine, sont devenues des espèces disparues du pays, en voie de disparition ou menacées et à favoriser la gestion des espèces préoccupantes pour éviter qu'elles ne deviennent des espèces en voie de disparition ou menacées.

[…]

Mesures de protection des espèces sauvages inscrites

Interdictions générales

Abattage, harcèlement, etc.

32 (1) Il est interdit de tuer un individu d'une espèce sauvage inscrite comme espèce disparue du pays, en voie de disparition ou menacée, de lui nuire, de le harceler, de le capturer ou de le prendre.

Possession, achat, etc.

(2) Il est interdit de posséder, de collectionner, d'acheter, de vendre ou d'échanger un individu — notamment partie d'un individu ou produit qui en provient — d'une espèce sauvage inscrite comme espèce disparue du pays, en voie de disparition ou menacée.

Présomption

(3) Pour l'application du paragraphe (2), tout animal, toute plante ou toute chose présentée comme un individu — notamment partie d'un individu ou produit qui en provient — d'une espèce sauvage inscrite comme espèce disparue du pays, en voie de disparition ou

the absence of evidence to the contrary, to be such an individual or a part or derivative of such an individual.

menacée est réputée, sauf preuve contraire, être tel individu, telle partie ou tel produit.

Damage or destruction of residence

Endommagement ou destruction de la résidence

33 No person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered species or a threatened species, or that is listed as an extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada.

33 Il est interdit d'endommager ou de détruire la résidence d'un ou de plusieurs individus soit d'une espèce sauvage inscrite comme espèce en voie de disparition ou menacée, soit d'une espèce sauvage inscrite comme espèce disparue du pays dont un programme de rétablissement a recommandé la réinsertion à l'état sauvage au Canada.

…

[…]

Agreements and Permits

Accords et permis

Powers of competent minister

Pouvoirs du ministre compétent

73 (1) The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals.

73 (1) Le ministre compétent peut conclure avec une personne un accord l'autorisant à exercer une activité touchant une espèce sauvage inscrite, tout élément de son habitat essentiel ou la résidence de ses individus, ou lui délivrer un permis à cet effet.

Purpose

Activités visées

(2) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(2) Cette activité ne peut faire l'objet de l'accord ou du permis que si le ministre compétent estime qu'il s'agit d'une des activités suivantes :

(a) the activity is scientific research relating to the conservation of the species and conducted by qualified persons;

a) des recherches scientifiques sur la conservation des espèces menées par des personnes compétentes;

(b) the activity benefits the species or is required to enhance its chance of survival in the wild; or

b) une activité qui profite à l'espèce ou qui est nécessaire à l'augmentation des chances de survie de l'espèce à l'état sauvage;

(c) affecting the species is incidental to the carrying out of the activity.

c) une activité qui ne touche l'espèce que de façon incidente.

Pre-conditions

(3) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;

(b) all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and

(c) the activity will not jeopardize the survival or recovery of the species.

Conditions préalables

(3) Le ministre compétent ne conclut l'accord ou ne délivre le permis que s'il estime que :

a) toutes les solutions de rechange susceptibles de minimiser les conséquences négatives de l'activité pour l'espèce ont été envisagées et la meilleure solution retenue;

b) toutes les mesures possibles seront prises afin de minimiser les conséquences négatives de l'activité pour l'espèce, son habitat essentiel ou la résidence de ses individus;

c) l'activité ne mettra pas en péril la survie ou le rétablissement de l'espèce.

Explanation in public registry

(3.1) If an agreement is entered into or a permit is issued, the competent minister must include in the public registry an explanation of why it was entered into or issued, taking into account the matters referred to in paragraphs (3)(a), (b) and (c).

Raisons dans le registre

(3.1) Si un accord est conclu ou un permis délivré, le ministre compétent met dans le registre les raisons pour lesquelles l'accord a été conclu ou le permis délivré, compte tenu des considérations mentionnées aux alinéas (3)a) à c).

Consultation

(4) If the species is found in an area in respect of which a wildlife management board is authorized by a land claims agreement to perform functions in respect of wildlife species, the competent minister must consult the wildlife management board before entering into an agreement or issuing a permit concerning that species in that area.

Consultation

(4) Si l'espèce se trouve dans une aire à l'égard de laquelle un conseil de gestion des ressources fauniques est habilité par un accord sur des revendications territoriales à exercer des attributions à l'égard d'espèces sauvages, le ministre compétent est tenu de consulter le conseil avant de conclure un accord ou de délivrer un permis concernant cette espèce dans cette aire.

Consultation

(5) If the species is found in a reserve or any other lands that are set apart for the use and benefit of a band under the Indian Act, the competent minister must consult the band before entering into an agreement or issuing a

Consultation

(5) Si l'espèce se trouve dans une réserve ou sur une autre terre qui a été mise de côté à l'usage et au profit d'une bande en application de la Loi sur les Indiens, le ministre compétent est tenu de consulter la

permit concerning that species in that reserve or those other lands.

Terms and conditions

(6) The agreement or permit must contain any terms and conditions governing the activity that the competent minister considers necessary for protecting the species, minimizing the impact of the authorized activity on the species or providing for its recovery.

Date of expiry

(6.1) The agreement or permit must set out the date of its expiry.

Review of agreements and permits

(7) The competent minister must review the agreement or permit if an emergency order is made with respect to the species.

Amendment of agreements and permits

(8) The competent minister may revoke or amend an agreement or a permit to ensure the survival or recovery of a species.

(9) [Repealed, 2012, c. 19, s. 163]

Regulations

(10) The Minister may, after consultation with the Minister responsible for the Parks Canada Agency and the Minister of Fisheries and Oceans, make regulations respecting the entering into of agreements, the issuance of permits and the renewal, revocation, amendment and suspension of agreements and permits.

bande avant de conclure un accord ou de délivrer un permis concernant cette espèce dans la réserve ou sur l'autre terre.

Conditions

(6) Le ministre compétent assortit l'accord ou le permis de toutes les conditions — régissant l'exercice de l'activité — qu'il estime nécessaires pour assurer la protection de l'espèce, minimiser les conséquences négatives de l'activité pour elle ou permettre son rétablissement.

Date d'expiration

(6.1) La date d'expiration de l'accord ou du permis doit y figurer.

Révision des accords et permis

(7) Le ministre compétent est tenu de réviser l'accord ou le permis si un décret d'urgence est pris à l'égard de l'espèce.

Modification des accords et permis

(8) Il peut révoquer ou modifier l'accord ou le permis au besoin afin d'assurer la survie ou le rétablissement d'une espèce.

(9) [Abrogé, 2012, ch. 19, art. 163]

Règlement

(10) Le ministre peut par règlement, après consultation du ministre responsable de l'Agence Parcs Canada et du ministre des Pêches et des Océans, régir la conclusion des accords et la délivrance des permis, ainsi que leur renouvellement, annulation, modification et suspension.

Time limits

(11) The regulations may include provisions

(a) respecting time limits for issuing or renewing permits, or for refusing to do so;

(b) specifying the circumstances under which any of those time limits does not apply; and

(c) authorizing the competent minister to extend any of those time limits or to decide that a time limit does not apply, when the competent minister considers that it is appropriate to do so.

Délais

(11) Les règlements peuvent notamment :

a) régir les délais à respecter pour délivrer ou renouveler le permis ou refuser de le faire;

b) prévoir les circonstances où l'un ou l'autre de ces délais ne s'applique pas;

c) autoriser le ministre compétent, dans les cas où il l'estime indiqué, à proroger l'un ou l'autre de ces délais ou à décider qu'il ne s'applique pas.

FEDERAL COURT

SOLICITORS OF RECORD

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