



Office of the Auditor General of Ontario

Value-for-Money Audit:
Protecting
and Recovering
Species at Risk



November 2021

Ministry of the Environment, Conservation and Parks

Ministry of Northern Development, Mines, Natural Resources and Forestry

Protecting and Recovering Species at Risk

1.0 Summary

Species at risk are the plants, mammals, birds, fish, and other organisms that are in danger of extinction and being lost forever. From the polar bear, Algonquin wolf and golden eagle, to the spotted turtle, monarch butterfly and drooping trillium, at-risk species are the most vulnerable species to threats, and need protection and conservation efforts to recover.

The worldwide rate at which species are now going extinct and disappearing is tens to hundreds of times higher than over the past 10 million years—and the rate is accelerating. Experts and world leaders are calling for urgent action to address this global loss of nature. Species loss directly affects how the natural world works, and impacts the many ways in which humans rely on nature and the services it provides. In 2021, the World Bank estimates that without concerted conservation action, the loss of biodiversity and ecosystem services could have multi-trillion dollar impacts on the global economy. The World Economic Forum ranks biodiversity loss as one of the top five risks for the planet over the next decade.

In Canada, habitat loss and degradation—resulting from land use changes and disturbance from human activities—is the biggest threat to species at risk, like Blanding’s turtles and boreal caribou. Other threats include hunting, fishing and trapping, climate change, pollution, and invasive species. Unless these threats

are addressed, species may be eliminated from an area that they would normally be found—or worse, become extinct and lost forever.

Conserving biodiversity, including species at risk, is essential for ecosystems to stay healthy. Healthy ecosystems produce oxygen, control climate, lessen the impacts of floods and storms, and supply people with essentials like food and water. The degradation or loss of one part of an ecosystem impacts the functioning of the whole. For example, pollinators like bees support over 35% of the world’s food crop production, so if bees suffer, we suffer. Failing to protect and recover Ontario’s species and their habitats will eventually leave the province vulnerable to environmental problems such as soil erosion, air pollution, forest fires and floods, and could worsen the impacts of climate change.

Protecting species and their habitats is also increasingly important for lowering the risk from infectious diseases, such as COVID-19, which are spread from animals to humans. The risk of disease transmission is higher when species that carry infectious diseases end up in close contact with human populations, such as when housing and agricultural developments encroach on formerly wild spaces.

The successful protection and recovery of species at risk could stop or reverse significant declines. However, populations of Canadian at-risk species have declined by 59% on average from 1970 to 2016 according to the World Wildlife Fund’s

2020 Living Planet Report. In Ontario, 2,752 species are now considered vulnerable, rare or rapidly declining as of 2021.

The Ministry of the Environment, Conservation and Parks (Environment Ministry) is responsible for administering the *Endangered Species Act, 2007* (Act). Prior to April 2019, the Ministry of Northern Development, Mines, Natural Resources and Forestry (Natural Resources Ministry) administered the Act.

Our audit examined whether the Environment Ministry (and previously the Natural Resources Ministry) is effectively and efficiently protecting and recovering species at risk and their habitats. Our audit found that the Environment Ministry is failing in its mandate to protect species at risk. Its actions have not been sufficient to improve the state of these species and their habitats. **Figure 1** shows that since 2009, the first full year the Act was in effect, compared to 2020:

- the total number of species at risk has risen by 22%;
- annual approvals to harm species at risk have increased by 6,262%;
- annual approvals for protection and recovery have increased by 59%;
- annual stewardship funding has decreased by 10%; and
- the number of charges laid under the Act was zero in 2020.

The Environment Ministry does not have a long-term plan to improve the state of species at risk and there are no performance measures to evaluate the effectiveness of the species at risk program. Additionally, some species at risk may not be protected in the future, as the Act's classification criteria for species at risk was changed in 2019 and is now inconsistent with how species are assessed in other provinces across Canada. Moreover, forestry

Figure 1: Number of Species at Risk in Ontario, Approvals, Offences and Species at Risk Stewardship Program Budget under the *Endangered Species Act, 2007*, 2008–2020

Sources of data: Ministry of the Environment, Conservation and Parks and Ministry of Northern Development, Mines, Natural Resources and Forestry

Activity ¹	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% Difference (2009-2020)
Species at Risk in Ontario regulated under the Act ²	184	200	207	207	212	215	224	226	231	237	243	243	243	22
Approvals to Impact ³	1	13	197	29	40	38	143	380	771	803	987	972	827	6,262
Approvals for Protection and Recovery ⁴	0	68	106	139	101	100	97	117	166	106	129	101	108	59
Offences under the Act ⁵	9	8	11	15	50	12	0	28	27	36	3	2	0	(100)
Species at Risk Stewardship Program Budget (\$ million) ⁶	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	(10)

1. 2009 was the first full year that the Act was in force. The Ministry of Northern Development, Mines, Natural Resources and Forestry was responsible for enforcing the Act from 2008 to 2018. The Ministry of the Environment, Conservation and Parks has been responsible for enforcing the Act since 2019.

2. Species on the Species at Risk in Ontario List are classified as Endangered, Threatened, Special Concern or Extirpated.

3. Approvals to impact species at risk include agreements, permits and conditional exemptions.

4. Approvals for protection and recovery of species at risk include permits and conditional exemptions.

5. Offences include charges laid (including withdrawn and dismissed).

6. The budgeted amounts have not been adjusted for inflation. After inflation, the 2009 budgeted amount of \$5.0 million would be \$6.0 million if adjusted to 2020.

operations on Crown lands were exempted from the Act in 2020, resulting in some species actually losing habitat protections under the Act.

The committee that advises Ontario's Environment Minister on how to implement the Act is dominated by industry stakeholders, whose interests can be contrary to protecting species at risk and their habitats. Additionally, the Environment Ministry could not explain how six recent appointees were identified, screened and chosen for the independent science committee that classifies which species are at risk.

The Environment Ministry lacks guidance on when to say "no" to permit applications to harm species at risk and their habitats. No application to harm species or their habitats has ever been denied. In fact, most approvals are granted automatically by the Environment Ministry without review. There are also no inspections to ensure that companies and others abide by the conditions of their approvals. The cumulative effects of approvals to harm species at risk and other threats are not assessed by the Environment Ministry.

Because the province's goals are generally less ambitious than the recommendations made by independent scientists, its planned actions for the protection and recovery of species at risk are unlikely to improve their status. Few performance measures have been developed to gauge progress for any particular species, and progress is reviewed only once for each species as that is all that is required by the Act.

The following are some of our specific significant findings.

Governance and Accountability

- **The Environment Ministry does not have a long-term strategic plan to improve the status of species at risk.** Other jurisdictions identify priority species, habitats and threats in their strategic plans, with associated actions and timelines. The Ministry also has not established a performance measurement framework to evaluate whether its species at risk program is making species better off. A 2019 Ontario Public Service employee engagement survey conducted by the Environment Ministry found that 76% of the Species at Risk

Branch staff believed that the Ministry was not on the right track in its planning for the future.

- **Forestry operations on Crown lands were exempted from the *Endangered Species Act, 2007* in the *Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020* despite the Environment Ministry's determination that forestry rules could cause significant adverse effects to 12 endangered or threatened species such as boreal caribou.** The federal government can issue orders under the *Species at Risk Act* if the federal Minister of Environment and Climate Change is of the opinion that the laws of a province or territory do not effectively protect the critical habitat of a federally listed species at risk. In March 2021, the Environment and Natural Resources ministries each received a letter from the federal Environment Minister that warned the forestry exemption did not conform with the federal *Species at Risk Act*. Corrective action was requested by November 2021. In June 2021, the Environment Ministry received a follow-up letter. To date, no action has been taken. Additionally, Ontario made legislative changes in the *More Homes, More Choice Act, 2019* that increase its risk of not conforming with the federal *Species at Risk Act*, including changes to classification criteria for species at risk and the introduction of a new type of approval that does not require beneficial actions to be carried out for all impacted species.
- **The current process for appointments to the Environment Minister's species at risk advisory committee is not transparent.** The Species at Risk Program Advisory Committee (Advisory Committee) was established under the Act to advise the Minister on a broad range of species at risk matters related to the implementation of the Act. Members who work for industry associations or companies now account for 10 of the 15 (or 67%) members. Half of these 10 are registered lobbyists. Seven new members were appointed by the Minister in 2019 and 2020, yet the Environment Ministry

could not explain how they were identified, screened and chosen. Additionally, the Advisory Committee did not prepare annual reports describing its activities for 2017/18 or 2018/19. In 2016/17 and 2019/20, the annual reports were prepared by Ministry staff on behalf of the Advisory Committee. None of these reports are publicly available.

Species Assessment and Classification

- No new species at risk were regulated in 2019 and 2020 because the committee that assesses and classifies species lacked quorum to function.** The Species at Risk in Ontario List has not been updated since 2018 and some species that could have been protected sooner were not. For a species to receive protections under the Act, the Committee on the Status of Species at Risk in Ontario (Assessment Committee) assesses and classifies the species, then the Environment Ministry adds them to the Species at Risk in Ontario List. However, the Assessment Committee did not have the required members to function in the second half of 2018 and all of 2019. Once it had sufficient members again in 2020, the Assessment Committee assessed and classified 35 species from the backlog. The Environment Ministry must now update the Species at Risk in Ontario List by January 2022. Fifteen of the 35 are newly listed species at risk that will be regulated under the Act, including black ash (a tree), smooth yellow false foxglove (a plant) and hairy valerian (a plant).
- The current process for appointments to the committee that assesses and classifies species in Ontario is not transparent.** Until 2019, vacancies on the Committee on the Status of Species at Risk in Ontario were broadly advertised. Ministry staff with species at risk expertise screened applications using standard review criteria and recommended qualified candidates to the Minister for appointment. However, in 2019 and 2020, the Minister appointed six individuals: five were not screened using these criteria or recommended by staff with species at risk expertise, and the one candidate who was screened using these criteria was determined to be marginally qualified and was not recommended. The Environment Ministry could not explain how these six appointed members were identified, screened and chosen.
- The *More Homes, More Choice Act, 2019* changed the classification criteria used by the independent scientific committee, which may result in some species at risk not being protected in the future.** A 2019 omnibus bill changed the Act to require the Committee on the Status of Species at Risk in Ontario to consider a species' condition outside Ontario, and if the condition of the species across this broader area is determined to be at a lower risk level than if only the population in Ontario is considered, it must classify the species at the lower risk level. Previously, species assessments were based on their biological status in Ontario only, while accounting for functional connections with populations elsewhere. This was consistent with practices across Canada and internationally. In the future, a species may be down-listed from endangered or threatened, not because that species' status is improving in Ontario, but because with the changed criteria the Assessment Committee must consider the species' status outside of the province. Therefore, some species that are currently at-risk in Ontario may not be protected under the Act in the future.

Species at Risk Recovery Planning

- Recovery strategies are delayed for six endangered and 11 threatened species.** Recovery strategies are prepared by experts to provide independent scientific advice to inform the government's actions to protect and recover a species. Delays in preparing them result in delays in conservation action. Required recovery strategies have been completed for 154 species (or 90%), but they are delayed for six endangered and 11 threatened species. Fourteen recovery strategies have been delayed because the Environment

Ministry plans to adopt the federal recovery strategies for these species and is waiting for the federal government to complete these strategies. Two recovery strategies—for mountain lion (cougar) and spoon-leaved moss, both due in 2013—have been delayed to allow the Environment Ministry to prioritize the preparation of recovery strategies for other species. The recovery strategy for Algonquin wolf, due in 2018, was delayed due to “complex issues,” despite a draft strategy that warned that a delay may jeopardize the wolf’s long-term recovery. Hunting and trapping of wolves have economic and social importance for some people, yet these activities are significant threats to the Algonquin wolf. The Algonquin wolf is protected from being killed across only some of its geographical range.

- **Response statements are generally insufficient to improve the status of species at risk.** A response statement is prepared by the Environment Ministry for an endangered or threatened species. It identifies what actions the Government of Ontario will take, or support others to take, for a species’ protection and recovery. However, we found that the province’s goals are generally less ambitious than the scientific advice in recovery strategies, and that government-led actions are often not specific to the species and include meeting existing legal obligations. Additionally, response statements do not establish performance measures or provide cost estimates to help inform decisions about which protection and recovery actions to take or prioritize. Accordingly, the Environment Ministry does not have any objective or systematic way of knowing whether any actions being taken are making a difference. As a result of these weaknesses, implementing response statement actions may not improve the status of species at risk.
- **Response statements for two endangered, one threatened and one special concern species have been delayed for seven or more years.** Response statements publicly identify the actions and priorities that Ontario intends

to take and support to protect and recover a species. Response statements have been prepared for 164 or 98% of species at risk. They have not been prepared for the American eel and three populations of lake sturgeon (a fish). Accordingly, the status of these species is unlikely to improve. Another 17 endangered or threatened species do not have response statements because the recovery strategies upon which the statements will be based have not yet been created.

- **Reviews of progress do not evaluate the effectiveness of actions taken and are done only once per species.** The Environment Minister must ensure the implementation of any actions in a species’ response statement that are feasible and within the responsibilities of the Minister. However, reviews of progress do not evaluate the effectiveness of actions taken, and cannot be used to gauge progress for the recovery of a species at risk. Once a review is completed, the Ministry is not required to report again on the actions taken for that species, even when the review identifies that no progress has been made. In contrast, the federal government, Nova Scotia, and the Northwest Territories report on progress every five years until either a species’ recovery objectives have been achieved or the species’ recovery is no longer required or feasible.

Species at Risk Approvals

- **Approvals are not assessed for how they cumulatively affect species at risk and their habitats.** The Environment Ministry does not assess the total impact of all agreements, permits and conditional exemptions over time on regulated species. Instead, approvals are considered in isolation. Yet the cumulative effects of multiple stressors—particularly those involving habitat loss—are what pose a significant threat to species. For example, Blanding’s turtles have been impacted by 1,403 approvals since 2007; this species has declined by more than 60% over the last three generations because of ongoing

habitat loss in Ontario. Similarly, bobolinks (a bird) have been impacted by 2,049 approvals since 2007; this species is estimated to have declined by 77% since 1970 and by 33% since 2000. Additionally, legislative changes made in 2019 now allow for landscape agreements that approve multiple harmful activities across a broad area. In this type of approval, beneficial actions may not occur for all impacted species.

- **Permit applications to harm species at risk or their habitats are always approved.** Since the Act was passed in 2007, there have been 306 permits issued that have allowed harmful activities—74% of which have been in and around the Greater Golden Horseshoe and southwestern Ontario. The consequences are ongoing impacts to species at risk and their habitats. For example, the Environment Ministry issued a permit in 2021 to allow a corporation to construct a subdivision of cottages. The same corporation had been issued a stop work order in 2018 by the Natural Resources Ministry for building a road through Massasauga rattlesnake habitat without approval—and was subsequently charged in 2019 with damaging habitat. This prosecution was still ongoing at the time of our audit. In 2018, the Natural Resources Ministry, then responsible for the program, identified the need for internal guidance on when to say “no” to a permit application.
- **In 2020, 893 (or 96%) of approvals to harm species at risk and their habitats were conditional exemptions, which the Environment Ministry cannot choose to deny or tailor for specific circumstances.** Harmful activities by companies, organizations and people are allowed under conditional exemptions (sometimes called permit-by-rule) if a standard set of rules is followed. In 2020, conditional exemptions impacted 123 different species at risk. Often, these conditional exemptions require only that harm be minimized, which may contribute to a worsening status for the species at risk. In contrast, overall benefit permits require that species be made better off than before the activity occurred. The species

frequently negatively impacted by conditional exemptions are bobolink, eastern meadowlark (a bird), barn swallow (a bird), Blanding’s turtle and butternut (a tree) as these species have a broad geographical distribution.

- **The Environment Ministry has not assessed the effectiveness of overall benefit permits that allow harmful activities but require that species be made better off.** A total of 276 overall benefit permits was issued between 2007 and 2020—93% for locations in southern Ontario. Overall benefit permits require a company, organization, or person to make the species better off than before the activity was approved. In 2018, the Natural Resources Ministry, then responsible for the program, found that better guidance was needed on how much habitat is replaced compared to how much is destroyed, and that restoration work was sometimes done at unsuitable sites. For example, we found a case where a company was allowed by the Environment Ministry to damage and destroy 9.6 hectares of different types of Blanding’s turtle habitat, and was required to create a 0.49 hectare pond in order to achieve an overall benefit. Monitoring reports showed that the much smaller, newly created habitat was not effective as no turtles had inhabited it in two years after it had been constructed.
- **The Environment Ministry has delayed issuing some permits for conservation work, while fast-tracking some permits for development.** Instead of delegating decision-making, the Environment Minister is currently responsible for making all decisions on issuing permits under the Act, based on the advice of staff. This may be causing delays that impact species. According to Ministry staff with technical expertise, delays dating back to 2017—including obtaining the Minister’s approval—for a protection and recovery permit for conservation work on the Massasauga rattlesnake likely contributed to this species becoming locally extinct. In contrast, we found that companies or organizations who complain to

higher levels within the Ministry obtain permits for development 43% faster than had they not complained. For example, our review of permit files found that the Ministry prioritized permits for Infrastructure Ontario ahead of other applicants.

- **There is an increasing use of social or economic benefit permits to allow harmful activities; these permits do not require that species are made better off.** Social or economic benefit permits allow for activities that are expected to result in significant social or economic benefit to Ontario without requiring that any affected species at risk are made better off. There have been six of these permits for large-scale projects issued since 2007—four since 2019. Metrolinx obtained three of these permits in 2020 for transit projects in the Greater Toronto Area that collectively impact at least nine species at risk. Having a Crown agency obtain multiple permits for harmful activities, with no required overall benefit to make species better off, demonstrates to the public that the government sets a low standard for itself for species at risk conservation.
- **The Environment Ministry does not charge fees for approvals, although this would discourage activities that harm species at risk and their habitats.** The Environment Ministry charges fees for other activities that impact the environment. For example, the Ministry charges between \$1,190 and \$2,353 for different types of approvals under its Environmental Activity and Sector Registry program and charges up to \$60,000 for certain types of permits. Had the Ministry charged the lowest similar fee for the 935 approvals it issued in 2020 under the *Endangered Species Act, 2007*, it could have generated over \$1.1 million in revenue to support species at risk conservation.

Compliance and Enforcement

- **The Environment Ministry has laid only two charges for harming species at risk since 2019. An enforcement plan is not finalized and environmental officers have not been appointed to enforce the Act.** In contrast, when

it enforced the Act, the Natural Resources Ministry laid an average of 19 charges annually from 2009 (the first full year the Act was in force) to 2018. The Environment Ministry's enforcement of the Act is complaint driven, but the Ministry's enforcement website does not include information about how to file a complaint about potential harm to species at risk. At the time of our audit, the Ministry had not yet appointed environmental officers to enforce the Act due to labour relations issues such as new work with no additional resources. The Ministry has internally identified that not appointing environmental officers is a high risk to implementing its enforcement framework for the Act.

- **The Environment Ministry does not conduct inspections to ensure compliance with the requirements of agreements, permits and conditional exemptions.** There have been 6,539 approvals (agreements, permits and conditional exemptions) under the Act between 2007 and 2020 but none of the activities involved have ever been inspected for compliance with their approval conditions by the Environment Ministry or the Natural Resources Ministry (when it was responsible for the program prior to 2019). For example, conditional exemptions may require preparing mitigation plans but these are often missing or in poor quality. In 2017, 9% of approval holders did not provide plans when requested by the Natural Resources Ministry and 63% of the plans provided were poor in quality, with no clear actions to minimize adverse effects on the species. The Natural Resources Ministry did not follow up. The Environment Ministry expects to finalize a draft of its enforcement plan in 2021, but its approach will remain complaint driven. For other provincial environmental programs, inspections are routine.

Species at Risk Stewardship Program

- **Funding for the Stewardship Program has decreased despite an increased number of species at risk and the program's contributions**

to recovery efforts. The Environment Ministry relies on the Species at Risk Stewardship Program (Stewardship Program) to conduct on-the-ground conservation work because the Ministry has no dedicated staff or internal funding to conduct this work. The Stewardship Program has funded 1,170 projects and contributed to restoring 55,459 hectares of habitat for species at risk since its creation in 2007. However, we noted that the total amount budgeted for the Stewardship Program was \$5 million per year from 2008 to 2016, and has been \$4.5 million per year since 2017. In comparison, the number of regulated species at risk increased by 59 (or 32%) between 2008 and 2020.

- **Delays by the Environment Ministry in funding stewardship projects to undertake conservation work have sometimes resulted in the cancellation of projects.** We found that, in the last two funding cycles, successful Stewardship Program applicants were not officially notified that their projects were accepted until four to six months after their projects were to have started. The relatively late launch date for the call for proposals and the length of the approval process by senior management contributed to these delays. In addition, payment agreements for successful Stewardship Program applicants were not finalized until almost a year after the intended start date. The delays resulted in some applicants either walking away or having to redesign their projects. For example, activities to restore habitat damaged by phragmites (an invasive reed grass) did not proceed in 2019. This restoration work would have addressed high-priority actions in the response statement for the least bittern (a bird).

This report contains 21 recommendations, with 52 action items, to address our findings. See **Appendix 1** for a summary of the recommendations and the Environment Ministry's response to them. Our work is supported by the evidence in this audit. We believe that these recommendations are supportable and should be implemented.

Overall Conclusion

The overarching goal of the *Endangered Species Act, 2007* is to protect Ontario's species at risk and to promote their recovery for future generations. Yet, the Environment Ministry's species at risk program misses achieving its central purpose: protecting and recovering species at risk. The purpose of species at risk legislation is to serve as the last line of defence when other programs have been ineffective in conserving nature or have directly contributed to biodiversity loss. The Environment Ministry is not, however, acting in the best interests of species and their habitats.

Our audit found that the Environment Ministry's systems and processes for approvals facilitate and enable harm to species at risk and their habitats. Moreover, the government exempted forestry operations on Crown lands from the Act and its protection requirements for species and their habitats. No application for a permit to harm a species has ever been denied, resulting in ongoing impacts to species at risk and their habitats. Most other approvals, such as for gravel pit operations and some agricultural activities, are obtained automatically without the possibility of putting the needs of a species first by not allowing a particular harmful activity when warranted.

The Environment Ministry has not assessed the cumulative effects on species and their habitats of the 6,539 agreements, permits and conditional exemptions allowed between 2007 and 2020. Additionally, the Ministry has laid only two charges in the last two years and does not conduct inspections to ensure the conditions of approvals are complied with by the companies, organizations, and people who have been allowed to harm species and their habitats.

The Committee on the Status of Species at Risk in Ontario did not have sufficient members to assess and classify species at risk in 2018 and 2019. Accordingly, no new species at risk were regulated in 2019 and 2020. Further, the process for appointing members to this committee, whose work is meant to be independent and based on science, is not transparent. Recovery strategies and response

statements have been delayed for some species. The existing response statements are not likely to improve the status of species at risk.

The Environment Ministry does not have a long-term strategy or performance measures to evaluate whether successful outcomes are being achieved for species at risk. In the absence of substantive actions, the number of species at risk in Ontario will continue to grow. The condition of species and their habitats will continue to decline.

OVERALL ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks appreciates the Auditor General's comments and will use the report and the recommendations to guide our future work.

Our government is committed to conserving the province's rich biodiversity by protecting and recovering species at risk and their habitats. We continue to take action to make the *Endangered Species Act, 2007* more effective and efficient. We have made great progress over the past few years and continue to fund on-the-ground work through the Species at Risk Stewardship Program, investing more than \$16 million since 2018 to protect and recover species at risk. In 2019, we modernized and improved the effectiveness of the *Endangered Species Act, 2007* by implementing recommendations received as part of the 10-year review of the Act, including improving transparency when it comes to notifications of new species listings and enhancing government oversight and enforcement powers to ensure compliance with the Act.

We are committed to finalizing government response statements to support the protection and recovery of new species at risk and issuing permits with stringent requirements. We created a new provincial agency, the Species Conservation Action Agency, that will strategically invest funds to protect and recover species at risk on a province-wide scale, with the long-term interests of species in mind.

Species protection and recovery is a shared responsibility—that is why we will continue to work with individuals, stakeholders and Indigenous communities to achieve our goals.

OVERALL NATURAL RESOURCES MINISTRY RESPONSE

The Ministry of Northern Development, Mines, Natural Resources and Forestry (Natural Resources Ministry) acknowledges the recommendations outlined in this report and recognizes the importance of species at risk protection and recovery. The Ministry of the Environment, Conservation and Parks (Environment Ministry) is now responsible for the *Endangered Species Act, 2007* and will provide comments on behalf of the Government of Ontario.

The Natural Resources Ministry will continue to provide science support associated with species at risk and consider the requirements of the *Endangered Species Act, 2007* when implementing changes to existing programs and policies where there may be an impact to species at risk and/or their habitat and will support the Environment Ministry in addressing the recommendations in the report as appropriate.

2.0 Background

2.1 Species at Risk Conservation is a Global Issue

Species at risk are the plants, mammals, birds, fish, and other organisms that are in danger of extinction and being lost forever. See **Appendix 2** for a glossary of terms used in this report. According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, an international body of experts, the worldwide rate at which species are now becoming extinct is tens to hundreds of times higher than the average rate over the past 10 million years, and it is accelerating.

The loss of species contributes to the larger loss of biodiversity (nature), which includes plants, animals and all other living things, as well as how they interact in the environment. Experts and world leaders have called for urgent action to address this global loss of nature. In December 2020, the Secretary-General of the United Nations warned that humanity is waging war on nature at its own peril.

The World Economic Forum in its *Global Risks Report 2021* ranked biodiversity loss, which includes species at risk, as a top-five risk—by likelihood and impact—over the next five to 10 years. The other top risks by likelihood are extreme weather, climate action failure, human environmental damage and infectious diseases. Each of these risks impact species and their habitats in different ways.

The global *Red List* of imperilled species—the most comprehensive list of species at risk—currently includes more than 37,000 species assessed to be threatened with extinction, including 41% of all amphibians, 34% of evergreen trees, 33% of reef-building corals, 26% of mammals and 14% of birds. This list is prepared by the International Union for Conservation of Nature, the global authority on the natural world comprising more than 1,400 government and non-governmental organizations.

Canada has similar rates of imperilled plants, animals and other organisms compared to other countries in the Americas. According to the World Wildlife Fund's *2020 Living Planet Report*, the populations of Canadian at-risk species have declined by 59% on average from 1970 to 2016. At the time of our audit, there were 3,594 species in Canada on the global *Red List*, including 28 that are listed as critically endangered. Examples of critically endangered species in decline in Ontario are the rusty-patched bumble bee, American chestnut (a tree), and the green ash (a tree). For example, the rusty-patched bumble bee was common in southern Ontario until the 1980s, but it has not been found since 2009 despite extensive scientific surveys—it was regulated as endangered in Ontario in 2010.

2.2 Why Species Diversity is Important

Species make many significant contributions to the quality of human life. For example, the antibiotic penicillin is derived from a fungus; a drug used to fight leukemia in children is derived from Madagascar's rosy periwinkle plant; research on venom from a South American snake led to the development of a drug to control blood pressure; and one of the tests currently used to diagnose COVID-19 comes from bacteria discovered in hot springs in Yellowstone National Park in 1966.

Preventing the loss of species and their habitats is also increasingly important for lowering the risk of transmitting infectious diseases such as COVID-19 from animals to humans. Scientists estimate that there are approximately 700,000 wildlife viruses that have the potential to affect humans and cause disease. The risk of disease transmission from wildlife to humans increases with more interaction between humans and wildlife. When wildlife habitat is converted into other land uses such as housing or agriculture, species that carry infectious diseases live closer to human populations. Losing a species from an ecosystem can also disrupt the balance in that ecosystem. For example, if a disease-carrying species loses a natural predator, its numbers will increase, which increases the risk it will transmit the disease to humans.

Further, conserving biodiversity, including species at risk, is essential to maintaining properly functioning ecosystems, which produce oxygen, regulate climate, mitigate floods and storms and provide recreational opportunities like hunting, fishing and wildlife-viewing, and supply people with food and water. For example, pollinators like bees support over 35% of the world's food crop production. In 2021, the World Bank estimated that the loss of biodiversity and ecosystem services could result in a \$2.7 trillion USD decline in global GDP by 2030 without concerted conservation actions. In Ontario, failing to protect and recover species and their habitats will also leave the province more vulnerable to environmental impacts

such as soil erosion, air pollution, forest fires and floods, and could exacerbate the impacts of climate change. The degradation or loss of one part of an ecosystem impacts the functioning of the whole.

2.3 The Biggest Threats to Species

An estimated one million of the planet's eight million species are threatened with extinction by human actions and the resulting changes in nature, according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. The biggest threats to biodiversity, including species at risk, are:

- land-use change (such as converting natural forest or grassland to agricultural, residential or industrial uses, resulting in the loss of natural areas and habitat for species);
- direct exploitation or harvesting (logging, hunting, trapping and fishing);
- climate change (including temperature and precipitation changes, worsening natural disasters, and rising sea levels);
- pollution (air, water, and plastic pollution); and
- invasive species (non-native species that compete with native species and alter how ecosystems function).

Habitat loss is a key predictor of species becoming endangered and causes problems for species recovery efforts. Scientists reported in 2020 in the *Earth System Science Data* journal that 178 square kilometres of natural land is lost each day around the world and the rate has increased over the last 25 years. Scientists also reported in 2021 in the *Frontiers in Forests and Global Change* journal that only 3% of the world's land (except Antarctica) remains ecologically intact with healthy populations of original wildlife and unimpacted habitat.

Similarly, in Canada, habitat loss and degradation—resulting from land-use changes and disturbance from human activity—is the predominant threat to species at risk. Creating and effectively managing protected areas is one way to conserve species and habitats from harmful impacts of human activities such as logging, mining, urban development and

agriculture. Our Office reported on protected areas in our 2020 value-for-money audit on *Conserving the Natural Environment with Protected Areas*. Canada's national target is to protect 25% of lands by 2025 to conserve biodiversity, including species at risk. Provincially, protected areas covered 10.7% of Ontario at the time of our audit. The effectiveness of laws for species at risk is especially important for the species in lands and waters outside of protected areas.

2.4 Species at Risk in Ontario

Ontario is home to more than 30,000 species. Scientists have assessed the status of more than half the species in Ontario and 2,752 are of conservation concern in 2021. Species are “of conservation concern” when they are vulnerable, rare or rapidly declining, indicating significant risk about their future survival. Additionally, Ontario has eight species that are not found anywhere else in Canada or the world (see **Appendix 3**). Other species are found only in Canada such as the Algonquin wolf that inhabits parts of Ontario and Quebec.

The Ontario Biodiversity Council—a volunteer body of conservation groups, industry associations, and Indigenous peoples—reported in 2021 that:

- the total number of species at risk in Ontario had increased by 19 species (or 8%) to 243 and only one species was delisted since its last report in 2015; and
- species at risk in Ontario that were reassessed between 1996 and 2017 worsened more often in status (20%) than improved (14%).

Species have evolved over thousands or millions of years but can now face rapid decline in decades, sometimes only years, because of different threats. For example, four of Ontario's eight bat species are at-risk due to a disease called white-nose syndrome that causes the death of 95% to 100% of hibernating bats in two to three years. Since the emergence of this disease in 2006 in eastern New York, white-nose syndrome, which has no known cure, has spread to 35 US states and seven Canadian provinces. The Natural Resources Ministry released

Ontario's White-nose Syndrome Response Plan in 2015. However, remaining populations of at-risk bats in Ontario still face other pressures from habitat loss due to infrastructure, urban development and mining-related activities.

Other species, like Ontario's population of polar bears, face slower declines. Scientists have found that polar bears are likely to become locally extinct in Ontario in 40 to 100 years due to the loss of sea ice habitat on Hudson Bay. Climate change is impacting their ability to hunt for food sources, such as seals. Climate change exacerbates the risks and threats that many other imperilled species already face, including pushing species northwards as temperatures warm.

The decline of other species is directly connected to human development. For example, Ontario's caribou—sometimes called the “grey ghosts” of the boreal forest—have retreated northwards as 40% to 50% of their habitat has been lost since the 1800s. Threats to the boreal population of caribou include habitat loss, degradation and fragmentation due to human settlement and development activities such as forestry, mining, and building hydro corridors and roads. Caribou are also at risk from an increase in predation and disease that accompanies such broad habitat changes.

American eels in Ontario were once abundant in the Great Lakes basin, providing a highly prized food source for Indigenous peoples. American eel numbers drastically declined as dams were constructed that fragmented their waterway habitat. The commercial eel fishery was closed in 2004 and American eels are now endangered. Without action, these could be the last generations of the species in Ontario.

There are at least eight species that once lived in Ontario that are now extinct (see **Appendix 4**). For example, there were as many as five billion passenger pigeons at one time across North America, but this species became extinct in 1914 due to extensive hunting. Other species that once lived in Ontario may only be found in other parts of Canada, like the eastern tiger salamander, now found only in Manitoba.

2.5 Protecting and Recovering Species at Risk

Government programs—the rules for land-use planning, development, forestry, agriculture, mineral development, hunting and fishing, and controlling pollution—are expected to conserve biodiversity and prevent species from becoming at risk. Species at risk legislation usually serves as the last line of defence when other programs have been ineffective in conserving nature or have directly contributed to biodiversity loss. The goal of a species at risk program should be to protect and recover species so that they are no longer at risk.

Species at risk are like patients in a hospital emergency room—both have imminent threats to their survival that must be assessed and treated to prevent their condition from worsening. An endangered species is like a patient having a heart attack—both require immediate intervention to prevent their extinction or death. Like preventative health care, it is more effective, efficient and economical to keep species healthy by protecting them than to undertake complex and time-consuming efforts to recover them after they have been harmed.

The protection and recovery of species at risk and their habitats is a shared responsibility across Canada between the provincial, territorial and federal governments. **Figure 2** summarizes the roles and responsibilities of various key players in Ontario. There are a number of significant agreements, summarized in **Figure 3**, intended to address species at risk.

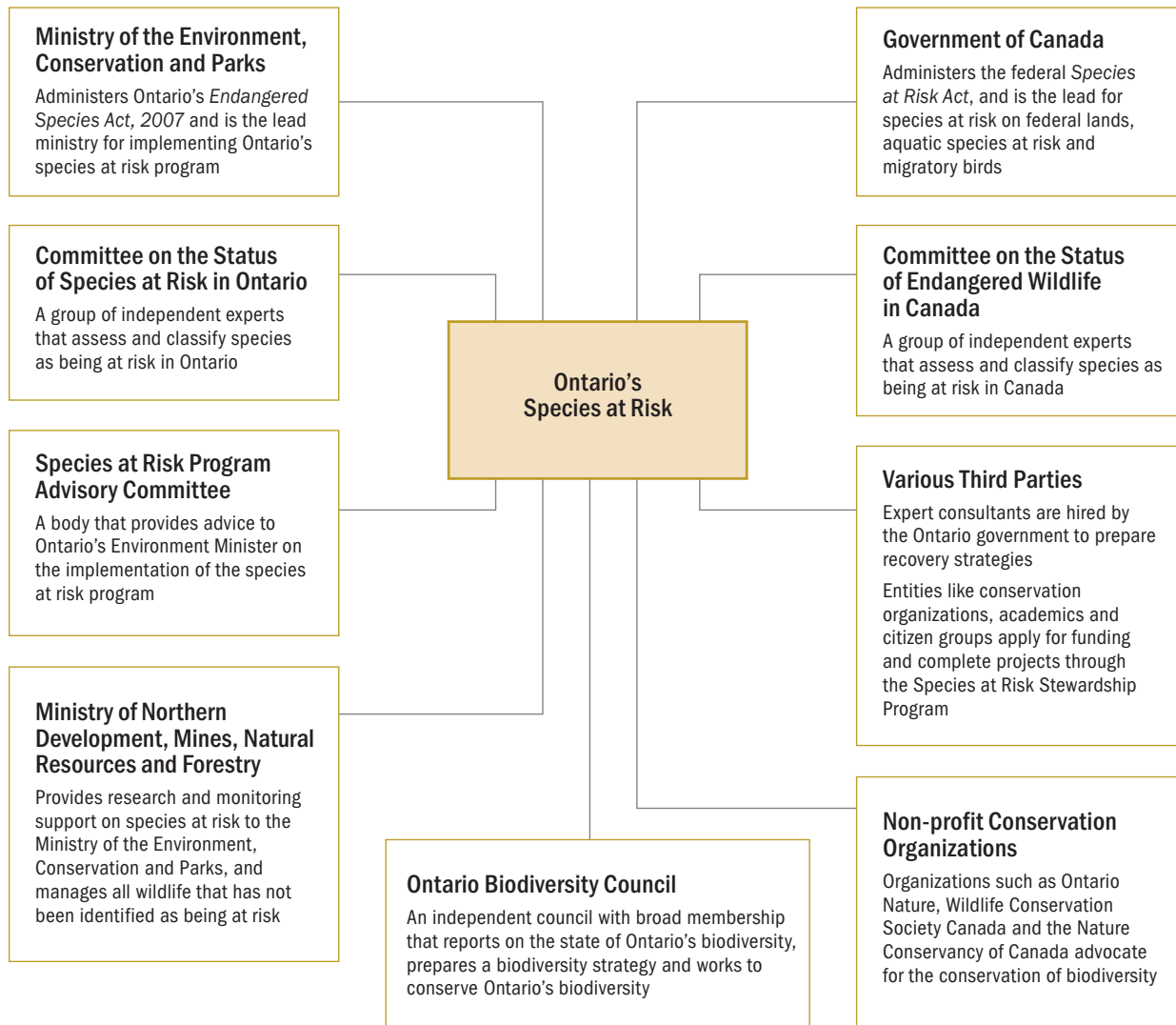
2.6 Species at Risk Law

2.6.1 Federal Law – the *Species at Risk Act*

The federal *Species at Risk Act*, passed in 2002, legally established the Committee on the Status of Endangered Wildlife in Canada, an independent body of scientists, to assess whether individual species across Canada are endangered, threatened, of special concern, extirpated or extinct. This federal law outlines measures to protect the 630 wildlife species (including aquatic

Figure 2: Roles and Responsibilities of Key Players on Species at Risk

Prepared by the Office of the Auditor General of Ontario



species and migratory birds) currently listed in Schedule 1 of this Act, 226 (or 36%) of which are found in Ontario. This law is administered by Environment and Climate Change Canada, and various responsibilities are implemented by the Canadian Wildlife Service, Parks Canada, and Fisheries and Oceans Canada.

The *Species at Risk Act* generally directly applies only to federal lands (national parks and reserves, First Nation reserves, military bases, airports), which make up about 1% of Ontario's land base. However, the federal government can issue orders under the *Species at Risk Act*, such as when the federal Minister

of the Environment and Climate Change is of the opinion that the laws of the province or territory do not effectively protect the critical habitat of a federally listed species at risk.

The federal government can also enter into a conservation agreement with a province or territory to benefit a species at risk or enhance its survival in the wild when the two parties agree that conservation measures are sufficient. For example, all jurisdictions—except Manitoba and Ontario—have negotiated an agreement (or equivalent) with the federal government for the conservation and recovery of boreal and/

Figure 3: Government Agreements on Species at Risk Conservation

Prepared by the Office of the Auditor General of Ontario

Strategy or Framework	Description
United Nations' <i>Convention on International Trade in Endangered Species of Wild Fauna and Flora</i> , 1974	<ul style="list-style-type: none"> The aim of this agreement is to ensure that the international trade in wild animals and plants does not threaten their survival.
<i>Recovery of Nationally Endangered Wildlife Strategy</i> , 1988	<p>In 1988, federal, provincial and territorial governments agreed to a strategy for species at risk with the following objectives:</p> <ul style="list-style-type: none"> no endangered species in Canada will be allowed to become extirpated or extinct; no new species will be allowed to become threatened or up-listed to endangered; when and where possible, extirpated species will be reintroduced to Canada; recovery plans will be prepared for all threatened and endangered species; and recovery programs will be initiated, where feasible, to work towards removing species from threatened, endangered or extirpated status.
United Nations' <i>Convention on Biological Diversity</i> , 1992	<ul style="list-style-type: none"> The Convention, ratified by Canada in 1993, is an international treaty with the goal of slowing or halting the loss of biodiversity. In 1995, Canada developed the <i>Canadian Biodiversity Strategy</i> to implement the Convention and it was adopted by federal, provincial and territorial ministers on behalf of their respective governments. In 2010, Canada and the other parties to the Convention—now 196 countries—met in Nagoya, Aichi Prefecture, Japan, and agreed to a new 10-year strategic plan for biodiversity that established 20 targets. The “Aichi targets” were targets to conserve biodiversity, including to prevent the extinction of known threatened species and improve their conservation status, particularly of those most in decline, by 2020.
<i>Accord for the Protection of Species at Risk</i> , 1996	<ul style="list-style-type: none"> The Accord was signed by federal, provincial and territorial ministers responsible for wildlife (except Quebec) with the goal of preventing species in Canada from becoming extinct or extirpated because of human impacts. The Accord set out principles and commitments related to protecting species at risk, including the importance of intergovernmental co-operation, and complementary legislation and effective programs across the country.
<i>Biodiversity Goals and Targets for Canada</i> , 2015	<ul style="list-style-type: none"> In 2015, the federal, provincial and territorial governments released the <i>2020 Biodiversity Goals and Targets for Canada</i>. Target 2 states that, “By 2020, species that are secure remain secure, and populations of species at risk listed under federal law exhibit trends that are consistent with recovery strategies and management plans.”
<i>Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada</i> , 2018	<ul style="list-style-type: none"> In 2018, the federal, provincial and territorial governments agreed to implement the <i>Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada</i>—a new multispecies and ecosystem approach that focuses efforts on priority species, places and sectors across Canada.

or southern mountain caribou. Entering into such an agreement would require a willingness by Ontario to improve existing measures for boreal caribou and adapt rules for the forestry industry.

2.6.2 Provincial Law – the *Endangered Species Act, 2007*

The *Endangered Species Act, 2007* took effect in 2008 and its purposes are to:

- identify species at risk based on the best available scientific information, community knowledge and Indigenous traditional knowledge;
- protect species at risk and their habitats;
- promote the recovery of species at risk; and
- promote stewardship activities to assist in the protection and recovery of species at risk.

The *Endangered Species Act, 2007* replaced the *Endangered Species Act* that was passed in 1971. The old law enabled the Natural Resources Ministry to regulate species as threatened with extinction, and prohibited harming them or destroying their habitat under any circumstance. This inflexibility hindered the government's willingness to regulate additional species at risk despite many being identified by scientists as warranting protection. Only 43 species at risk were regulated under the old law when it was repealed, despite 119 others that had been identified as at risk.

Six other provinces and territories (Manitoba, Quebec, New Brunswick, Nova Scotia, Newfoundland and Labrador, and the Northwest Territories) also have standalone laws to address species at risk (See **Appendix 5**).

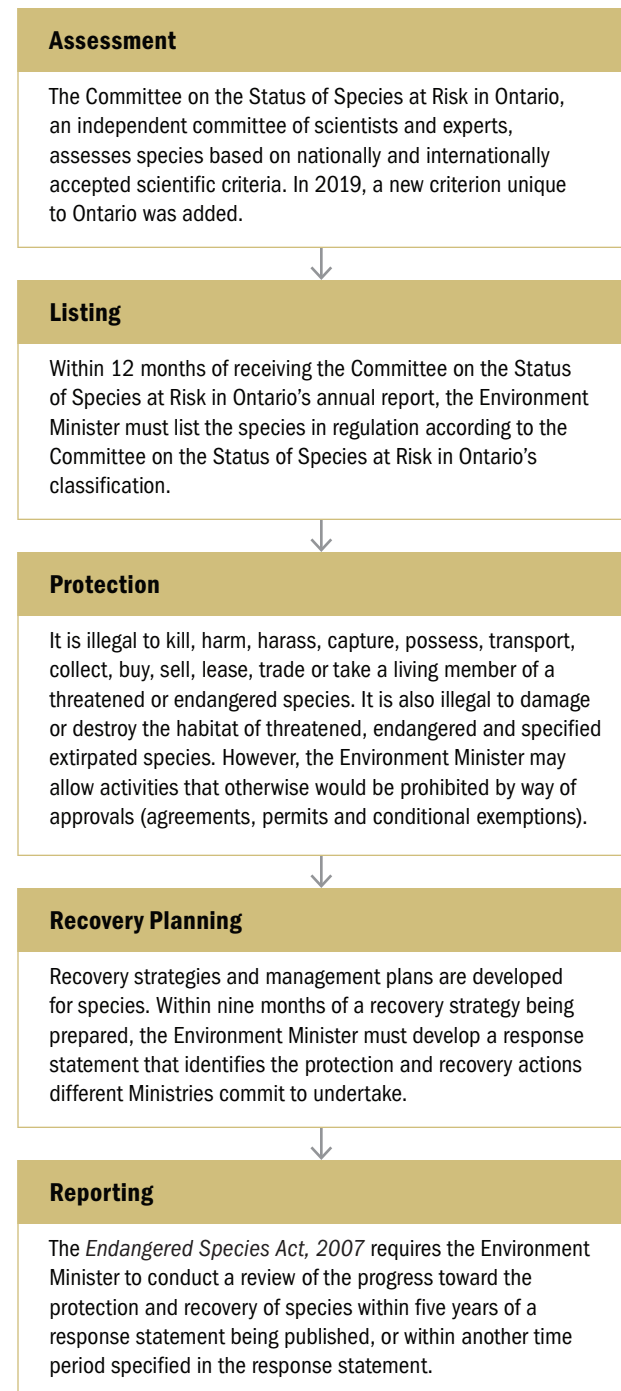
2.7 Ontario's Species at Risk Program

The *Endangered Species Act, 2007* is administered by the Environment Ministry's Species at Risk Branch. It was previously administered by the Natural Resources Ministry. The transfer of the program was announced in June 2018, formalized in an October 2018 Order-in-Council, and operationalized by the Environment Ministry in April 2019. **Figure 4** illustrates Ontario's species at risk protection and recovery process. The branch also provides advice on species at risk issues in other regulatory processes such as environmental assessment and works with other governments on shared species at risk issues.

Figure 5 shows that the Environment Ministry's Species at Risk Branch currently has 51 full-time equivalent staff (FTEs), seven seasonal and three intern positions. In addition, there are 47 staff in the Ministry's Environmental Investigations and Enforcement Branch who were appointed by the Minister to enforce

Figure 4: Ontario's Species at Risk Protection and Recovery Process

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the *Endangered Species Act, 2007*, in addition to their enforcement responsibilities for other programs. For the 2020/21 fiscal year, the Species at Risk Branch had a budget of \$10.5 million. For the 2021/22 fiscal year, the Species at Risk Branch has a budget of \$10.9 million.

Prior to 2019, responsibilities for the species at risk program were spread across a number of areas at the Natural Resources Ministry and neither the overall budget nor the FTEs were tracked.

In April 2019, the Environment and Natural Resources ministries signed a three-year Services Partnership Agreement that outlines the nature and extent of continuing and new science and research supports that the Natural Resources Ministry will provide to the Environment Ministry's Species at Risk Branch and Ontario Parks.

At the time of our audit, the Natural Resources Ministry's Science and Research Branch had 22 FTEs who spend more than a quarter of their time supporting or conducting species at risk work. Additionally, the Natural Heritage Information Centre in the Natural Resources Ministry compiles, maintains and distributes information about species, plant communities

and natural areas of conservation concern as part of its responsibilities.

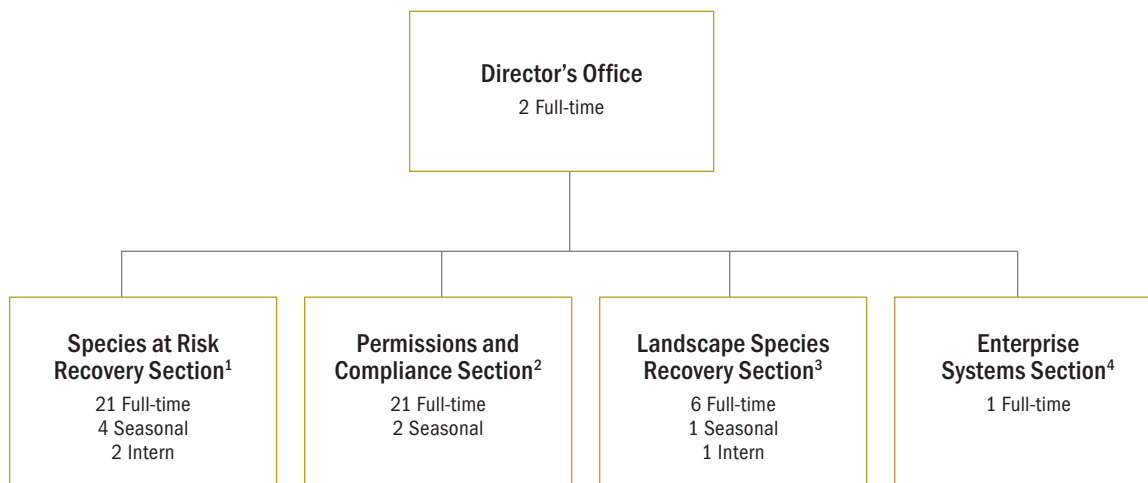
2.7.1 Species Assessment, Classification and Listing

The Act establishes the Committee on the Status of Species at Risk in Ontario (Assessment Committee). The Assessment Committee assesses and classifies species, and provides advice to the Environment Minister when requested.

The Act requires the Assessment Committee to submit a report to the Environment Minister in January of each year. The annual report is to summarize newly classified species and changes to the classification of currently listed species (see **Figure 6**). Within one year of receiving this annual report, the Environment Minister must update the

Figure 5: Ministry of the Environment, Conservation and Parks' Species at Risk Branch Organizational Chart, as of December 31, 2020

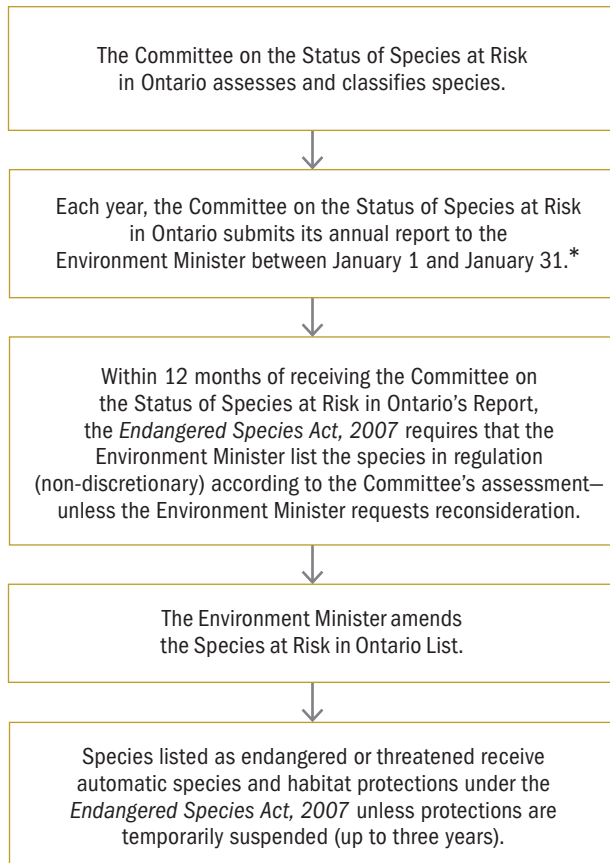
Source of data: Ministry of the Environment, Conservation and Parks



- Species at Risk Recovery Section¹:** responsibilities include leading the development of legislation, regulations and policies related to species at risk protection and recovery; providing secretarial support to the Committee on the Status of Species at Risk in Ontario (see **Section 2.7.1**); leading the development of recovery strategies, management plans and government response statements (see **Sections 2.7.2** and **2.7.3**); and administering the Species at Risk Stewardship Program (see **Section 4.6**).
- Permissions and Compliance Section²:** responsibilities include working with proponents to navigate the approval's application process (see **Section 4.3**); providing program support for compliance activities (see **Section 4.4**); and building relationships with other ministries and municipalities.
- Landscape Species Recovery Section³:** responsibilities include leading the implementation of the Services Partnership Agreement with the Natural Resources Ministry for co-ordination of science and data support (see **Section 2.7.4**), reporting and policy development and evaluation; and leading development of policies, approvals and projects that overlap with Crown land and the Far North.
- Enterprise Systems Section⁴:** leads the establishment of an electronic permissions system as well as the development of guidance documents and tools to support proponents in the approvals process.

Figure 6: Species Assessment and Listing Process

Prepared by the Office of the Auditor General of Ontario



* The Committee on the Status of Species at Risk in Ontario may submit additional reports only when the Environment Minister requests reconsideration or where the Committee on the Status of Species at Risk in Ontario deems the species to be at imminent risk of extirpation or extinction.

Species at Risk in Ontario List (O. Reg. 230/08) to regulate the classified species. Protection and recovery activities only occur after species have been put on the list.

At the time of our audit, 243 species were listed in the Species at Risk in Ontario List regulation (O. Reg. 230/08) under the provincial *Endangered Species Act, 2007* as shown in **Figure 7**. The complete list of species at the time of our audit is found in **Appendix 6**.

2.7.2 Recovery Strategies and Management Plans

Within one year of an endangered species becoming regulated, and within two years of a threatened species becoming regulated, the Environment Ministry must ensure that a recovery strategy for the species is prepared. **Figure 8** outlines the species recovery process and timelines. Recovery strategies must identify the habitat needs of the species, describe the threats to the survival and recovery of the species, and recommend objectives on protection and recovery measures including any specific area that should be regulated as protected habitat. In order for recovery strategies to be based on independent scientific advice, the Environment Ministry contracts with persons or organizations with relevant scientific expertise to prepare recovery strategies.

A recovery strategy is not required for extirpated species but must be prepared if the Minister is of the

Figure 7: Ontario's Species at Risk under the *Endangered Species Act, 2007*, October 2021

Source of data: *Endangered Species Act, 2007*; O. Reg. 230/08

Classification	Description	# of Species
Endangered	Lives in the wild in Ontario but is facing imminent extirpation or extinction	117
Threatened	Lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address threats	54
Special Concern	Lives in the wild in Ontario, is not threatened or endangered, but may become threatened or endangered due to a combination of biological characteristics and identified threats	56
Extirpated	Lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario	16
Total		243

Figure 8: Species Recovery Process and Timelines

Source of data: Ministry of the Environment, Conservation and Parks



1. The Ministry may also develop customized species and/or habitat protection that limits the scope and/or timing of prohibitions.

2. Unless a notice is posted to notify the public additional time is needed.

3. Only if no federal plan is required.

4. Unless an alternate timeline is specified in a Government Response Statement.

opinion that reintroduction of the species to Ontario is biologically, socially and economically feasible.

Within five years of a species of special concern being regulated, the Environment Minister is required to ensure that a management plan is prepared for the species unless there is a federal recovery strategy or management plan. A management plan sets

out advice and recommendations to the Minister on approaches for the management of the species.

2.7.3 Government Response Statements and Reviews of Progress

The Environment Minister must generally develop a government response statement within nine months

of finalizing a species' recovery strategy or management plan. The Minister may delay preparation if additional time is required for one of three reasons specified in the Act. A response statement identifies the actions that Ontario intends to take to protect and recover the species, and identifies potential actions for third parties, such as conservation organizations. The Environment Minister must ensure the implementation of response statement actions that, in the opinion of the Minister, are feasible and within the responsibilities of the Minister.

Within five years of a response statement being published for an endangered, threatened or extirpated species (or within some other time frame specified in a response statement), the Act requires the Environment Minister to conduct a review of the progress toward the protection and recovery of the species. Reviews of progress are not required for species of special concern, even if a response statement is required for that species.

2.7.4 Scientific Research and Monitoring

Science plays a significant role in effectively protecting and recovering species at risk. Research and monitoring activities are conducted to gather scientific information to support the assessment, protection, recovery and stewardship of species at risk. The scale, scope, and necessary time, sometimes many years, for research and monitoring depend on the species, the current state of knowledge, and the threats it faces. Some work can be conducted by outside experts, but it is best suited for ministry staff and resources in many cases.

In April 2019, a three-year Services Partnership Agreement was entered into outlining the nature and extent of continuing and new science and research supports the Environment Ministry can expect from the Natural Resources Ministry. This agreement expires on March 31, 2022 and a new agreement would be necessary to continue this arrangement.

The Environment Ministry identifies its species research and monitoring priorities for consideration in future annual workplans, and the Natural

Resources Ministry assesses its capacity to either conduct the work internally or support the Environment Ministry in procuring or partnering for external expertise. In the fall of 2019, the Environment Ministry identified 12 new science projects and seven ongoing projects. These priority research projects included requests to:

- evaluate the importance of habitat features for bats;
- develop modelling for the survival of American eels during downstream movement;
- develop and implement a polar bear science program; and
- assess the effectiveness of caribou conservation and recovery efforts through monitoring.

As of March 2021, the Natural Resources Ministry has completed four (21%) of the 19 multi-year projects in progress. Twelve projects (63%) were identified as partially completed and/or research was ongoing, and three priority projects (16%) were not actioned (wolverine monitoring, caribou monitoring strategy and road reclamation). The Environment Ministry did not request any priority projects for the 2021/22 fiscal year because the Natural Resources Ministry had limited capacity to address them due to constraints related to COVID-19 on field work and travel.

2.7.5 Approvals (Agreements, Permits and Conditional Exemptions)

The Act makes it illegal to kill, harm, harass, capture, possess, transport, collect, buy, sell, lease, trade or take a living member of an endangered, threatened or extirpated species. It is also illegal to damage or destroy the habitat of endangered, threatened, or specified extirpated species. Penalties include fines and imprisonment. In addition, the Minister has the ability to customize species and habitat protections by regulation. The Act's prohibitions do not apply to species of special concern.

A broad restriction on all activities that may affect species at risk and their habitats may not be practical or possible. For example, a situation may arise that involves activities necessary to protect human health

and safety, or that will result in significant social and economic benefit to Ontario. **Figure 9** shows the different types of agreements, permits and conditional exemptions for prohibited activities that would otherwise not be allowed. Permits and agreements require approvals from the Environment Ministry before being issued whereas conditional exemptions are approved automatically. No agreements have been issued since 2013.

Only some types of agreements and permits are currently required under the *Environmental Bill of Rights, 1993* to be posted by the Environment Ministry on the Environmental Registry for public consultation before a decision is made on their issuance and conditions. The Environmental Registry is an online platform maintained by the Environment Ministry to notify and consult the public on ministries' environmentally significant decisions. However, the Natural Resources Ministry and now the Environment Ministry voluntarily post overall benefit permits for public consultation. There is typically a minimum 30-day public comment period for proposals. Consulting the public allows the Environment Ministry to inform and improve its decision-making, including considering local community knowledge.

2.7.6 Compliance and Enforcement

There are 47 investigators and other staff in the Ministry's Environmental Investigations and Enforcement Branch appointed to enforce the *Endangered Species Act, 2007* as part of their enforcement responsibilities. There are two main types of compliance and enforcement violations under the Act: contraventions of the general prohibitions on the harm to species and their habitats; and contraventions of the conditions of an approval (agreement, permit, conditional exemption). Penalties under the Act include a fine of not more than \$1,000,000 in the case of a first offence for a corporation, and a fine of not more than \$250,000 or imprisonment for a term of not more than one year for a first offence by any other person. Fines may be multiplied by the number of individual animals, plants and other organisms harmed.

2.7.7 Species at Risk Stewardship Program

The Act establishes the Species at Risk Stewardship Program to fund third parties to assist in the protection and recovery of species on the Species at Risk in Ontario List. Eligible applicants include Indigenous communities and organizations, academic institutions, businesses and conservation organizations, but provincial ministries and federal government departments and agencies are excluded. The purposes of this program are to promote:

- preserving and rehabilitating habitat, and enhancing other areas so that they can become habitat;
- implementing recovery strategies and management plans;
- public education and outreach programs relating to stewardship; and
- other activities to assist in the protection or recovery of species.

All stewardship project funding recipients must develop a targeted action plan, maintain detailed financial information and comply with regular reporting requirements that include evaluating project outcomes. Administration and other indirect costs cannot exceed 10% of the total project funding. Payments are not to be made to recipients until project milestones are completed, and interim and final reports that are satisfactory to the Ministry are submitted.

2.7.8 Species at Risk Program Advisory Committee

The Act also provides for the establishment of the Species at Risk Program Advisory Committee (Advisory Committee) to make recommendations to the Minister on implementing the species at risk program. The Advisory Committee is composed of up to 19 members (currently 15) appointed by the Lieutenant Governor in Council. The Act allows the Advisory Committee to provide advice on issues ranging from public education and outreach, to agreements and permits toward the protection and recovery of species. The Terms of Reference for the Advisory Committee requires preparing an annual report on its activities.

Figure 9: Agreements, Permits, Conditional Exemptions and Other Exemptions under the *Endangered Species Act, 2007*

Prepared by the Office of the Auditor General of Ontario

Type	Regulation or Section of the Act	Description
Stewardship Agreement	16(1)	<ul style="list-style-type: none"> Issued for activities to assist in the protection or recovery of a species that are not otherwise allowed under the Act. Conditions are put in place to minimize negative effects. This type of agreement has not been issued since 2013.
Landscape Agreement*	16.1(1)	<ul style="list-style-type: none"> Authorizes a party to carry out multiple activities throughout a geographic area that would otherwise be prohibited under the Act. The authorized party is to complete beneficial actions that will assist in the protection or recovery of one or more endangered, threatened or special concern species that exist in the geographic area. At least one of the benefitting species must also be an impacted species. This type of agreement has not been issued as of 2020.
Health or Safety Permit	17(2)(a)	<ul style="list-style-type: none"> Issued to allow actions necessary for the protection of human health or safety. Conditions or requirements for this type of permit include taking steps to minimize adverse effects on the species at risk, monitoring and reporting. <p>Examples:</p> <ul style="list-style-type: none"> Reduce flooding near property by decreasing water levels impacting Blanding's turtle and its habitats. Bridge replacement, where there is an impact to wood turtle and its habitats.
Protection or Recovery Permit	17(2)(b)	<ul style="list-style-type: none"> Issued to permit activities that will assist in the protection or recovery of a species at risk. Conditions or requirements for this type of permit include taking steps to minimize adverse effects on the species at risk, monitoring and reporting. <p>Examples:</p> <ul style="list-style-type: none"> Blanding's turtle egg collection to support egg incubation and headstarting to recover their population in a park. Mitigating threats and increasing populations of freshwater mussel species at risk in a river.
Overall Benefit Permit*	17(2)(c)	<ul style="list-style-type: none"> Issued for activities that do not assist in the protection or recovery of species at risk where the Minister is of the opinion that steps have been taken to minimize adverse effects on species, alternatives have been considered and an overall benefit will be provided for the species through requirements imposed by conditions of the permit. The person carrying out the activity must improve the situation for the species compared to the previous condition before the permit. Conditions or requirements for this type of permit include mitigating adverse effects on the species at risk impacted, and providing overall benefit (net positive effect) for species at risk impacted within a reasonable time frame, monitoring and reporting. <p>Examples:</p> <ul style="list-style-type: none"> Subdivision development impacting Blanding's turtle, butternut trees and their habitats. Construction of an open pit gold mine that will result in destruction of little brown myotis (bat) and northern myotis (bat) habitats.

Type	Regulation or Section of the Act	Description
Social or Economic Benefit Permit*	17(2)(d)	<ul style="list-style-type: none"> • Issued to allow activities that will result in a significant social or economic benefit to Ontario. • The Minister must also be of the opinion that the activity will not jeopardize the survival or recovery of the species in Ontario, there are reasonable alternatives that have been considered and there are reasonable steps to minimize adverse effects. Conditions of the permit minimize adverse effects to the species at risk impacted by the permitted activity. <p>Examples:</p> <ul style="list-style-type: none"> • Transit line expansion project known as the Scarborough Subway Extension, extending east from Scarborough Centre Station to Kennedy Station in Toronto, with adverse impacts to nine species at risk and their habitats. • Construction of an 1,800-kilometre system of new transmission lines in northwestern Ontario, impacting four species and their habitats (also covered as an Aboriginal permit).
Aboriginal Permit*	19(3)	<ul style="list-style-type: none"> • Issued for activities undertaken by a band (as defined in the federal <i>Indian Act</i>), a tribal council, or an organization that represents a territorially based Aboriginal community. It may include conditions or requirements like monitoring and reporting.
Conditional Exemptions	O. Reg. 242/08	<ul style="list-style-type: none"> • Authorizes a party to carry out activities without seeking a permit or agreement. Conditions can include registering the activity with the Environment Ministry, undertaking measures to minimize the adverse effects of the activity on species at risk, creating and following a mitigation plan, monitoring and reporting on the effectiveness of mitigation measures. There are currently 17 conditional exemptions, which apply to a variety of activities and specific species; <ul style="list-style-type: none"> • Aquatic species (section 23.4) • Barn swallow (section 23.5) • Bobolink, eastern meadowlark (section 23.6) • Butternut (section 23.7) • Chimney swift (section 23.8) • Drainage works (section 23.9) • Early exploration mining (section 23.10) • Ecosystem protection (section 23.11) • Hydro-electric generating stations (section 23.12) • Transition - development ongoing when species first listed, etc. (section 23.13) • Pits and quarries (section 23.14) • Possession for educational purposes, etc. (section 23.15) • Safe harbour habitat (section 23.16) • Species protection, recovery activities (section 23.17) • Threats to health and safety, not imminent (section 23.18) • Trapping – incidental catch (section 23.19) • Wind facilities (section 23.20) <p>Examples:</p> <ul style="list-style-type: none"> • Operation of a wind facility impacting 18 species at risk and their habitats. • Mine rehabilitation to block access to potentially unsafe underground mine infrastructure in the case of threats to human health and safety that is not imminent. The work impacts little brown myotis (bat) and northern myotis (bat) and their habitats.

Type	Regulation or Section of the Act	Description
Other Exemptions	O. Reg. 242/08	<ul style="list-style-type: none"> • A variety of eligible activities and persons are exempted subject to conditions. There are currently 24 of these types of exemptions under the regulation. These types of exemptions do not require a registration through the registry; <ul style="list-style-type: none"> • Algonquin wolf (section 1.1) • American ginseng (section 2) • Bobolink, eastern meadowlark (section 4.1) • Eastern flowering dogwood (section 5.1) • Northern bobwhite (section 6) • Virginia mallow (section 6.1) • Caribou (boreal population) – cast antlers (section 7) • Protection of health or safety, etc. (section 8) • Protection of property (section 9) • Escape or unauthorized release from captivity (section 10) • R.H. Saunders Station – American eel (section 11.1) • Commercial cultivation of vascular plants, etc. (section 12) • Fishing – incidental catch (section 13) • Veterinarians (section 15) • Rehabilitation or care – wildlife custodians (section 16) • Rehabilitation or care – transfer to Ministry employees (section 17) • Zoos (section 18) • Falconry (section 19) • Possession prior to listing, etc. (section 20) • Tanning or taxidermy (section 21) • Forest operations in Crown forests (section 22.1) • Transition – development and infrastructure (section 23) • Development and infrastructure – redbreasted dace (section 23.1) • Development – bobolink, eastern meadowlark (section 23.2) <p>Examples:</p> <ul style="list-style-type: none"> • Allowing hunting and trapping of Algonquin wolf in some locations. • Incidental fishing by-catch. • Veterinarians transporting a species at risk. • Protection of property where a species at risk is damaging the property.
Other Exemptions	<i>Crown Forest Sustainability Act, 1994</i>	<ul style="list-style-type: none"> • Forest operations in Crown forests are exempt.

* Can be used to apply to prescribed “conservation fund species” and the proponent pays a fee to the Species at Risk Conservation Fund. The Species at Risk Conservation Trust then funds other parties to undertake conservation work (rather than the proponent) subject to various requirements. This fund had not been established at the time of our audit.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the Ministry of the Environment, Conservation and Parks and the Ministry of Northern Development, Mines, Natural Resources and Forestry have a long-term strategy, and cost effective and efficient systems and processes to:

- assess and identify species at risk;
- protect species at risk and their habitats;
- promote the stewardship and recovery of species at risk and their habitats; and
- measure and publicly report on progress towards the protection and recovery of species at risk and their habitats.

In planning our work, we identified the audit criteria (**Appendix 7**) we would use to address our audit objective. We established these criteria based on a review of applicable legislation, policies and procedures, internal and external studies, and best practices. The senior management of both ministries reviewed and agreed with the suitability of our objective and associated criteria.

We conducted our audit from January 2021 to July 2021. We received written representation from management of both ministries that, effective November 4, 2021, they had provided us with all the information they were aware of that could significantly affect the findings or the conclusions of this report.

Due to COVID-19, our work was conducted remotely. We engaged the ministries and other stakeholders through video-conferencing, phone calls and emails. We interviewed senior management and staff, and reviewed relevant data and documents from both ministries.

We asked the federal government and the six Canadian provinces and territories that have standalone species at risk legislation, about their approaches and processes for different aspects of species at risk conservation and received responses

from the Northwest Territories, Quebec, New Brunswick, and the federal government. In addition, we interviewed staff from organizations who work on species at risk protection and recovery—such as the Canadian Wildlife Service, the Nature Conservancy of Canada, the Wildlife Conservation Society Canada and Ontario Nature—to obtain their perspectives on species at risk protection and recovery in Ontario. We also interviewed current and former members of the Committee on the Status of Species at Risk in Ontario, the Species at Risk Program Advisory Committee, the Ontario Biodiversity Council, and the federal Committee on the Status of Endangered Wildlife in Canada. To identify best practices, we reviewed scientific literature and international standards about species at risk protection and recovery. We also interviewed academic experts in species at risk policy and science.

We conducted our work and reported on the results of our examination in accordance with the Canadian Standard on Assurance Engagements—Direct Engagements issued by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada. These standards involve conducting the tests and other procedures that we consider necessary, including obtaining advice from external experts when appropriate to obtain a reasonable level of assurance.

Our Office applies the Canadian Standard on Quality Control and, as a result, maintains a comprehensive quality control system that includes documented policies and procedures with respect to compliance with the code of professional conduct, professional standards and applicable legal and regulatory requirements. We have complied with the independence and other ethical requirements of the Code of Professional Accountants of Ontario, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

4.0 Detailed Audit Observations

4.1 Species Assessment and Classification

4.1.1 No New Species at Risk were Protected for Two Years Because the Assessment Committee Lacked Quorum

The Committee on the Status of Species at Risk in Ontario (Assessment Committee) is responsible for the critical task of assessing and classifying Ontario species as being endangered, threatened, special concern, extirpated, extinct or not at risk. However, the Assessment Committee was unable to function and fulfill its mandate during the second half of 2018 or any of 2019. As a result, no new species at risk were regulated in order to receive protections under the Act in 2019 or 2020 (see **Figure 10**).

The Assessment Committee may consist of up to 12 members, and must have a minimum of eight members present at meetings, including the Chair or Deputy Chair, to conduct committee business. The Minister is responsible for recommending appointments and re-appointments of members to the Assessment Committee, including the Chair or Deputy Chair, to the Lieutenant Governor in Council

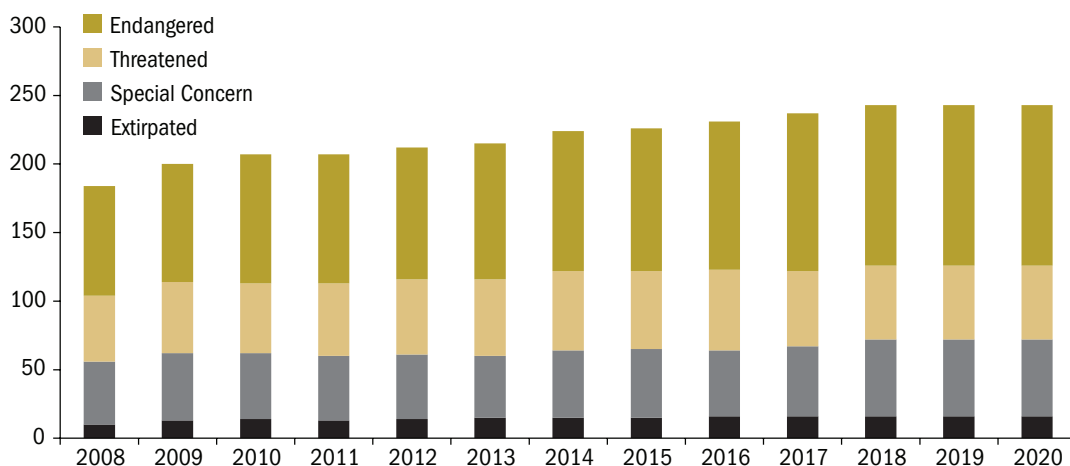
who approves the appointments. The Assessment Committee had 11 members at the time of our audit but there was an insufficient number of members in 2018 and 2019. From August 12, 2018 to December 11, 2018, the number of members dropped to eight, and there was no Chair or Deputy Chair appointed. This resulted in the committee not being able to make quorum. In 2019, there were seven or fewer members for 10 months of the year.

The Assessment Committee experienced issues meeting quorum in 2016 and postponed its spring meeting when the terms of four members expired and the Natural Resources Ministry was delayed in renewing them.

In addition to an insufficient number of members to function, there was no Deputy Chair until March 2020, though members had advised the Natural Resources Ministry in 2018 about the need for a Deputy Chair to act in the Chair's absence. The Assessment Committee attempted to have a member designated as the Deputy Chair in fall 2018. The Natural Resources Ministry had in fact approved the member who volunteered to be Deputy Chair, but the Environment Ministry decided against it. This occurred when the program was in transition from the Natural Resources Ministry to the Environment Ministry.

Figure 10: Changes to the Classifications of Species at Risk in O. Reg. 230/08, 2008–2020*

Source of data: Ministry of the Environment, Conservation and Parks



* No annual reports were submitted for 2018 and 2019 by the Committee on the Status of Species at Risk in Ontario.

The Assessment Committee must include on its priority list for assessment Ontario species that have been classified by the federal Committee on the Status of Endangered Wildlife in Canada—and have not yet been assessed by the Assessment Committee. Both the federal and Ontario committees usually meet twice a year to conduct species assessments—they meet independently of one another and meetings take place once in the spring and once in the fall. The federal committee assesses the Canada-wide status of a species, whereas Ontario’s committee assesses a species’ status specifically in Ontario. Ontario’s committee generally assesses species six months after they have been assessed by the federal committee as it uses the status reports prepared for the federal committee as the basis of the provincial assessment reports. Because of the provincial committee’s inability to make quorum in 2018 and 2019, by spring 2020, there was a backlog of 46 species requiring assessment in Ontario.

As a result of Ontario’s Assessment Committee’s inability to function, the Species at Risk in Ontario List has not been updated since 2018, and species have not been protected as soon as they could have been. For example, two populations of threatened lake whitefish, found in a deep, cold inland lake in Ontario, would have otherwise been assessed in fall 2019 and therefore protected starting in January 2021. Instead, these fish will not be protected under the Act until January 2022.

During 2020—once it had sufficient members—the Assessment Committee classified 35 species from the backlog and provided its annual report to the Environment Ministry in January 2021. The Environment Ministry shared the results of the new classifications with the public in April 2021 and must update the Species at Risk in Ontario List by January 2022. The updated list will have seven new endangered species: Gillman’s goldenrod (a plant), shagreen (a snail), toothed globe (a snail), black ash (a tree), white-rimmed shingle lichen, false-foxglove sun moth, and downy yellow false foxglove (a plant). Additionally, seven new

threatened species also will be added: lake whitefish—Opeongo Lake large-bodied populations, lake whitefish—Opeongo Lake small-bodied populations, Carolina mantleslug, Hudsonian godwit (a bird), smooth yellow false foxglove (a plant), fern-leaved yellow false foxglove (a plant), and hairy valerian (a plant). Red-tailed leafhopper (an insect) was added as a new species of special concern. No currently listed species improved to the degree that they were classified as no longer at risk.

The Assessment Committee assesses and classifies Ontario species, determining what species will be regulated under the *Endangered Species Act, 2007*. Because it is only after species have been regulated that protection and recovery requirements apply, it is critical that the Assessment Committee maintain sufficient membership to operate.

4.1.2 Current Process for Appointing and Re-appointing Members to the Assessment Committee is Not Transparent

We found that the process for appointing and re-appointing new members to the Assessment Committee was not transparent.

The *Endangered Species Act, 2007* states that members may only be appointed to the Assessment Committee if the Environment Minister considers that the person has relevant expertise in a range of scientific disciplines, or in community knowledge or Indigenous traditional knowledge.

Until fall 2019, vacancies on the Assessment Committee were broadly advertised. Applications submitted by interested individuals were screened by technical and program staff with species at risk expertise. Standardized review criteria were used to evaluate applicants based on their qualifications, experience related to conducting species assessments, and how they could fill known expertise gaps on the Assessment Committee. Staff with species at risk expertise then identified and recommended qualified candidates to the Minister for interviews.

After the Environment Ministry took responsibility for the program in 2019, branch staff reviewed applications submitted by 48 individuals to fill five positions on the committee. Branch staff recommended nine candidates for interviews. The Minister appointed two of the nine recommended candidates.

Our review of 2019 applicant evaluation files showed that the Minister's office also appointed one candidate who was not recommended after staff with species at risk expertise had determined the candidate was marginally qualified. The Minister also appointed five individuals in 2019 and 2020 who were not screened or recommended by staff with species at risk expertise. The Environment Ministry could not provide us with details about how these six recently appointed members were identified, screened and chosen.

Furthermore, we found that from 2017 to 2020, five committee members were dismissed by the Minister who were willing to continue to serve on the committee when their terms expired. They were not told the reason for their dismissal. Two members were university professors, two worked for conservation authorities, and one was a botanist with the federal government. All were considered productive and well-respected members of the Assessment Committee.

The Assessment Committee Chair expressed concern over the lack of transparency in the appointment and re-appointment process in a letter to the Deputy Minister in 2017, and by an Assessment Committee member in a letter to the Minister in 2019. The dismissal process negatively influenced committee morale and led to some members' unwillingness to continue to serve or recommend colleagues for committee membership.

Ontario's current process for filling vacancies on its Assessment Committee contrasts with the clearly defined and transparent process used to fill vacancies on the federal assessment committee. The federal assessment committee advertises vacancies on its website and via email notifications, and new members are selected by a committee comprising existing members who score applicants against established criteria.

RECOMMENDATION 1

So that independent expertise is used to promptly assess species and improve the status of species at risk in line with the purpose of the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks:

- ensure that membership on the Committee on the Status of Species at Risk in Ontario is sufficient for quorum to be able to carry out its mandate to assess and classify species for subsequent recovery and protection efforts; and
- develop, publish, and follow transparent and accountable procedures so that technical and program staff with species-at-risk expertise screen and recommend to the Minister candidates for appointment and re-appointment to the Committee on the Status of Species at Risk in Ontario.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the recommendation to ensure membership on the Committee on the Status of Species at Risk in Ontario is sufficient so that quorum is achieved to carry out its mandate.

The *Endangered Species Act, 2007*, sets out the role and member qualifications of the Committee on the Status of Species at Risk in Ontario. The Environment Ministry will continue to ensure that the processes outlined by the Public Appointments Secretariat and the Agencies and Appointments Directive are adhered to in appointments and reappointments to the Committee on the Status of Species at Risk in Ontario. The Environment Ministry does not intend to develop procedures that are unique to the Committee on the Status of Species at Risk in Ontario.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to develop, publish, and follow transparent and

accountable procedures so that technical and program staff with species-at-risk expertise screen and recommend to the Minister candidates for appointment and re-appointment to the Committee on the Status of Species at Risk in Ontario.

4.1.3 Assessment Committee Requires Additional Resources to Fulfill its Mandate

The Assessment Committee requires additional technical resources to fulfill its mandate. In order to conduct species assessments, the committee must assemble and analyze data correctly as they are used to determine whether a species meets a threshold for a given classification status. In May 2017, the Assessment Committee requested that the Natural Resources Ministry provide it with technical support for this, and subsequently referenced this need in meeting minutes. We found that the need for support with these analyses remains an issue for the current committee. In comparison, the secretariat for the federal assessment committee—funded and staffed by the Canadian Wildlife Service—provides technical support as required to committee members.

The Assessment Committee has also identified that the Environment Ministry should acquire assessment software for rapid screening to prioritize species in need of assessment. This software uses the international criteria on which Ontario's assessment criteria are based (see **Section 4.1.4**) and is used by the federal assessment committee to prioritize the species it assesses. This software can help the Assessment Committee decide how to most efficiently spend its time, which is increasingly important as species that will not be assessed by the federal assessment committee can then be considered for assessment in Ontario—for example, American white pelican, bald eagle, moose and wild rice. The federal assessment committee has not prioritized these species because it is required by the federal *Species at Risk Act* to give priority to species that are “more likely to become extinct.”

Finally, the Assessment Committee has identified that funds may be needed to contract external consultants to prepare comprehensive status reports for species that have not been assessed by the federal assessment committee. The federal assessment committee contracts external consultants to prepare status reports in advance of its species assessments. These status reports form the basis of the federal committee's status assessments and subsequent assessments by Ontario's committee. Preparing status reports falls outside the scope of Assessment Committee member responsibilities, but is recognized by the committee's Terms of Reference.

RECOMMENDATION 2

So that the Committee on the Status of Species at Risk in Ontario (Assessment Committee) has the resources needed to effectively fulfill its mandate as required by the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks ensure that the Assessment Committee be provided access to the technical support it needs, and be supplied with the necessary tools and the funds to procure needed status reports to promptly and effectively assess species.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the recommendation to provide the Committee on the Status of Species at Risk in Ontario with technical support and tools to do its work.

That is why the Environment Ministry is acquiring specific software for rapid screening to prioritize species in need of assessment, as requested by the Committee on the Status of Species at Risk in Ontario. The Environment Ministry will also continue to support the Committee on the Status of Species at Risk in Ontario in obtaining required information, as it identifies specific needs.

4.1.4 Legislative Changes to Species Assessment and Classification Criteria Are Inconsistent with Species Assessment and Classification Criteria across Canada and May Result in Unprotected Species at Risk in Ontario

Legislative changes to the *Endangered Species Act, 2007* in 2019 to the species at risk classification criteria now require the Assessment Committee to consider a species' condition outside, as well as inside, Ontario. This change may result in some currently listed species at risk losing protection if reassessed at a future date or some newly assessed species not being protected in the future.

As required under the Act, the Assessment Committee maintains the list of criteria used to assess and classify species in Ontario. These criteria include consideration of population size, trends and distribution. For example, a species may be considered threatened if the number of mature individuals in Ontario has declined by more than 50% in the last 10 years or three generations, or may be considered endangered if the decline has been more than 70%. These criteria are based on the scientific quantitative criteria used to assess species globally by the international scientific community, and across Canada by the federal Committee on the Status of Endangered Wildlife in Canada.

However, the *More Homes, More Choices Act, 2019* amended the Act's criteria. The Assessment Committee is now required to consider not only the condition of species in Ontario but also the "condition of the species across the broader biologically relevant geographic range in which it exists both inside and outside of Ontario." The previous criteria considered the condition of species only in Ontario when assessing species. Furthermore, the Act now requires that if the condition of the species across this range is at a lower level of risk than if only the population in Ontario is considered, the Assessment Committee must classify the species at the lower level of risk. At the time of our audit, no other province or territory in Canada uses this classification criterion.

Previously, species assessments were based on their biological status in Ontario only, while accounting for whether populations were functionally connected—able to move back and forth—with areas outside Ontario. This 2019 change may result in "edge of range species" not being protected under the Act. For example, the gray fox is classified as threatened—isolated in a single population on Pelee Island on Lake Erie—but is relatively common in the United States. However, populations of species like these that live at the edge of their geographical range, can have unique genetic traits, be especially well adapted to northward range shifts because of climate change, not be functionally connected to other populations, and also face different threats than elsewhere.

The Assessment Committee was required to classify two species at lower risk levels in 2020 after the legislative change because populations other than those in Ontario were considered. The chimney swift (a bird) met the criteria for assessment as endangered in Ontario based on the declining number of mature individual birds, declining food sources and loss of roosting habitat, but its classification was reduced to threatened based on its condition outside of Ontario. Hairy valerian (a plant) also met the criteria for endangered in Ontario based on the small area in which it is found, but its classification was reduced to threatened based on its lower risk status in Wisconsin, Illinois, Michigan and Minnesota. In both cases, the classification of threatened instead of endangered results in a one-year delay in the deadline for preparing a recovery strategy.

This 2019 amendment does not define "condition" or what is considered a species' "broader biologically relevant geographic range," leaving this language open to interpretation. In 2020, the Assessment Committee asked the Environment Ministry for guidance on how to interpret these terms, and was provided with clarification on the legal requirements and policy intent. The committee drafted its own interpretation and is still working to implement this new concept in a consistent manner.

As well, information on species in areas outside of Ontario may be of varying reliability or may not exist—they may be out of date or inaccurate, and information on population trends, threats and efforts to protect and recover species may be unavailable or unknown.

Due to this legislative change, some species that are currently at risk in Ontario may lose protections, and some newly assessed species may never receive protections. Our Office compared the status of Ontario’s endangered and threatened species—those that currently receive protections based on their status under the Act—with adjacent jurisdictions. We found that 78 (or 67%) of 117 endangered species and 34 (or 63%) of 54 threatened species in Ontario are classified at a lower risk level in one or more adjacent jurisdictions (Manitoba, Quebec, Michigan, Minnesota, New York, Ohio and Pennsylvania).

Moreover, since the criteria for species classifications have changed, going forward it will be difficult to assess or track progress in recovering species at risk simply by looking at changes to their classification on the Species at Risk in Ontario List. For example, in the future, a species may be down-listed from endangered or threatened to special concern not because the species’ status has actually improved in Ontario, but because the Assessment Committee is now considering the species’ status in areas outside of Ontario. As well, in some cases, individual species classifications may more accurately be described as the status of the species in “Ontario and Manitoba” for example, rather than their status in Ontario only.

RECOMMENDATION 3

So that species at risk receive protections under the *Endangered Species Act, 2007* when appropriate, we recommend that the Ministry of the Environment, Conservation and Parks align the assessment and classification criteria used by the Committee on the Status of Species at Risk in Ontario with that used by the federal and other provincial or territorial assessment committees.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the recommendation to align the assessment and classification criteria used by the Committee on the Status of Species at Risk in Ontario, when appropriate.

The Environment Ministry is supportive of the Committee on the Status of Species at Risk in Ontario continuing to utilize the existing International Union for Conservation of Nature and the Committee on the Status of Endangered Wildlife in Canada criteria with appropriate modifications taking into consideration the 2019 amendments to the *Endangered Species Act, 2007*.

AUDITOR GENERAL’S RESPONSE

The Environment Ministry did not agree to align the assessment and classification criteria used by the Committee on the Status of Species at Risk in Ontario with that used by the federal and other provincial and territorial assessment committees for all species.

4.2 Recovery Planning

4.2.1 Recovery Strategies Delayed for 17 Endangered and Threatened Species

There were 117 endangered and 54 threatened species on the Species at Risk in Ontario List at the time of our audit (see **Appendix 6**). As of June 2021, recovery strategies had been completed for 154 (or 90%) of these species but were delayed for six endangered and 11 threatened species (see **Figure 11**). Eight (or 47%) of these 17 species have had the preparation of their recovery strategies delayed for eight or more years.

Recovery strategies identify habitat needs and threats to species. They also recommend goals and objectives for the protection and recovery of species, and identify approaches that can be used to achieve

the recommended objectives. Recovery strategies are important because they form the basis of the Environment Ministry's response statements—policies that describe what actions the province will take or support to recover species at risk.

The Act requires that a recovery strategy must be prepared within one year for endangered species and two years for threatened species from the date that the species is placed on the Species at Risk in Ontario List. However, the Ministry may take additional time to ensure the completion of recovery strategies if they involve complex issues, are prepared in co-operation with other jurisdictions like the federal government, or the government wants to prioritize the preparation

of recovery strategies for other species. To do so, the Minister must post a notice on a Government of Ontario website to provide the reason for the delay and an estimate of when the recovery strategy will be completed—and must do this before the one- or two-year statutory deadlines for endangered or threatened species recovery strategies expires. The Environment Ministry posts these notices on the Environmental Registry of Ontario.

For all 17 species with delayed recovery strategies, the government posted public notices about the delays. Recovery strategies have been delayed for 14 species to allow for co-operation with the federal government—the Environment Ministry

Figure 11: Outstanding Recovery Strategies for Endangered and Threatened Species, as of June 2021

Prepared by the Office of the Auditor General of Ontario

Species	Species at Risk in Ontario List Status	Date Regulated	Ministry's Rationale for Delay	Included in Animal Justice's 2017 Lawsuit
Algonquin wolf	Threatened	Jun 15, 2016	Complex issues	No
Black redhorse	Threatened	Jun 30, 2008	Co-operation with federal government	Yes
Broad-banded forestsnail	Endangered	Jun 15, 2016	Co-operation with federal government	No
Cerulean warbler	Threatened	Jun 8, 2011	Co-operation with federal government	Yes
Chimney swift	Threatened	Sep 10, 2009	Co-operation with federal government	Yes
Fawnsfoot	Endangered	Sep 10, 2009	Co-operation with federal government	Yes
Hickorynut	Endangered	Jan 13, 2012	Co-operation with federal government	Yes
Lilliput	Threatened	Jun 27, 2014	Co-operation with federal government	Yes
Louisiana waterthrush	Threatened	Jun 2, 2017	Co-operation with federal government	No
Mountain lion (cougar)	Endangered	Jun 30, 2008	Priority given to other species	Yes
Pugnose minnow	Threatened	Jan 24, 2013	Co-operation with federal government	Yes
Shortjaw cisco	Threatened	Jun 30, 2008	Co-operation with federal government	Yes
Silver chub	Threatened	Jan 24, 2013	Co-operation with federal government	Yes
Silver shiner	Threatened	Jan 13, 2012	Co-operation with federal government	Yes
Spoon-leaved moss	Endangered	Jun 30, 2008	Priority given to other species	Yes
Threehorn wartyback	Threatened	Jun 27, 2014	Co-operation with federal government	Yes
Warmouth	Endangered	Jun 15, 2016	Co-operation with federal government	No

plans to adopt the federal recovery strategies developed for these species rather than prepare its own, but the timelines do not align with the *Endangered Species Act, 2007*. Recovery strategies for three other species have been delayed to give priority to other species, or due to complex issues:

- The Algonquin wolf has been regulated as a threatened species since 2016 when it was up-listed from special concern. Its population has been estimated at between 250 and 1,000 animals. Despite the Act's general prohibitions, the Algonquin wolf may be hunted and trapped across parts of its range due to a regulatory exemption under the Act. The hunting and trapping of wolves have economic and social importance for some people, yet it is a significant threat to the survival of Algonquin wolves. Given the best available scientific evidence, public opposition to allowing the hunting and trapping of this threatened species, and the negligible financial benefit of these activities, the former Environmental Commissioner of Ontario recommended in 2017 that the Algonquin wolf be fully protected under the Act across its range. A recovery strategy was required by June 2018, but it was delayed due to "complex issues" and was anticipated to be finalized by September 2019. A draft recovery strategy, released in January 2018, concludes that delays in implementing recovery actions may jeopardize the long-term recovery of the species. In April 2019, the Environment Ministry presented options internally that included: 1) further extending the timelines on the recovery strategy and subsequent response statement; 2) the Minister requiring the Assessment Committee to reassess the Algonquin wolf, which may result in its down-listing and removal of existing prohibitions; and 3) revoking the current limited restrictions on hunting and trapping to address "sector concerns." The delay for this recovery strategy is unreasonable.
- The mountain lion (cougar) has been regulated as an endangered species since 2008 when the Act came into effect. Cougars are Canada's largest wild cat and were once found across much of

North America. The main threat to the species is human disturbance and forest clearing that destroys their habitat. A 2011 study by Natural Resources Ministry staff in the *Canadian Field-Naturalist* confirmed the presence of free-ranging cougars in Ontario, but the current population size is unknown. A recovery strategy was required by June 2013, but it has not been prepared, as other species were prioritized. The deadline for preparation was initially delayed to May 2016, but in June 2016 the deadline was again extended. The Ministry did not provide an estimate for when it would be finalized. The delay for this recovery strategy is unreasonable.

- Spoon-leaved moss has been regulated as an endangered species since 2008 when the Act came into effect. It is found at only a few sites in southern Ontario, and is threatened by development and invasive species. A recovery strategy was required by June 2013. It has not been prepared, as other species were prioritized, but was estimated to be finalized by May 2016. The Environment Ministry has now forecast that the recovery strategy for the spoon-leaved moss will be completed by December 2022. The delay for this recovery strategy is unreasonable.

Until these recovery strategies are complete, the Ministry is not required to develop response statements (see **Section 4.2.2**) that identify the actions it intends to take or support to help recover these species. This delays provincial efforts to improve the status of these species.

These current delays are not new. In September 2017, Animal Justice (a non-profit charity) commenced an application for judicial review alleging that the Natural Resources Minister had failed to ensure that 37 recovery strategies for species at risk were prepared within the time specified by the Act, or fulfill the notice requirements in the Act that would allow additional time to prepare recovery strategies. The parties reached a settlement in May 2018. The government agreed that it would publicly provide quarterly updates on the progress made on the 37 outstanding recovery strategies for three years, including a

timetable for their development. At the time of our audit, 13 of the 37 (or 35%) recovery strategies were still outstanding (see **Figure 11**).

The timely preparation of recovery strategies is critical because delays in their preparation can result in delays in the province's efforts to protect and recover species at risk.

RECOMMENDATION 4

To identify goals, objectives and approaches to improve the status of all species at risk, and to be transparent and accountable to the public and timely in meeting its legislative responsibilities under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks:

- ensure the preparation and public release of recovery strategies for Algonquin wolf, mountain lion (cougar), and spoon-leaved moss by December 2022; and
- post the list of outstanding recovery strategies and management plans, and a timetable for their development on the Environmental Registry on a quarterly basis.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees about the importance of transparency and accountability to the public and timeliness in meeting legislative responsibilities under the *Endangered Species Act, 2007*.

As recommended, the Environment Ministry is committed to ensuring the preparation and public release of a recovery strategy for spoon-leaved moss by December 2022.

The Environment Ministry will finalize the recovery strategy, as appropriate, for Algonquin wolf pending the outcome of the reassessment by the Committee on the Status of Species at Risk in Ontario which is occurring in November 2021. A draft recovery strategy for Algonquin wolf was posted on the Environmental Registry for public

comment in January 2018. However, since the species was assessed and listed as threatened in 2016, questions have been raised about the abundance and distribution of this species and the history of breeding among canids (members of the dog family) in Ontario.

The Environment Ministry will finalize the development of the recovery strategy for mountain lion (cougar), as appropriate pending the outcome of the upcoming reassessment by the Committee on the Status of Species at Risk in Ontario. The January 2020 Committee on the Status of Species at Risk in Ontario report identified mountain lion on the list of species being considered for assessment or reassessment in 2021.

The Environment Ministry agrees with the Auditor General's recommendation to share information publicly about the status and timelines for recovery strategies and management plans and will undertake an analysis to determine how best to achieve that objective.

4.2.2 Response Statements for Four Species Have Been Delayed for Seven or More Years

The Act requires that the Ministry prepare a response statement for each recovery strategy or management plan prepared under the Act. Response statements identify what actions Ontario intends to take or support to help recover species.

The response statement must generally be completed within nine months of the recovery strategy or management plan being finalized and shared with the public. The timely preparation of response statements is critical because delays in their preparation may result in further delays to recover affected species.

At the time of our audit, response statements had been prepared for 164 (or 98%) of the 168 species currently requiring a response statement. However, response statements for four species have been delayed.

The Ministry may take additional time to complete the response statement if the Minister publishes a notice on a Government of Ontario website that states

that additional time is required, provides the reasons for why the time is required and provides an estimate of when the government response statement will be completed before the nine-month statutory deadline expires. The Environment Ministry posts these notices on the Environmental Registry.

At the time of our audit, required response statements for four of the 168 species had been delayed because they involve complex issues. The Natural Resources Ministry posted notices of delay for:

- lake sturgeon (Great Lakes—Upper St. Lawrence populations) (endangered) due in 2012;
- lake sturgeon (Saskatchewan—Nelson River populations) (threatened) due in 2012;
- lake sturgeon (Southern Hudson Bay—James Bay populations) (special concern) due in 2012; and
- American eel (endangered) due in 2014.

In September 2012, the Natural Resources Ministry posted a notice on the Environmental Registry that the response statement for the three populations of lake sturgeon was forecast to be complete by June 2013. In December 2014, the Natural Resources Ministry posted a notice that additional time would be required for the American eel’s response statement, but did not forecast a timeline for completion.

For these species, the Ministry stated that it required additional time to engage with key interested parties—in particular, hydroelectric dam operators. Lake sturgeon and American eel are affected by hydroelectric dams that block their movements along waterways. Additionally, hydroelectric dams can kill American eels, which require structural modifications like fish ladders (structures that allow migrating fish passage over or around an obstacle) in order to lessen their impacts.

While the issues involved are complex, the prolonged delays in preparing response statements are unreasonable. The province has an obligation to set out the actions it intends to take, even if the identified actions do not immediately solve the problem at hand. Preparation of robust response statements maintains government accountability for species at risk, even in the absence of a perfect solution. Response statements should be

“robust, effective, and defensible” as recommended by the former Environmental Commissioner of Ontario in 2009.

Additionally, the recovery strategies for 17 threatened and endangered species have been delayed (see **Section 4.2.1**). This means there is no requirement yet to prepare response statements describing what actions will be taken to protect and recover them.

4.2.3 Response Statements are Generally Insufficient to Improve the Status of Species at Risk

Our review of a sample of 30 response statements from 2010 to 2020 found that the province’s goals are generally less ambitious than the scientific advice in the recovery strategies, and government-led actions are often not specific to the species and include meeting existing legal obligations. We also found that response statements do not establish performance measures and do not provide cost estimates to help inform decisions about which protection and recovery actions to take or prioritize. As a result of these weaknesses, implementing response statement actions, in general, is unlikely to improve the status of species at risk.

Response statements are the provincial government’s species-specific policy that identifies the goal and what actions the province intends to take to protect and help recover species. Response statements include two types of actions: “government-led” actions are those that a provincial ministry or agency will undertake, while “government-supported” actions are those that the government endorses as necessary for the protection and recovery of species and looks to external third parties to undertake. One of the ways the government supports undertaking these actions is through the Species at Risk Stewardship Program (see **Section 4.6**).

The Act requires that the Environment Minister implement any actions in a response statement that, in the opinion of the Minister, are feasible and within the responsibilities of the Minister. Response

statements are prepared by Ministry staff based on advice provided in the recovery strategy or management plan, social and economic considerations, and input from stakeholders, Indigenous communities, other jurisdictions and the public.

Of the sample of 30 response statements we reviewed, we found that their goals are generally less ambitious than the corresponding recovery strategy goals. We found that 24 (or 80%) of 30 recovery strategies recommended goals that involve increasing the populations of the species at risk, and that six (or 25%) of these increases are qualified. In contrast, we found that 23 (or 77%) of 30 response statements contained goals that involve increasing the population, but 18 (or 78%) of these increases are qualified—six specify these will be achieved through natural processes and increases, and 12 are qualified by reference to “feasibility.” Examples of less ambitious response statement goals include:

- eastern meadowlark (a bird)—the recovery strategy’s recommended long-term goal is to achieve population stability at approximately 90% of the current population size, yet the response statement goal is to retain 72% of its current population size by 2036;
- northern madtom (a fish)—the recovery strategy’s recommended goal is to “sustain and enhance the viability of existing populations,” yet the response statement goal is to “maintain existing populations;”
- American chestnut (a tree)—the recovery strategy’s recommended goal is to restore populations to a self-sustaining state, yet the response statement goal is to “retain the current population level and distribution” and explore the feasibility of restoring the species to a self-sustaining state; and
- kidneyshell (a freshwater mussel)—the recovery strategy’s recommended goal is to prevent the extirpation of the species, maintain healthy self-sustaining populations in specific locations, and re-establish historic populations, yet the response statement goal is to protect populations of species, improve their habitat, and “investigate the feasibility of augmenting existing populations.”

In contrast, the United States Fish and Wildlife Service uses quantitative population targets for some species to guide recovery efforts and ultimately remove them from its list of regulated species under the US *Endangered Species Act*. For example, its recovery goal for the piping plover (a bird) is to increase and maintain for five years a total of 2,000 breeding pairs, including region-specific minimum sub-populations such as a minimum of 625 breeding pairs in New England. Likewise, Environment and Climate Change Canada’s proposed population goal for piping plover is to achieve and maintain a minimum of 250 breeding pairs in the short term, and 310 breeding pairs in the long term. In comparison, Ontario’s response statement goal for the piping plover is qualitative, such that progress achieving it will be open to interpretation: “ensure its persistence along the coasts of the Great Lakes and Lake of the Woods, encourage increases in the number of breeding pairs, and support the expansion of the species to additional suitable breeding habitat in Ontario, where feasible.”

In general, we found that Ministry staff have been directed to not include government-led actions that require additional financial resources. As a result, required actions to substantially improve the state of a species—such as reintroduction into a particular area, which would likely involve new costs and other needed resources—would have to be led by external parties rather than the government.

Our review showed that there is a standard list of government-led actions included in most response statements. Government-led actions focus on areas of provincial responsibility such as regulations, policy, enforcement, and establishing funding priorities that cannot be led by other jurisdictions or partners. These types of action are positive and should be undertaken by the Ministry, regardless of whether they are specified in a response statement. For example, a standard government-led action is to “educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the Act.” While such government-led actions are reasonable, they

are not an effective substitute for specific actions to improve the status of a particular species.

We sampled 30 response statements for endangered and threatened species covering all groups of species. We found that they contained an average of eight government-led actions yet an average of seven (or 88%) were standard and not specific to the species of interest. All response statements in our sample contained standard actions, including some that the Ministry is required to do by law (see **Figure 12**). For example, four response statements prepared in 2020—Blanding’s turtle, purple twayblade orchid (a plant), transverse lady beetle, yellow-breasted chat (a bird)—included the government-led action to conduct a review of progress within a specified number of years.

The former Environmental Commissioner of Ontario (Commissioner) reported in 2015 that the conditions that initially contributed to species being listed as at risk were unlikely to improve as a result of the actions set out in 13 sampled government

response statements. The Commissioner found that response statements generally reiterated approaches that existed before the response statements were prepared, had little Ministry involvement in monitoring, relied on third parties for conservation actions, and did not contain any population recovery targets or timelines against which to measure success. The Commissioner previously reported in 2011 that another 13 sampled response statements made overly broad commitments, restated already existing legal obligations, and relied on third parties to undertake conservation work (see **Section 4.6.1**). These findings are consistent with the observations of our current audit.

We also found that while each of our sampled recovery strategies recommended up to 17 performance measures to gauge the success of protecting and recovering particular species, none of the corresponding response statements included any explicit performance measures. Including performance measures in response statements improves

Figure 12: Standard Government-led Actions in a Sample of 30 Response Statements from 2010–2021

Prepared by the Office of the Auditor General of Ontario

Government-led Action	Required by the <i>Endangered Species Act, 2007</i>	% of Response Statements with Action
Educate other agencies and authorities involved in planning and environmental assessment processes on the protection requirements under the Act	No	100
Encourage the submission of data to Ontario’s central repository at the Natural Heritage Information Centre	No	100
Protect the species and its habitat through the Act and implement and enforce habitat protection provisions	Yes	100
Undertake communications and outreach to increase public awareness of species at risk in Ontario	No	97
Support conservation, agency, municipal, industry partners and Indigenous communities to undertake activities to protect and recover the species by providing support through funding, agreements, permits and advisory services	No	97
Establish and communicate annual priority actions for government support in order to encourage collaboration and reduce duplication of efforts	No	90
Continue to implement the Ontario Invasive Species Strategic Plan to address the invasive species that threaten the species	No	77
Conduct a review of progress toward the protection and recovery within five years of the publication of the response statement	Yes	13

accountability. Knowing what steps have been taken to implement protection and recovery actions, and what are the outcomes, creates a meaningful framework for reviewing progress for each species (see **Section 4.2.4**).

For example, independent experts who prepared the recovery strategy for the endangered barn owl recommended 17 specific performance measures to improve knowledge about the Ontario population, increase the availability of nesting sites, identify and improve habitat, and increase public awareness. There were only two confirmed breeding locations of barn owls in the province according to the 2007 *Atlas of the Breeding Birds of Ontario*. While the response statement included actions related to 11 of the 17 recommended performance measures, it did not include any explicit performance measures to gauge improvements in the status of the species. Therefore, the Environment Ministry currently has no objective or systematic way of knowing whether actions being taken are making a difference.

Response statements also generally do not have estimated timelines and never forecast costs for actions to achieve recovery goals. Including the costs of intended actions would allow decision-makers to make informed choices about actions to protect and recover species at risk. Cost estimates could inform the Minister's decision about whether actions in response statements are feasible. For example, the US *Endangered Species Act* requires estimates of the time and costs to carry out recovery actions in order to achieve the goals for each species. The US Government Accountability Office reported in 2006 that costs to recover different species at risk range from an estimated \$58,000 USD to recover the decurrent false aster (a plant in Illinois and Missouri) to \$125 million USD to recover the whooping crane (a bird found across the Midwest). Similarly, scientists in 2020 assessed New Brunswick's Saint John River Watershed and concluded that 40 species at risk could be recovered by undertaking 15 actions at a cost of \$25.8 million annually for 25 years.

Cost estimates also are beneficial to illustrate the financial burden and required effort to recover species

at risk, compared to safeguarding wildlife before they become at risk. No overall cost estimates for Ontario or Canada exist but in the United States, the estimated annual national cost to recover species at risk in 2019 was \$1.5 billion USD.

RECOMMENDATION 5

To increase transparency and improve clarity about the government's actions to improve the status of all species at risk, and to increase accountability and progress in implementing identified protection and recovery actions, we recommend that the Ministry of the Environment, Conservation and Parks:

- develop guidance for the preparation of response statements that will result in the achievement of meaningful outcomes for species at risk;
- complete the development of response statements for American eel and lake sturgeon by December 2022 so that actions to protect and recover species can be implemented;
- post the list of outstanding response statements, and a timetable for their development on the Environmental Registry on a quarterly basis;
- include performance measures in response statements based on recovery strategies so that success can be assessed and accountability established for undertaking required actions; and
- include cost and time estimates in response statements so that the needed allocation of resources for actions is clear to decision-makers and the public.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks is committed to having a clear and comprehensive consultation process for preparing response statements. Each response statement shall identify a provincial recovery goal for the species as well as key objectives and prioritized

actions necessary to support the recovery of (and meaningful outcomes for) the species. This is the Environment Ministry's current focus and new guidance for the preparation of response statements is not being developed at this time.

The Environment Ministry is finalizing the response statement for American eel and developing the response statement for lake sturgeon. These will be completed by December 2023.

The Environment Ministry agrees with the Auditor General's recommendation to share information publicly about the status and timelines for response statements and will undertake an analysis to determine how best to achieve that objective.

The Environment Ministry will ensure each response statement includes a provincial recovery goal for each species as well as detailed objectives, performance measures and prioritized actions necessary to support the species' recovery. These will be used to assess and report on progress toward the protection and recovery of each species.

The Environment Ministry is committed to incorporating considerations of time into response statements through prioritization of the actions identified as necessary to support the protection and recovery of each species, as well as for some species by identifying short- and long-term goals or timelines for achieving the goals or particular actions.

Cost estimates are not included in response statements, as statements identify actions necessary to support recovery, but remain flexible for stewards and stakeholders to identify the best approaches for implementing or achieving the actions.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to develop guidance for the preparation of response statements that will result in the achievement of meaningful outcomes for species at risk. The

Environment Ministry also did not agree to include cost estimates in response statements so that the needed allocation of resources for actions is clear to decision-makers and the public.

4.2.4 Reviews of Progress Are Done Only Once, Provide Few Details on Outcomes for Species, and Do Not Evaluate the Effectiveness of Actions Taken

The Act requires that reviews of progress for species be done only once. Reviews of progress provide few details on outcomes, and do not evaluate the effectiveness of actions in response statements taken to protect and recover species. The Environment Ministry is therefore unable to gauge progress or effectively adapt work toward the recovery of species at risk in a manner that ensures that continuous improvements are made for the betterment of species.

According to the Act, the Ministry must prepare a review of progress for all threatened, endangered and extirpated species for which a response statement has been published. Reviews of progress are prepared by Environment Ministry staff who compile information from a wide variety of sources, including the Natural Resources and other ministries, and summarize the progress toward meeting all actions in the response statements.

At the time of our audit, all 85 reviews of progress have been completed as required (100%) and 18 additional reviews of progress are due to be completed later in 2021. As noted in **Section 4.2.3**, response statements do not contain performance measures and, accordingly, reviews of progress cannot assess the success of actions. Our analysis of a sample of 30 reviews of progress from 2015 to 2020 showed that the reviews included information that was generally focused on outputs rather than outcomes for species. For example, the review of progress for the bobolink and eastern meadowlark, completed in 2020, reported:

- 13 dedicated stewardship projects received a total of \$537,847;

- 35 stewardship projects for other species, which likely also benefit these two species, received a total of \$1,639,211;
- stewardship projects received a total of \$10,008,080 of in-kind resources;
- stewardship projects involved 54,675 volunteer hours;
- stewardship projects reached 1,783,242 individuals through outreach; and
- 50 permits and 2,946 conditional exemptions were allowed for these two species.

Information in reviews of progress related to outcomes for species comprises a summary of species observations submitted to the provincial data repository, as well as updated information on numbers of species and the area(s) in which they are found. For example, the review of progress for the bobolink and eastern meadowlark reported that these species have been found in additional locations and that their known distribution is greater than what was previously reported.

The review of progress for these two species also briefly describes the progress made toward achieving the actions in the response statement and identified actions without progress. The review concluded that “substantial” progress had been made toward achieving the recovery goal of slowing population decline by maintaining and enhancing grassland habitat in the short term and maintaining a stable population throughout its current range in the long term. However, without any performance measures against which to compare progress on maintaining and enhancing grassland habitat, this conclusion is subjective.

We sampled 30 reviews of progress completed from 2015 to 2020, covering endangered and threatened species of all species groups, and found that the implementation of only one government-led action had been described. In the 30 reviews, containing between six and 13 government-led actions, the implementation of the majority of these actions was described as “direct action” undertaken by Ontario. Only the implementation of the government-led action to “encourage other agencies to ensure

that wastewater treatment plants and stormwater management facilities are functioning effectively so as to maintain or improve water quality in the habitat,” found in three reviews of progress for freshwater mussels, was described.

In addition, we found that no progress was reported by the Ministry for 37 (or 15%) of the 249 government-supported actions identified in response statements in our sample. For example, no progress was reported on any of the six government-supported actions for Hungerford’s crawling water beetle and no progress was reported on seven of the eight government-supported actions for wild hyacinth (a plant). The Environment Ministry does not have a database to track the assignment, implementation and progress of government-supported actions outlined in response statements. Our 2020 value-for-money audit on *Setting Indicators and Targets, and Monitoring Ontario’s Environment* recommended that the Environment Ministry:

- establish a database of actions contained in government response statements;
- execute on high-priority actions to be taken, including monitoring;
- solicit interest from and assign responsibility for certain actions to conservation partners (e.g., organizations, agencies, universities and other stakeholders); and
- use the database to annually track and follow up on progress on actions.

In addition, reviews of progress were previously required to be conducted within five years of the publication of the response statement for a species. The *More Homes, More Choices Act, 2019* amended the Act to now allow a different reporting date based on what may be specified in the response statement. Four response statements—for American ginseng (a plant), Blanding’s turtle, spiny softshell (a turtle), and spotted turtle—released in 2020 specify a 10-year reporting period. This change is viewed by many as positive; a five-year reporting period may be too short to complete recovery actions in response statements, assess progress toward goals with the data available, and see changes in outcomes for

species. However, a longer reporting period could result in a reduction in transparency, and may reduce opportunities to adapt protection and recovery actions in a timely fashion as new information becomes available. It would therefore be reasonable to report every five years until a species is no longer on the Species at Risk in Ontario List.

Once a review of progress is completed, there is no further requirement in the Act for the Environment Ministry to ever report again on the actions taken for that species at risk—even when little or no progress has been made to improve its status. For example, we found that no progress was reported on government-supported actions in the response statement for Hungerford’s crawling water beetle and the Environment Ministry is not required to report on this species in the future. In contrast, the federal government, Nova Scotia, and the Northwest Territories report every five years until either a species’ recovery objectives have been achieved or the species’ recovery is no longer required or feasible. Similarly, the Secretary of the Interior in the United States must report every two years to different committees of the House of Representatives on recovery efforts for all species at risk. The Secretary of the Interior also is required to continue monitoring and reporting on species for no less than five years after they have been recovered and de-listed to ensure that their status has stabilized or continues to improve.

RECOMMENDATION 6

To increase accountability on progress made to improve the status of species at risk in Ontario, we recommend that the Ministry of the Environment, Conservation and Parks:

- report on the outcomes of actions and impacts on species at risk in reviews of progress, based on the performance measures described in **Recommendation 5**;
- detail in reviews of progress how government-led actions were implemented; and
- report on progress for species every five years until the species is no longer on the Species at Risk in Ontario List.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges this recommendation and recognizes the importance of regular reporting to provide transparency and effectively track progress on species at risk protection and recovery.

The Committee on the Status of Species at Risk in Ontario maintains the priority list of species requiring assessment or reassessment, and generally performs species reassessments on an approximate 10-year cycle, which aligns with federal species assessment processes. Through its assessment work, the Committee provides a transparent and science-based evaluation of progress made toward species recovery. The Committee’s reports are provided annually to the Minister and are made available to the public within three months of being received.

The Ministry of the Environment, Conservation and Parks is exploring the feasibility of enhanced progress tracking and follow up on actions identified in government response statements.

AUDITOR GENERAL’S RESPONSE

The Environment Ministry did not agree to report on outcomes in reviews of progress, detail how government-led actions are implemented, and report on progress until the species is no longer at risk.

We note that the Committee on the Status of Species at Risk in Ontario’s species reassessments do not evaluate the outcomes of actions nor detail how government-led actions are implemented.

4.3 Approvals (Agreements, Permits and Conditional Exemptions)

4.3.1 Permits to Harm Species at Risk Always Approved

No permits to harm species or their habitats have been denied since the Act was passed in 2007. While it is illegal to kill, harm or harass endangered and

threatened species or damage and destroy their habitats, the Minister may allow activities that would otherwise be prohibited using various types of permits (see **Figure 9**).

A permit is like a licence issued by the Minister to a person, company or organization, and includes conditions that must be met. Since the Act was passed in 2007, there have been 1,124 permits of various types issued (see **Figure 13**). Excluding permits that have the main purpose of protection and recovery, there have been 306 permits that have allowed harmful activities—74% of which have been in the areas around the Greater Golden Horseshoe and southwestern Ontario, where a significant amount of development activity occurs provincially. The species most frequently impacted by these 306 permits were butternut, redbreasted dace (a fish), bobolink, whip-poor-will (a bird), and Blanding’s turtle.

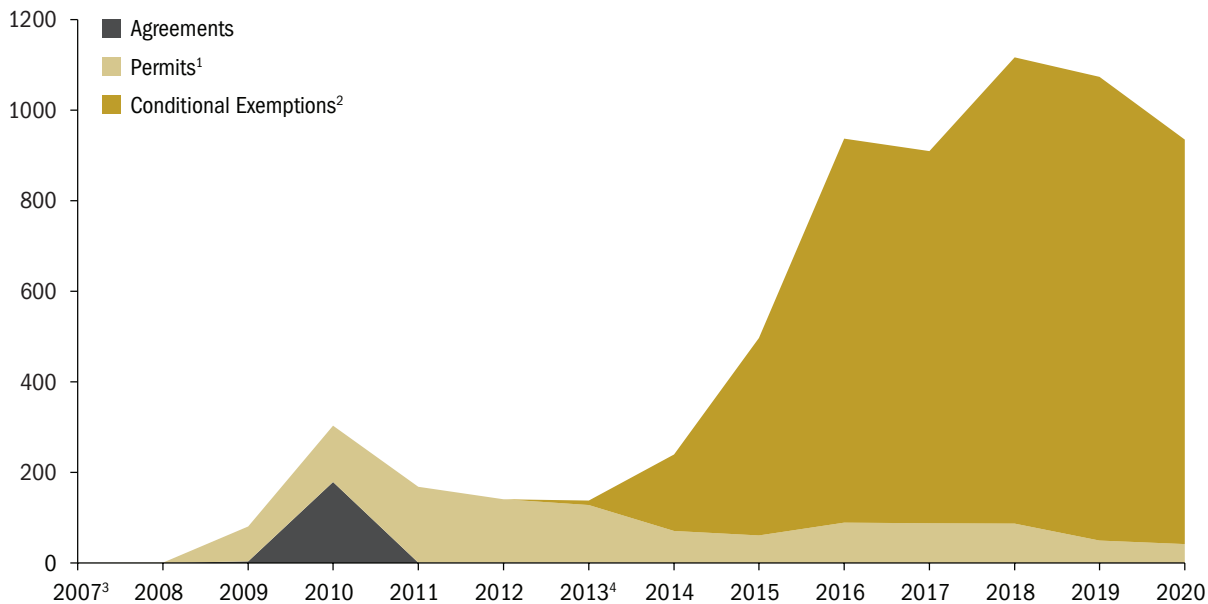
In 2018, Natural Resources Ministry staff identified the need for guidance on when to say “no” to a permit application. No guidance was developed. Consequently, we found that no permits have ever

been denied. For example, in a sample of permits we reviewed, the Environment Ministry issued a permit in 2021 to a company to divide a tract of cottage land into smaller lots, despite that the same company had been issued a stop work order in 2018 for building a road through the habitat of a species at risk (Massasauga rattlesnake) without approval, and was charged in 2019 with unlawfully damaging habitat. That prosecution was still ongoing at the time of our audit.

The Ministry’s objectives for handling permits is to use an “avoidance first” approach. In other words, the Ministry will work with a company, organization, or person to see whether measures can be taken to avoid harmful impacts to species and habitat so that a permit is not required. If negative impacts cannot be avoided, the Ministry will work with them through the permit process. Based on our analysis, the Environment Ministry handled at least 150 avoidance cases in 2020, where no permit was ultimately issued. However, in the absence of inspections, there is no way for the Ministry to know

Figure 13: Approvals under the *Endangered Species Act*, 2007, 2007–2020

Source of data: Ministry of the Environment, Conservation and Parks



1. There have been 1,124 permits since 2007; 818 of those permits were for protection and recovery purposes.

2. There have been 5,229 registered conditional exemptions since 2013; 520 of those exemptions were for protection and recovery purposes.

3. The first year of the Act was 2007, and no approvals were passed that year.

4. The Act was amended in 2013 to allow conditional exemptions.

whether the promised avoidance measures were implemented. The Ministry does not track avoidance cases.

Additionally, in our review of permits, we noted that the language was sometimes oversimplified and misleading in proposal notices on the Environmental Registry. For example, in 2021, there was a proposed permit to build a subdivision that staff determined would damage 3.1 hectares and destroy 18.8 hectares of habitat for eastern foxsnake and Butler’s gartersnake. However, the proposal notice on the Environmental Registry described that the activity “may impact” the habitat of the two species. Ministry staff removed all references relating to killing, harming, harassing, damaging, and destroying—all of which are the prohibited activities spelled out in the Act—which would have helped the public better understand the nature of the proposal, and make informed comments on whether the permit should be issued. We reviewed a sample of proposed permits posted on the Environmental Registry since 2019 and found that 52% contained similar understated language. Staff selected the understated wording of “may impact” at the preference of the Minister’s office.

RECOMMENDATION 7

To minimize the harm to species at risk allowed by permit approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks (Environment Ministry):

- develop and implement guidance for Environment Ministry staff on when to deny approvals based on the needs of a species; and
- ensure language used in proposed permits on the Environmental Registry clearly identifies expected impacts to species and their habitats.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that guidance for Environment

Ministry staff in relation to approvals under the *Endangered Species Act, 2007* is important.

The Environment Ministry’s priority is guidance for staff on how to determine whether the Act’s requirements have been met. Permit proposals that meet the Act’s legal tests are recommended to the Environment Minister for issuance. Permit proposals that do not meet the legal tests are not recommended for approval.

As noted in the Environment Ministry’s responses to **Recommendations 10** and **11**, the Environment Ministry is committed to continuously improving and refining its guidance for Environment Ministry staff related to permit development under the *Endangered Species Act, 2007*.

The Environment Ministry agrees that communication of information through the Environmental Registry should be as clear as possible for the public.

That is why when the Environment Ministry prepares to post, each individual posting is evaluated and carefully reviewed to avoid technical and legal jargon and to ensure that it clearly identifies expected impacts to the natural environment. We will ensure that the same standard is applied for all Environmental Registry postings, including those under the *Endangered Species Act, 2007*.

AUDITOR GENERAL’S RESPONSE

The Environment Ministry did not agree to develop and implement guidance for Ministry staff on when to deny approvals based on the needs of a species.

4.3.2 96% of Approvals to Harm Species at Risk in 2020 Were Issued Automatically

In 2020, 893 (or 96%) of the 935 approvals allowed under the Act were automatic conditional exemptions. Conditional exemptions do not go through a review process by staff, unlike agreements and permits. These approvals impacted 123 different species at risk—72% of all 171 species listed as endangered

or threatened. Since 2013, 50% of conditional exemption registrations impacted bobolink, eastern meadowlark, barn swallow, Blanding’s turtle, and butternut.

Regulatory changes were made in 2013 to allow companies, organizations, and people to be conditionally exempted from the prohibitions of the Act for some types of harmful activities rather than having to apply for a permit (see **Figure 14**). This change was the product of the Natural Resources Ministry’s three-year Transformation Plan to modernize its business and operate more cost efficiently by streamlining some approvals. The Natural Resources Ministry stated that the use of conditional exemptions would allow for the “more efficient implementation of the [Act] while continuing to protect species at risk and their habitats.” The former Environmental Commissioner of Ontario reported in 2013 that this change to approvals effectively exempted many activities that can adversely affect species at risk and their habitats, such as gravel pit operations and drainage works, and was at odds with the purposes of the Act.

There are 41 different conditional exemptions and other exemptions; 17 require activities to be

registered with the Ministry by completing an online form (see **Figure 9**). For example, conditional exemptions include activities like the operation of a wind facility, and early exploration for mining. There are 24 other exemptions that do not require registration, such as incidental fishing by-catch, when species are caught accidentally.

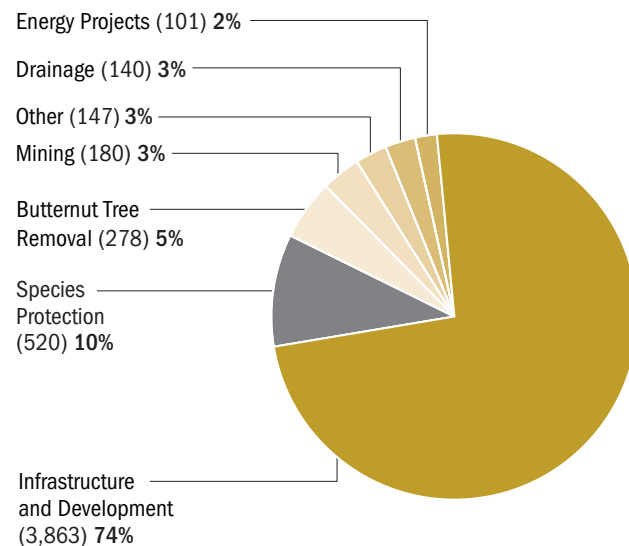
These conditional exemptions often allow harmful activities and only minimize harm, but do not eliminate or compensate for it by providing an overall benefit, which would make the species better off. Activities affecting certain species at risk (bobolink, butternut) can proceed without requiring a permit as long as the conditions in the regulation are followed. Conditions can include such things as registering with the Ministry, developing a mitigation plan, keeping activities a specified distance away from important habitat features, limiting the timing of activities, creating or enhancing habitat elsewhere, species monitoring and maintaining habitat features.

There have been 5,229 registrations for conditional exemptions as of 2020 with an annual average of 923 in the last five years. There have been 520 (or 10%) conditional exemptions for activities for the protection and recovery of species at risk compared to 4,709 (or 90%) conditional exemptions for activities with a potential negative impact on species as of 2020. There has been an average of 846 conditional exemptions annually in the last five years with the potential to negatively impact species at risk and their habitats. In 2020, the majority of conditional exemptions were located in southern Ontario.

The species most commonly identified in registrations for conditional exemptions as being likely to be affected are bobolink, eastern meadowlark, barn swallow, Blanding’s turtle, and butternut. In part, these species are impacted more than others because of their widespread habitats. Their at-risk status is based on rates of decline, not total population size. For example, bobolink—which have declined considerably over the last half century—inhabit grasslands and often use farm fields across southern Ontario as habitat. Mowing of hay during

Figure 14: Conditional Exemptions under O. Reg. 242/08 by Activity Type, 2007–2020

Source of data: Ministry of the Environment, Conservation and Parks



the breeding period from May to July may inadvertently kill and disturb nesting adults and young birds, and destroy eggs and nests.

There have been 1,133 activities that have registered for conditional exemptions with potential impacts to Blanding's turtles. Seventy-eight percent of these are for non-imminent threats to human health or safety, such as road and culvert maintenance and repair. Similarly, there have been 2,010 activities that have registered for conditional exemptions for bobolink and 1,964 for eastern meadowlark, ranging from wind facility operations to drainage works construction. More than 90% of the conditional exemption registrations for both of these birds do not concern imminent threats to human health or safety.

Additionally, the online portal that companies use to obtain conditional exemptions currently uses Natural Resources Ministry forms, which may lead the public to mistakenly believe that it is still responsible for the Act. The Environment Ministry has initiated work to transition to its own online system for conditional exemptions.

RECOMMENDATION 8

To minimize the harm to species at risk allowed by conditional exemption approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks:

- evaluate the effects of conditional exemptions on species at risk and their habitats;
- make the results of that evaluation public; and
- take corrective action as necessary on the requirements and scope of conditional exemptions.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that evaluating the effects of conditional exemptions on species at risk and their habitats is beneficial to the provincial species at risk program.

Within budgetary and staffing realities, the Environment Ministry will continue to evaluate the effectiveness of conditional exemptions.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not commit to making an evaluation of the effects of conditional exemptions public, and taking corrective action as necessary.

4.3.3 Insufficient Information Required for Health or Safety Conditional Exemptions

There have been 2,954 conditional exemptions for infrastructure or structure maintenance, or repairs or certain replacements related to non-imminent threats to human health and safety where a mitigation plan is not required. These types of activities may include the removal of hazardous trees, bridge replacement, lowering pond levels to prevent flooding of roads, or culvert replacement. However, there is no requirement to explain how species at risk will be impacted by the activity. There is also no requirement to include how human health or safety will be impacted if the activity is not allowed to proceed. In 2020, the majority of the activities that have been registered for these conditional exemptions were located in southern Ontario.

We sampled 30 conditional exemptions and found that there are inconsistencies in information provided about how activities will help protect human health or safety. In 27% of registrations for health or safety, no information was provided by the registrant on the threat to human health and safety to justify the need for the activity. Additionally, none of the registrations we sampled contained information about how much species at risk habitat would be damaged or destroyed as it is not a requirement to provide such details. For example, Hydro One registered a conditional exemption to remove trees and shrubs that provided bobolink, loggerhead shrike (a bird) and eastern meadowlark habitat and did not include

information about how much habitat would be damaged or destroyed.

Similarly, the Natural Resources Ministry found in 2017 that some of these conditional exemptions did not include information about the threat, indicate whether the mitigation plan was prepared by an expert, describe what would happen if the work was not done, or include details about the activity. The Natural Resources Ministry did not take any corrective action based on these findings, as the transfer of the species at risk program to the Environment Ministry was announced in 2018.

RECOMMENDATION 9

To minimize the harm to species at risk allowed by conditional exemption approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks require that health or safety conditional exemptions justify the need for the exemption and provide details of the activity, including an assessment of how species will be impacted.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges and agrees with this recommendation in regard to structures and infrastructure.

A condition to the exemption for activities involving structures and infrastructure under the conditional exemption for non-imminent threats to health and safety is that proponents must develop a mitigation plan prior to commencing their activity. This plan must include information about the need for the exemption and an assessment of the activity's likely effects on species at risk identified in their mitigation plan. Further, it is a condition to the exemption that the activity is carried out in accordance with the mitigation plan.

Proponents must comply with the conditions of the exemption in order for the exemption to apply. Further, failure to comply with a

requirement under a regulation is an offence under the *Endangered Species Act, 2007*.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to require that all registrations for health or safety conditional exemptions justify the need for the exemption and provide details of the activity, including how species will be impacted.

4.3.4 Unknown Whether Overall Benefit Permits are Effective in Making Species and Their Habitats Better Off

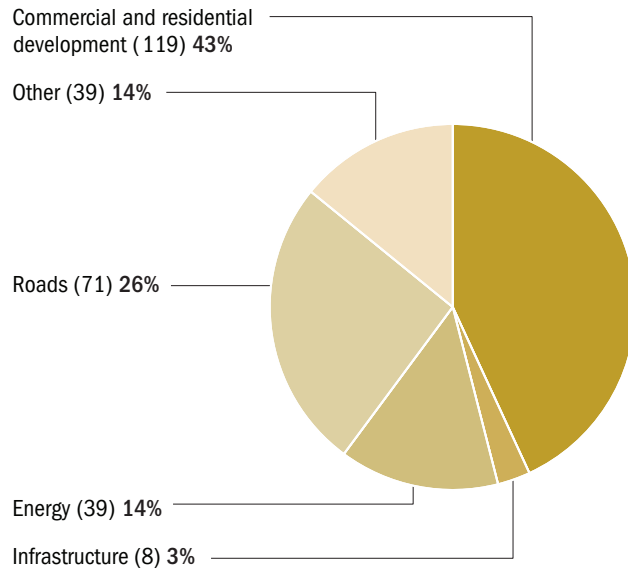
We found that the Environment Ministry has not assessed the effectiveness of overall benefit permits, which are intended to make species better off than before the activity occurred.

Overall benefit permits are issued for activities that may have an unavoidable adverse effect on species at risk or their habitat. **Figure 15** shows the types of activities that have been allowed under overall benefit permits. Conditions for this permit include the requirement to achieve an overall benefit, making the species better off than before the activity, within a reasonable time. For example, a condition of this type of permit could include creating a greater amount of habitat than what is permitted to be destroyed, or other measures to improve the conditions of the species and its habitat. A total of 276 overall benefit permits have been issued between 2007 and 2020. Forty-three percent of overall benefit permits are related to residential and commercial development, and 93% are located in southern Ontario. **Figure 16** shows that 68% of the 30 overall benefit permits that we sampled have been issued to private corporations.

The Natural Resources Ministry found in 2018 that only 42% of monitoring reports demonstrated evidence of desired outcomes of overall benefit objectives. Our review of permit files found a case where a company was allowed to damage and destroy 9.6 hectares of different types of habitat

Figure 15: Overall Benefit Permits under the *Endangered Species Act, 2007* by Activity Type, 2007–2020

Source of data: Ministry of the Environment, Conservation and Parks

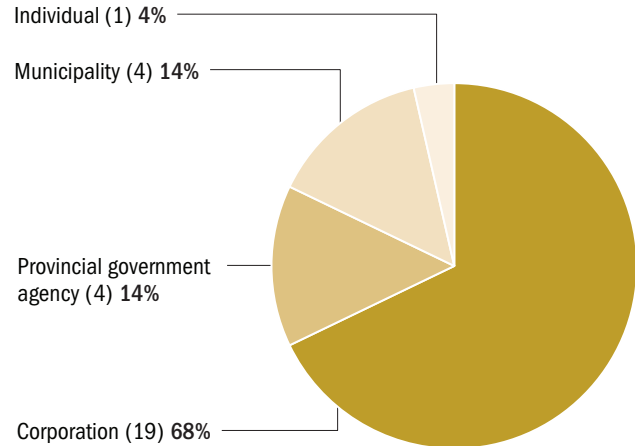


for Blanding’s turtle, and was required to create a 0.49 hectare pond as an overall benefit to the turtle. However, monitoring reports showed that no turtles had inhabited the pond two years after it had been constructed.

The Natural Resources Ministry also found in 2018 that better guidance is needed for suitable habitat offsets and replacement ratios (how much is replaced compared to how much is destroyed) in some permits. Similarly, our review of approvals files found that eight overall benefit permits for reidside dace (a fish) issued in the last two years always allowed for more damage or destruction of habitat than what was restored or replaced. For example, the Ministry of Transportation obtained an overall benefit permit in 2021 for a highway crossing over a creek that allowed the damage and destruction of 0.46 hectares of reidside dace habitat, but only required 0.08 hectares of habitat to be created or enhanced. In Ontario, the overall population of reidside dace is estimated to have declined by over 50% in the last decade based on a reduction in its

Figure 16: Sample of 30 Entities that Hold Overall Benefit Permits under the *Endangered Species Act, 2007**

Source of data: Ministry of the Environment, Conservation and Parks



* The sample includes overall benefit permits from 2015 to 2021.

geographic range and the number of sites where it has been found.

We also found overall benefit permits for Blanding’s turtles in which large amounts of habitat were allowed to be damaged or destroyed compared to what was required to be replaced. For example, we found two overall benefit permits in 2021 for a subdivision development that allowed 51.6 hectares of different types of habitat for Blanding’s turtle to be damaged or destroyed, but required the creation or enhancement of just 1.8 hectares (3%).

Some guidance incorporated into permits may not be effective. We found that the guidance for the construction of building kiosks and nest cups for barn swallows may not be working. Some species have more site fidelity than others, as they always return to the same site, and will not seek out new habitat. A 2019 study published in the *Canadian Field-Naturalist* found that building shed-like structures may not be effective for mitigating the loss of barn swallow nesting habitat. Additionally, the Natural Resources Ministry found in 2018 that work was being performed on unsuitable sites as replacement habitat

for bobolink and eastern meadowlark. Environment Ministry staff informed us that they often copy the conditions from previously issued permits in order to expedite approvals.

The effective implementation of the Act—protecting and recovering species at risk—requires that overall benefit permits result in verifiable outcomes that make species better off. However, the Environment Ministry is not assessing whether the required conditions in these permits work as intended.

RECOMMENDATION 10

To improve the status of species at risk affected by overall benefit permit approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks:

- evaluate the outcomes to species at risk from issuing overall benefit permits to confirm that required conditions are making species better off;
- publicly report on that evaluation; and
- update internal guidance using the best available scientific information to ensure overall benefit permits result in successful outcomes for species at risk and their habitats.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that the evaluation of the outcomes to species at risk from issuing overall benefit permits is important and will undertake such work within budgetary and staffing realities.

The Environment Ministry is committed to using the best available scientific information to ensure overall benefit permits result in successful outcomes for species at risk and their habitats.

The Environment Ministry will continue to apply and refine its internal guidance on an ongoing basis in the development of overall benefit permits consistent with the *Endangered Species Act, 2007*.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to publicly report on the evaluation of the outcomes to species at risk from issuing overall benefit permits.

4.3.5 Some Protection and Recovery Permits that Benefit Species Are Delayed, while Some Development-Related Permits that Harm Species Get Fast Tracked by the Environment Ministry

We found delays by the Environment Ministry in issuing permits for the protection and recovery of species. On the other hand, permit applications for development activities were fast tracked when companies or organizations complained.

Protection and recovery permits are issued to allow activities to help a species at risk or its habitat; the permits are required because the activities are likely to cause some minor adverse effects during the work. There have been 818 protection and recovery permits issued between 2007 and 2020 for conservation work such as the restoration of a wetland. For protection and recovery permits, 30% of permits were for conservation work for Blanding's turtle, Jefferson salamander, redbreast dace, and spotted turtle. The remaining 70% were for conservation work for 117 other species at risk.

In 2010, when the Natural Resources Ministry was responsible for the Act, it began delegating 22 different functions to Ministry staff, including issuing permits for protection and recovery activities to make species better off. Since the Environment Ministry became responsible for the Act in 2019, the Environment Minister has assumed responsibility for making decisions on issuing all types of permits under the Act.

Delays in issuing protection and recovery permits can impact species. For example, one conservation organization has been waiting for four years since 2017 to obtain this type of permit for conservation work for the endangered Carolinian population of Massasauga rattlesnake at Ojibway Prairie near Windsor. This work is listed as a high-priority action

in the response statement for the species because the population has declined over 50% since 2013 and is facing imminent extirpation. However, delays in issuing the permit may have contributed to the species' local demise due to the time taken by the Ministry to consider policy and other implications for the proposal.

Likewise, a conservation organization attempted to renew its permit in the beginning of March 2020 to collect and incubate Blanding's turtle eggs to help increase the local population in the Ottawa area. Egg collection was to occur from late May to early July. However, the Environment Minister did not approve the permit until the end of June 2020. As a result of this delay, the conservation organization was only able to collect 14 eggs (or 5%) of the 300 eggs it had planned to collect.

In comparison, we found that other permit applications related to development received priority treatment, and were able to jump the queue. For example, in 2020 a permit for Infrastructure Ontario to build affordable housing was prioritized over other permits and was issued in 90 days. This permit allowed for the habitat of three at-risk bats (little brown myotis, northern myotis, eastern small-footed myotis) to be destroyed through the demolition of four vacant warehouse buildings in the City of Toronto. Abandoned dark places like old warehouses are used as habitat by some species of bats. The Natural Resources Ministry's 2018 internal evaluation of permits found that staff felt pressure when assessing the impacts of a project and identifying options for achieving an overall benefit when companies or organizations appealed to higher levels within the Ministry outside of the permit process. Environment Ministry staff informed us that companies or organizations that complain to the Ministry will generally obtain their permits faster. Our review of a sample of 30 permits related to development activities found that seven (or 23%) were fast-tracked by staff, resulting in approvals issued 43% faster than those that were not. Six of the fast-tracked permits were for housing development and the other was for an electrical transmission line.

Our review of a sample of development-related permits issued between 2015 and 2021 found that it took an average of 851 days—ranging from 90 to 2,733 days—to complete the permit process. In 2020, the Environment Ministry set a target to reduce the amount of time by 10 to 16 weeks for when a company, organization or a person submits the necessary information to when a permit is issued. As of August 2020, it took 256 days on average to complete the permit process. However, Environment Ministry staff have never conducted site visits during the preparation of permits to better understand local conditions and validate information. Conducting site visits would increase the processing time for permits but could provide important information for staff to assess the application and possible conditions of a permit. Although the Environment Ministry conducts site visits for other programs, none of the 30 permits we sampled had site visits.

RECOMMENDATION 11

So that all permit approvals under the *Endangered Species Act, 2007* achieve the best possible outcomes for species at risk and their habitats, we recommend that the Ministry of the Environment, Conservation and Parks:

- develop and implement guidance for staff to process all permits in a consistent manner; and
- develop and implement guidance that delegates Ministerial authority back to Ministry staff to issue permits with the main purpose of assisting in the protection or recovery of the species.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that guidance for staff on processing permit applications in a consistent manner is important to ensure consistency and completeness in reviewing applications.

The Environment Ministry is committed to continuously improving its internal guidance

regarding permit development consistent with the *Endangered Species Act, 2007*.

The Environment Ministry acknowledges the ability to delegate statutory powers and will continue to review delegations as needed to determine if they are appropriate.

4.3.6 Increasing Use of Social or Economic Benefit Permits for Public Infrastructure with No Requirement to Provide Overall Benefit to Species

Our audit found an increase in the last several years in the number of social or economic benefit permits being used for public infrastructure projects. There have been six social or economic benefit permits issued since 2007 for large-scale projects; four have been issued by the Environment Ministry since 2019.

Companies or agencies can apply for either an overall benefit permit, or a social or economic permit. As discussed in **Section 4.3.4**, overall benefit permits are issued for activities that may have an unavoidable adverse effect on species at risk or their habitats. Social or economic benefit permits are issued to allow activities that are expected to result in a significant social or economic benefit to Ontario. The most significant difference between the two permits is that overall benefit permits require an overall benefit, making the species better off within a reasonable time, whereas social or economic permits do not have this requirement.

Ministry staff are concerned that social or economic benefit permits will become increasingly more common, reducing the benefit and protection for species at risk. We reviewed the four most recent social and economic benefit permits and noted that three of the four permits are for public transit projects. Metrolinx obtained three separate permits in 2020 for the Eglinton Crosstown West Extension, Scarborough Subway Extension, and the Ontario Line projects in the Greater Toronto Area, impacting nine species at risk: barn swallow, butternut, bank swallow, Blanding's

turtle, chimney swift, eastern small-footed myotis bat, little brown myotis bat, northern myotis bat and tri-colored bat. Metrolinx requested these permits be issued in advance of tendering the projects so that bidders can factor them into their bids. Granting a Crown agency multiple permits with no required overall benefit could create the perception that the government sets a lower standard for itself for protecting species at risk than of others. The Environment Ministry could have required that Metrolinx obtain overall benefit permits instead but it would have taken longer in order for Metrolinx to determine which species were present and for the Environment Ministry to determine what overall benefit requirements would be necessary.

Additionally, the Environment Ministry noted internally that many of the project areas have not yet been surveyed in detail for species at risk, and Metrolinx is not yet clear on the specific impacts on the species and their habitats. Furthermore, for barn swallows, the permits direct Metrolinx to follow guidance to construct nest cups, which have been proven ineffective in other cases (see **Section 4.3.4**). These permits were fast tracked by the Ministry and were issued within five months of the Ministry of Transportation proposing legislation to speed up construction of transit projects in the Greater Toronto Area.

The Environment Ministry also issued a social or economic benefit permit to Wataynikaneyap Power Ltd. in 2019 for the construction, operation, maintenance and retirement of approximately 1,800 kilometres of transmission lines located north of Red Lake and Pickle Lake to connect 17 remote First Nation communities to the provincial electricity grid. These communities have historically relied on diesel fuel to power their communities, which was financially unsustainable, environmentally risky, and unreliable to meet community needs. The company obtained a permit to impact four species at risk: boreal caribou, wolverine and two bats (northern myotis and little brown myotis). In 2018, stakeholders raised concerns about the environmental assessment for this project and the transmission lines routing through

caribou habitat rather than alternative locations with less impact.

RECOMMENDATION 12

To minimize the harm to species at risk allowed by social or economic benefit permit approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks develop and implement guidance based on the best available science that details when it is appropriate to issue a social or economic benefit permit rather than an overall benefit permit.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the Auditor General's recommendation and notes that current work is under way to update guidance to support staff in the review of applications for approvals under the *Endangered Species Act, 2007*.

4.3.7 The Environment Ministry Does Not Assess Cumulative Effects of Approvals (Agreements, Permits, Conditional Exemptions) and How They Impact Species at Risk and Their Habitats

The Environment Ministry does not assess cumulative effects—the total impact over time—of all the activities allowed by agreements, permits and conditional exemptions on species at risk, with the exception of boreal caribou. Cumulative effects also include any ongoing threats and pressures that affect species' well-being.

Certain activities otherwise prohibited under the *Endangered Species Act, 2007* require approval because they are detrimental to the well-being of Ontario's species and their habitats. However, each approval is treated in isolation without regard for the net impact that they collectively have on a particular species and its habitat. The cumulative effect of multiple stressors, particularly those involving land-use change, poses a significant threat to biodiversity and

a risk to species recovery in Ontario. Introduced in 2013, conditional exemptions often allow harmful activities that require only that harm to species and their habitats is minimized. However, they do not eliminate harm and are not required to provide an overall benefit to species. Conditional exemptions account for 80% (5,229) of the 6,539 approvals since 2007 (see **Figure 13**).

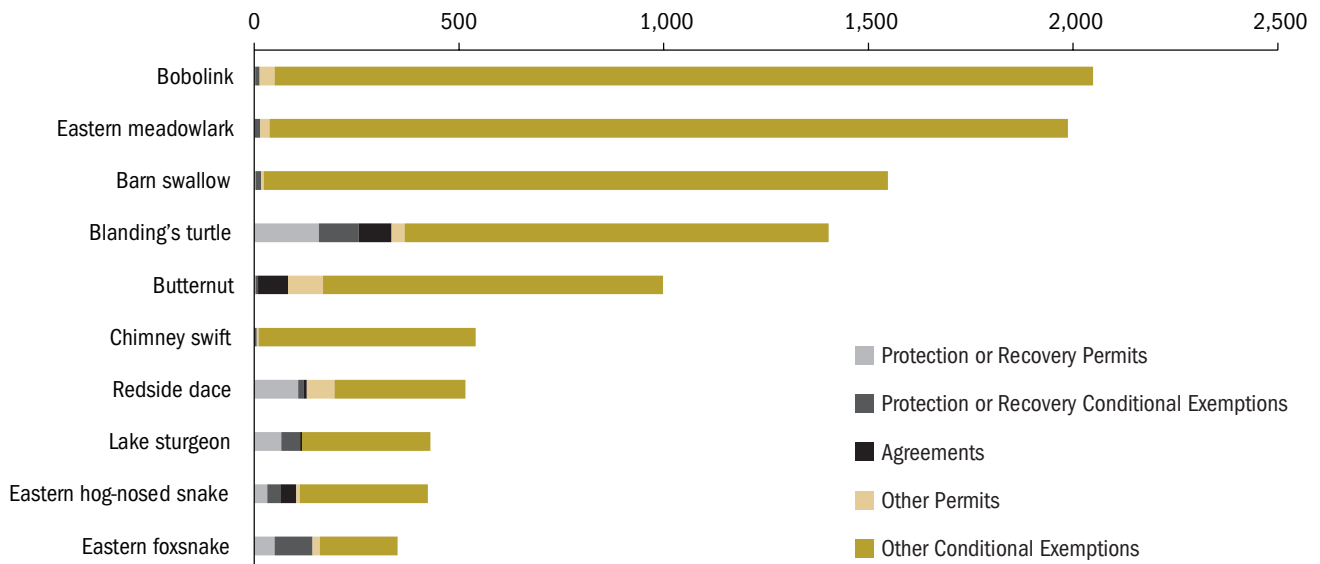
Figure 17 shows the top 10 species in Ontario with the highest numbers of approvals (agreements, permits, and conditional exemptions). These 10 species are affected by an average of 1,025 approvals each. These species were all at risk before these approvals allowed further impacts. As a result, many species are now subject to pressures from ongoing activities that the Ministry has allowed, including bobolink (39 permits, 2,010 conditional exemptions), lake sturgeon (five agreements, 66 permits, 359 conditional exemptions) and Blanding's turtle (80 agreements, 190 permits, 1,133 conditional exemptions). Scientists estimate that Blanding's turtles have declined by more than 60% over the last three generations (approximately 120 years) due to fragmentation and loss of habitat in southern Ontario. Similarly, the number of bobolinks is estimated to have declined by 77% since 1970 and by 33% since 2000.

The government has made recent changes to the approvals framework that may worsen the cumulative effect of harm to species and their habitats. The *More Homes, More Choice Act, 2019* added a new type of approval to the *Endangered Species Act, 2007* called a landscape agreement. Previously, an approval would only be issued to a single entity to engage in a harmful activity at a defined location with limitations on the project size and the number of harmful activities allowed. However, landscape agreements can approve multiple harmful activities across a broader area, and beneficial actions may not occur for all impacted species.

In contrast to Ontario's Environment Ministry, other federal and other provincial departments with responsibilities for species at risk consider the cumulative effects of approvals on species and their

Figure 17: Top 10 Species Impacted by Approvals under the *Endangered Species Act, 2007, 2007–2020*

Source of data: Ministry of the Environment, Conservation and Parks



habitats. Federally in Canada, the cumulative effects of any proposed activity are considered alongside activities affecting the same species. Likewise, Quebec considers the cumulative effects of both past approvals and other activities affecting a given species or habitat when assessing a new permit application affecting that same species or habitat. British Columbia is currently drafting its own species at risk legislation that aims to bring an integrated and consistent approach to cumulative effects assessment.

RECOMMENDATION 13

To minimize the harm to species at risk allowed by approvals under the *Endangered Species Act, 2007*, we recommend that the Ministry of the Environment, Conservation and Parks:

- evaluate the cumulative effects of approvals and other threats over time on species at risk and their habitats and factor this knowledge into the issuance or non-issuance of future approvals;
- publicly report on this information; and

- take corrective actions as necessary to ensure that approvals contribute to successful outcomes for species at risk and their habitats.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks acknowledges the Auditor General's recommendation to evaluate the cumulative effects of approvals and other threats over time on species at risk and their habitats, to factor this knowledge into the issuance or non-issuance of future approvals, to publicly report, and take corrective actions as necessary.

Overall benefit permits are unique from other types of approvals in that the intended outcome of these permits is meant to improve the relative standing of a species after taking into account the residual adverse effects to the species or its habitat that are authorized by the permit.

The Environment Ministry intends to initiate development of policy considerations to support the development of landscape agreements and to consider appropriate approaches to balancing

across species the impacts on species at risk with the benefits provided.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not commit to evaluating the cumulative effects of approvals and other threats, publicly reporting on this evaluation, and taking any necessary corrective actions.

4.4 Compliance and Enforcement

4.4.1 Ministry Has Laid Only Two Charges for Harming Species at Risk Since 2019

The Environment Ministry has laid only two charges under the *Endangered Species Act, 2007* since assuming enforcement responsibility in April 2019. In contrast, when it enforced the Act, the Natural Resources Ministry laid an average of 19 charges annually from 2009 (the first full year the Act was in force) to 2018. This represents a 95% reduction in average annual charges under the Act when comparing between the two Ministries. **Figure 18** shows the number of charges and fines issued in the last five years.

Environment Ministry enforcement staff have the authority to issue stop orders, and the Minister has the authority to issue species protection orders and habitat protection orders. The Ministry has issued only a single stop order since 2019 for clearing a small forest that was alleged to have American chestnut, eastern flowering dogwood (a plant), eastern foxsnake, blue ash (a tree), and eastern prairie fringed-orchid (a

plant). In contrast, the Natural Resources Ministry issued an average of three stop orders annually between 2015 and 2018. These stop orders allow the Environment Ministry to halt an activity that is underway or about to begin. Species protection orders and habitat protection orders, issued by the Minister, may also require that steps be taken to either address adverse impacts or rehabilitate a damaged or destroyed area. The Environment Ministry has a compliance policy to inform decision-making on enforcement actions, but Ministry staff are still in the process of determining when it may be appropriate to issue a stop order under the Act.

There are 47 investigators and other staff in the Ministry's Environmental Investigations and Enforcement Branch appointed to enforce the Act, in addition to enforcement responsibilities for other programs. It is a new responsibility for these staff to enforce this Act and, more generally, enforce wildlife-related laws. However, at the time of our audit, the Environment Ministry had not yet appointed its environmental officers to enforce the Act due to labour relations issues, involving new work with no additional resources. The Environment Ministry internally identified not appointing environmental officers as a risk to its enforcement of the Act.

In contrast, at the time the species at risk program was transferred to the Environment Ministry, the Natural Resources Ministry had 184 conservation officers appointed to enforce the Act, in addition to their enforcement of over 25 other natural resource laws such as the *Fish and Wildlife Conservation Act*. Prior to the transition of the program, enforcement work

Figure 18: Total Fines and Offences under the *Endangered Species Act, 2007*, 2015–2020

Sources of data: Ministry of the Environment, Conservation and Parks and Ministry of Northern Development, Mines, Natural Resources and Forestry

Year	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ²	2020 ^{2,3}
Total Fines⁴ (\$)	46,720	75,000	118,200	2,000	0	0
Total Offences⁵ (#)	28	27	36	3	2	0

1. Under the Ministry of Northern Development, Mines, Natural Resources and Forestry.

2. Under the Ministry of the Environment, Conservation and Parks.

3. The statute of limitations for proceedings was suspended between March 16, 2020 and September 13, 2020 under O. Reg. 73/20. Due to COVID-19, provincial courts were only managing critical issues.

4. Total fines may be a result of charges laid in years prior and the charge may not be laid in the same year in which the incident occurred. Per the Act, the statutes of limitations for charges is five years.

5. Offences include charges laid (including withdrawn and dismissed).

related to the Act was undertaken by all field officers on an as-needed basis. Additionally, park wardens in the Ontario Parks branch were authorized to enforce the Act. Following an analysis, the Natural Resources Ministry transferred the budget for two vacant enforcement positions to the Environment Ministry when responsibility was transferred in 2019.

Environment Ministry staff also do not possess tools like untraceable cellphones, used to contact and investigate people illegally selling species at risk, that were available to Natural Resources Ministry staff when they enforced the Act. This may hamper the Environment Ministry's ability to work covertly on undercover operations. There is a need for training for investigations staff to enable covert operations and increase technical knowledge on particular species at risk given that the nature of investigating species at risk violations is substantially different than the other enforcement work conducted by staff.

The Environment Ministry does not have a dedicated website, whistleblower phone line or email address for the public to use to report possible contraventions of the Act. The Ministry may conduct enforcement in response to public complaints made to the Ministry's Spills Action Centre, its district offices, and from the Natural Resources Ministry's TIPS hotline. Public complaints may be escalated to the Species at Risk Branch, which may then escalate to the Environmental Investigations and Enforcement Branch. However, the Environment Ministry's Spills Action Centre's public website contains no information about the *Endangered Species Act, 2007* or its enforcement. Given its name, this could lead to confusion for members of the public interested in reporting possible violations.

The Natural Resources Ministry's TIPS hotline also receives public tips about species at risk. The majority of these tips are forwarded to the Environment Ministry and are not tracked in the Natural Resource Ministry's TIPS database. However, when it is initially unclear if the tip involves a species at risk, they may be assigned to an enforcement unit and logged in the Natural Resources Ministry's database. Referrals concerning the tip may occur once the assigned

conservation officer gathers more information about the tip. However, the Natural Resources Ministry is unable to track the total number of possible cases of harm to species at risk due to the system's limited reporting function and lack of integration with the enforcement records management system. We reviewed all 139 reports of possible violations entered in the Natural Resources Ministry's TIPS database between January 2018 and January 2021—5% were forwarded to the Environment Ministry after being assigned to an enforcement unit, 10% were forwarded to police or a municipality; and the status of 22% of complaints was unknown. The Natural Resources Ministry closed the files on the remaining 63% of reports as they did not involve species at risk or possible contraventions of the Act.

The Environment Ministry receives approximately two public complaints or referrals from the TIPS hotline each week; one-third of these are then referred to the Ministry's Environmental Investigations and Enforcement Branch for further action. The Environmental Investigations and Enforcement Branch had 23 possible contraventions of the Act in 2019/20 and 57 cases in 2020/21. It closed the files on 52 (or 65%) and 28 (or 35%) remain open or under investigation.

Our Office audited a sample of 35 of these cases and found that 74% of cases relate to habitat damage or destruction, and 26% relate to selling species at risk illegally. In cases of reported habitat destruction, we found that staff visited the site in question only 24% of the time. The remaining cases were addressed remotely. If a site visit is initiated, the enforcement officer needs to ensure appropriate authorizations are in place to legally attend the site. This could include consent from the owner, a judicial inspection warrant or if an investigation has been initiated, an investigative techniques warrant and/or a search warrant.

In addition, the Environment Ministry currently does not have an incident report specifically for species at risk that can be used by the Spills Action Centre to record incidents. The Spills Action Centre instead uses a pollution incident report. The pollution

incident report template does not include information about repeat offenders, the species impacted, or the approval holder, if applicable.

4.4.2 Environment Ministry Does Not Inspect to Ensure Compliance with Approvals (Agreements, Permits and Conditional Exemptions)

The Environment Ministry does not have an inspection program to ensure that companies, organizations, and people adhere to the conditions of their approval when species at risk and their habitats are impacted. There have been 6,539 approvals (186 agreements, 1,124 permits, and 5,229 conditional exemptions) allowed under the Act between 2007 and 2020 (see **Figure 13**). The Environment Ministry has never inspected or laid a charge against any approval holder for non-compliance under the Act. Likewise, when the Natural Resources Ministry was responsible for enforcement prior to 2019, it did not carry out any inspections for non-compliance with approvals. In contrast, both ministries conduct routine inspections for other environmental programs. For example, the Natural Resources Ministry conducts inspections of licensed operators under the *Aggregate Resources Act*.

In July 2020, the Environment Ministry began developing a risk-based compliance and enforcement plan, including operational procedures, the appointment of additional officers, training, and information management strategies. However, the draft plan is not expected to be finalized until later in 2021, and the current complaint-driven process remains.

Permits may require the preparation and submission of an annual monitoring report to the Ministry. We reviewed a sample of permits and found that only 53% of the required monitoring reports had been submitted to the Ministry. The Ministry does not have any procedures in place to track reports or request outstanding reports. Reports that are received are not reviewed, as staff prioritize addressing inquiries and issuing new permits. Similarly, the Natural Resources Ministry found in 2018 that 53% of permit

holders either did not prepare a required report or they were not saved by Ministry staff.

Conditional exemptions may require the preparation of mitigation plans and/or monitoring reports but only some are required to be submitted to the Ministry. These mitigation plans should detail how adverse effects on species are minimized. However, the Natural Resources Ministry determined in 2017 that 9% of registrants did not provide these mitigation plans when they were requested. The Natural Resources Ministry also found that 63% of provided mitigation plans were poor in quality, with no clear actions to minimize adverse effects on the species, and there was no follow-up by the Ministry.

Our Office requested copies of mitigation plans and annual monitoring reports for 30 conditional exemptions from the Environment Ministry, but we received only three mitigation plans because it had not received any other documents and had not taken any action to obtain them. Mitigation plans and annual monitoring reports are to be submitted to the Environment Ministry upon the Ministry's request. The Environment Ministry would only provide our Office with the documents that were already in its possession. Accordingly, the Ministry has no way of knowing whether the other mitigation plans and monitoring reports are sufficient or that they exist. As a result, the Environment Ministry does not know if these registrants are in compliance with their conditional exemptions. Our Office contacted these 30 registrants: 40% did not respond, 13% provided partial documentation related to their conditional exemption, and 47% provided the requested documents.

We found that one of the three mitigation plans was prepared by an expert with the aim to create an overall benefit for impacted species, with 7.6 hectares for development and 8.8 hectares set aside for habitat. However, another mitigation plan for an early mineral exploration exemption, also prepared by an expert, stated only that the company would avoid all species at risk habitat in its 427-hectare plan, and

would not perform work during timing restrictions associated with impacted species.

In our testing, we found a case of a conditional exemption for early exploration mining where the company was allowed to impact boreal caribou and was required to submit annual monitoring reports to the Environment Ministry. Our Office asked the Ministry to provide the documents that should be in their possession. The Ministry informed us that it did not have them, and would not contact the company to obtain them; the Ministry did not have updated contact information for the new mining company that had bought out the original corporation that registered the conditional exemption. Our Office asked the new mining company for the annual monitoring reports, but we were told that they are unavailable and nothing has been filed for the conditional exemption since 2018.

Similarly, the Environment Ministry does not track the cases of when companies, organizations or people have chosen to avoid impacts to species at risk rather than obtain an approval like a permit or conditional exemption. The Environment Ministry does not follow up to ensure that promised actions to avoid harm to species at risk have been taken unless a complaint is received. If avoidance actions are not taken, the result could be unauthorized impacts to species or their habitats, a contravention of the Act.

RECOMMENDATION 14

So that regulated species at risk and their habitats are protected according to prohibitions under the *Endangered Species Act, 2007* and in the conditions of approvals, we recommend that the Ministry of the Environment, Conservation and Parks:

- develop and implement a comprehensive risk-based and sector-based compliance and enforcement plan, including regular inspections of approval holders to confirm that they are operating as allowed and are fulfilling their commitments regarding species at risk;

- ensure the sufficiency of enforcement resources, including training requirements, information management strategies, and the number of appointed officers;
- provide information on its website that informs the public that it is responsible for enforcement of the *Endangered Species Act, 2007* and how to report possible violations; and
- publicly report on the Environment Ministry's enforcement actions as part of its yearly published plans and annual report.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the Auditor General's recommendation.

The Environment Ministry is currently implementing a comprehensive risk-based compliance and enforcement framework that would include responsive and project-based proactive activities, taking into consideration the Ministry's broad compliance and enforcement mandate and available resources.

The Environment Ministry will ensure there is clear information on how to report potential violations under the Act on its website.

The Environment Ministry recognizes that more can be done to improve transparency and public communication as it relates to enforcement actions under the *Endangered Species Act, 2007*. We will consider publishing information in the future.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not commit to ensuring sufficient enforcement resources, including training requirements, information management strategies, and the number of appointed officers.

4.5 Funding for Species at Risk Conservation

4.5.1 Ministry Does Not Charge Approval Fees (for Agreements, Permits and Conditional Exemptions) to Recover Program Costs or to Discourage Harmful Activities

The Environment Ministry recognizes the polluter pays principle in its Statement of Environmental Values under the *Environmental Bill of Rights, 1993*—those that harm the environment should bear the costs involved for the activity and any remediation. Likewise, the 2012 Commission on the Reform of Ontario's Public Services recommended full cost recovery and user-pay models for environmental programs and services. However, the Environment Ministry does not charge fees for any approvals (agreements, permits, conditional exemptions) under the *Endangered Species Act, 2007* that allow otherwise prohibited activities to harm species at risk and their habitats. In contrast, the United States Fish and Wildlife Service charges up to \$2,500 USD for permit applications under its *Endangered Species Act*.

There have been 6,539 approvals (186 agreements, 1,124 permits, 5,229 conditional exemptions) issued under the Act between 2007 and 2020 (see **Figure 13**). Infrastructure and development projects, which often negatively impact habitats of different species, account for 59% (3,863) of these approvals.

Fees can recover costs for Ministry programs. The Environment Ministry levies fees to process, review and issue approvals for other environmental programs. For example, the Ministry charges between \$1,190 and \$2,353 for different types of registrations under its Environmental Activity and Sector Registry (Sector Registry) program, and charges up to \$60,000 for other types of permits (environmental compliance approvals) based on complexity and environmental risk. Likewise, other program areas like Ontario Parks charge user fees to pay some aspects of the operational costs of conserving nature in protected areas. Had the Ministry levied the minimum Sector Registry fee for the 935 approvals (42 permits, 893 conditional exemptions) given out

in 2020 under the *Endangered Species Act, 2007*, it would have generated over \$1.1 million in revenue to support species at risk conservation.

4.5.2 Other Jurisdictions More Innovative in Generating Funds to Support Species at Risk

The Ministry does not raise funds for species at risk conservation directly from the public. In contrast, Nova Scotia (since 2008), New Brunswick (since 2009) and Prince Edward Island (since 2013) generate revenue in the sale of species conservation licence plates. Such initiatives also contribute to increasing public awareness of species at risk conservation. For example, New Brunswick's program contributed to nearly 250 recovery projects after generating \$2.1 million from the sale of specialty licence plates and other revenue sources. Although Ontario Parks solicits public donations to help support some aspects of conservation work, it estimates that a specialty licence plate program would generate at least \$1.2 million annually in additional revenue for its programs.

Further, the Ministry has not explored opportunities for corporate sponsorships, philanthropic donations and fundraising toward species at risk conservation. For example, Australia publishes an annual *Threatened Species Prospectus* to solicit funding from the private sector to help meet conservation objectives. The prospectus details practical, tested and costed recovery actions for specific listed species that have been assessed against the best available science and evaluated for success by consulting scientific experts. The government openly solicits donations to fund these proposals and encourages private entities to become involved by having their employees participate in fieldwork alongside conservation organizations.

Reliable, long-term funding for species-at-risk initiatives is critical for protecting and improving the conditions of species and their habitats. Research shows that increasing expenditures on species conservation reduces the likelihood of further species decline. Experts concluded in a 2017 study in the

journal *Nature* that increased spending on biodiversity conservation since the Rio Earth Summit in 1992 has prevented species losses. Additionally, a 2007 study in the *Journal of Environmental Economics and Management* found that listing a species as at risk must be accompanied by funding for recovery actions for that species to achieve successful outcomes.

RECOMMENDATION 15

To improve the sufficiency of financial resources available for actions to protect and recover species at risk in Ontario, we recommend that the Ministry of the Environment, Conservation and Parks:

- charge fees for approvals to harm species at risk that recover program costs and help discourage harmful activities;
- actively engage the public, businesses, and the philanthropic sector in cultivating new sources of investment for species recovery actions; and
- develop a business case to implement a specialty licence plate program to raise funds for species at risk conservation.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that it is important to ensure sufficient financial resources to protect and recover species and acknowledges the potential sources of revenue that the Auditor General identifies.

The Environment Ministry's current priority is to operationalize the Species Conservation Action Agency which may receive donations from members of the public and organizations.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not commit to charging fees for approvals to harm species at risk and to develop other methods to raise funds for the conservation of all species at risk.

4.6 Species at Risk Stewardship Program

4.6.1 Species at Risk Stewardship Program Contributed to Restoring Species at Risk and Their Habitats

The Species at Risk Stewardship Program (Stewardship Program) has funded 1,170 projects and contributed to restoring 55,459 hectares of habitat for species at risk since its creation in 2007. See **Figure 19** for recipients of stewardship funding for 2015/16 to 2020/21. The Stewardship Program is an important means for making progress on government-supported actions identified in response statements (see **Section 4.2.3**).

The Environment Ministry's Species at Risk Branch does not have dedicated staff or funding to conduct on-the-ground species at risk work itself. The Stewardship Program was established by the *Endangered Species Act, 2007* to encourage people to assist in the protection and recovery of species on the Species at Risk in Ontario List. Eligible applicants include Indigenous communities and organizations, academic institutions, businesses and conservation organizations, but provincial ministries and federal government departments and agencies are excluded.

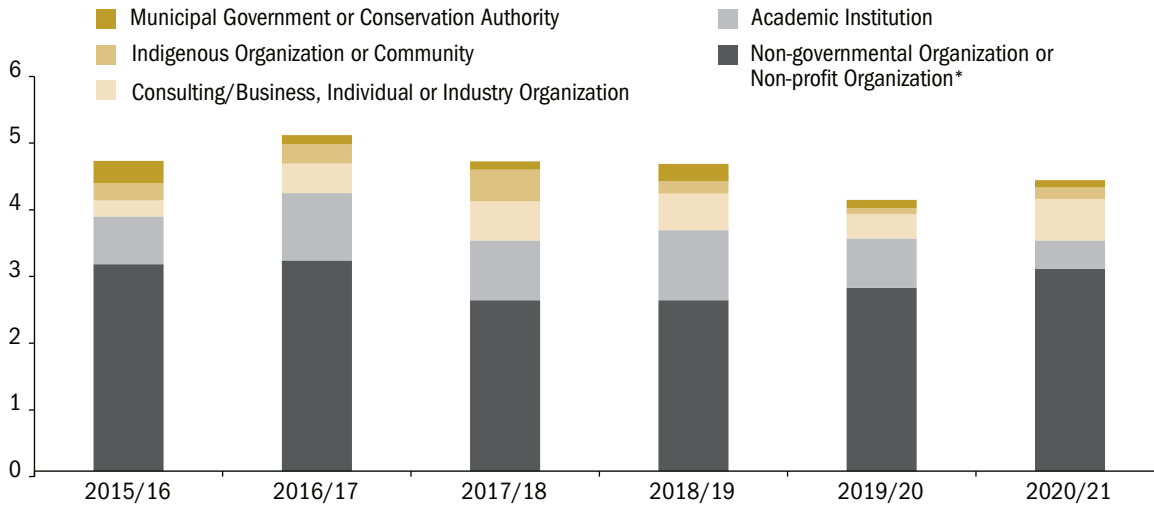
The Stewardship Program promotes activities including the preservation and rehabilitation of habitat, public education and outreach programs, and scientific research that fills knowledge gaps. For example, projects in 2019/20 included:

- the restoration of five hectares of habitat for at-risk pollinators like the rusty-patched bumble bee and the monarch butterfly;
- the delivery of workshops to the public on wetlands and at-risk bats, and classroom presentations for children on two endangered freshwater fish (spotted gar and redbreasted dace); and
- research to determine good growing conditions for sprouting the seeds of an endangered aquatic plant (scarlet ammannia).

In addition to the benefits for species at risk, the Stewardship Program generated social and economic

Figure 19: Recipients of Species at Risk Stewardship Program Funding, 2015/16–2020/21 (\$ million)

Source of data: Ministry of the Environment, Conservation and Parks



* Includes several large projects that implement programs designed to reach individual landowners and farmers.

benefits in capacity development and job creation. We analyzed final reports for 235 stewardship projects funded from 2015/16 to 2019/20, and it was reported that these projects created 502 full-time and 374 part-time positions, and engaged 410 contractors. During this time, 11,526 volunteers, including 3,021 youth, were reported to have gained skills and experience while contributing their time and efforts to these projects. The total volunteer time was valued at over \$4.5 million. In-kind donations for these projects were valued at over \$6.6 million.

Annual project funding priorities are largely driven by actions identified in government response statements—Ministry staff prioritize government-supported actions on which no or limited progress has been made, as funding is insufficient to finance all identified government-supported actions. Although applications are open for projects on all species at risk, each year, the Ministry identifies a list of high-priority species for targeted consideration.

We found that the total funding amount budgeted for the Stewardship Program was \$5 million per year from 2008 to 2016. It then decreased to \$4.5 million per year from 2017 to 2021, despite the fact that the

number of regulated species increased by 59 species (or 32%) from 2008 to 2020.

In our sample of 30 reviews of progress for species with response statements (see **Section 4.2.4**), we found that no progress had been made for 37 (or 15%) of the 249 government-supported actions identified in those response statements—including no progress made on eight (or 9%) of the 90 high-priority actions. For example, actions without progress include determining the cause of the decline of the endangered rusty-patched bumble bee, and developing a monitoring strategy and best management practices for the wild hyacinth plant.

Actions may not be taken in some cases, as the Stewardship Program relies on qualified third parties being aware, available, and interested in applying and undertaking projects that match province-supported actions in response statements. In other words, it assumes that there is an external expert on wild hyacinth plants who wishes to spend time writing a best management practice for the plant and its habitat. Actions may also not be taken because the level of funding is not adequate to cover all government-supported actions listed in response statements.

4.6.2 Funding Delayed for Successful Stewardship Program Applicants That Were Willing to Undertake Conservation Work

We found that in the last two funding cycles, successful Stewardship Program applicants were not officially notified that their projects were accepted until four to six months after their projects were to have started. Further, in some cases, payment agreements for successful Stewardship Program applicants were not finalized until almost a year after programs' start

dates. In the 2019/2020 funding cycle, delays resulted in five applicants walking away and likely contributed to the need for eight other applicants to scale back the scope of their projects.

Ministry staff follow a well-established series of steps geared toward funding stewardship projects that typically begin in May as shown in **Figure 20**. These steps include setting funding priorities, publicly announcing the call for proposals, conducting technical reviews and selecting proposals to fund, negotiating

Figure 20: Species at Risk Stewardship Program – Process and Timeline

Source of data: Ministry of the Environment, Conservation and Parks

Activity	Description	Timeline, Targeted
Priority setting	<ul style="list-style-type: none"> • Consultation across Species at Risk Branch and Natural Resources Science Branch • Seek alignment with recovery strategies, government response statements and reviews of progress 	May
Prepare for program launch	<ul style="list-style-type: none"> • Prepare program guidelines and application form • Work with Business and Fiscal Planning Branch and Legal Services Branch to prepare materials required to approve launch of program • Work with Communications Branch to prepare communications strategy and website materials • Program must be approved prior to launch* 	May to mid-Sep
Launch of annual program with call for proposals	<ul style="list-style-type: none"> • Inform the public of program's launch and deadline for submitting applications 	Mid to late Sep
Application period open	<ul style="list-style-type: none"> • Proposals can be submitted • Application period is typically six weeks long 	Late Sep to early Nov
Application review and project recommendations	<ul style="list-style-type: none"> • Applications are summarized, reviewed and evaluated • Review panel finalizes project recommendations 	Early Nov to early Jan
Approval of recommended projects	<ul style="list-style-type: none"> • Recommended projects must be approved prior to notifying successful applicants* 	Early Jan to Feb
Notification of approval	<ul style="list-style-type: none"> • Notification letters sent to successful applicants 	Feb or Mar
Develop transfer payment agreements with recipients	<ul style="list-style-type: none"> • Draft, negotiate and finalize transfer payment agreements with recipients • Work with Business and Fiscal Planning Branch and Legal Services Branch • Complete transfer payment agreements' risk assessments 	Apr to Oct
Program administration	<ul style="list-style-type: none"> • Administer transfer payment agreements • Process and issue payments • Track financials • Review project reports and compile information for reviews of progress 	Ongoing

* Deputy Minister can approve according to the Ministry of the Environment, Conservation and Parks' Delegation of Financial Management Authority.

and finalizing payment agreements with applicants, reviewing progress and facilitating payments to applicants.

Approval is required at two primary points in this process: the launch of the call for proposals for each program year, including the annual list of funding priorities; and the list of projects recommended for funding after the technical review is complete.

As shown in **Figure 21**, for the 2019/20 and 2020/21 Stewardship Program years, the Minister gave approval to launch the call for proposals seven months later, and the Deputy Minister four months later, respectively, than when the Stewardship Program was with the Natural Resources Ministry—which from 2015 to 2018 launched in September or October of each year. For 2021/22, the Deputy Minister gave approval to launch the program on November 10, 2020, but final approval was not received until January 4, 2021 as materials associated

with this approval package—including communications strategies materials—required Minister’s Office, Cabinet Office and Premier’s Office approval following the Deputy’s approval.

With the exception of the approval to launch the program in 2020/21, final approvals have taken place at the ministerial level in the Environment Ministry or higher, despite the Deputy Minister’s delegated financial authority for Stewardship Program approvals.

Delays in notifying successful applicants and finalizing funding agreements have resulted in proposed work not being completed, or not being completed as initially proposed. For example, during the 2019/20 Stewardship Program cycle, approved projects that did not proceed as planned included the following:

- activities to restore lake habitat damaged by an invasive reed grass; this restoration effort, which did not proceed, would have addressed high

Figure 21: Species at Risk Stewardship Program – Timing of Approvals and Finalized Applicant Agreements

Source of data: Ministry of the Environment, Conservation and Parks

Activity	2019/20	2020/21	2021/22
Project activities may begin	Jun 1, 2019	Apr 1, 2020	Apr 1, 2021
Approval process to launch program initiated	Jul 2018	Dec 10, 2019	Jul 24, 2020
Approval to launch program	Apr 11, 2019 by the Environment Minister	Feb 28, 2020 by the Deputy Environment Minister	Nov 10, 2020 by Deputy Environment Minister, but final approval not given until Jan 4, 2021*
Call for proposals	Apr 18 2019	Mar 4, 2020	Jan 5, 2021
Approval process for recommended projects initiated	Jun 4, 2019	Jun 2, 2020	May 20, 2021
Recommended projects approved	Sep 11, 2019 by the Environment Minister	Aug 7, 2020 by the Environment Minister	Not complete as of Oct 1, 2021
Successful applicants notified	Dec 3, 2019	Aug 10, 2020	Not complete as of Oct 1, 2021
Transfer payment agreements finalized	Feb–Mar 2020	Jan–Mar 2021	Not complete as of Oct 1, 2021

* Materials associated with this approval package require Minister’s Office, Cabinet Office and Premier’s Office approval following the Deputy’s approval.

priority actions in the government response statement for the least bittern (a bird);

- a survey to monitor populations of white wood aster (a plant); this monitoring effort, which did not proceed, was identified as a high priority action in the government response statement;
- the development of a tool to assess the health of eastern flowering dogwood (a plant) in the wild; a tool to help assess threats to the health of eastern flowering dogwood, which was not developed, would contribute to a high-priority action in the government response statement; and
- the development of incentives for farmers to support species at risk on their farms; the applicant had to scale back this project and was not able to fund farmers to complete species at risk best practices on their farms, but conducted some outreach and other activities.

While the Environment Ministry launched the call for proposals earlier in 2021/22 (January), the consistent mismatches in timing between the program start date, when successful applicants are notified that their projects have been approved, and when their funding agreement is finalized continues to impact program delivery.

The Natural Resources Ministry streamlined aspects of administering the Stewardship Program by delegating approval authority to the Assistant Deputy Minister or Deputy Minister. For example, each year the approvals package for the recommended projects to be funded also included approval for issuing the following year's call for proposals; following that, the exact timing of the annual call for proposals was a program-level decision. The Environment Ministry has not developed its own processes required to deliver the Stewardship Program effectively and efficiently.

RECOMMENDATION 16

To increase the positive outcomes for species at risk made possible by the Species at Risk Stewardship Program, we recommend that the Ministry of

the Environment, Conservation and Parks evaluate and provide the annual funding needed for the Stewardship Program to implement government-supported actions in response statements.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that the Species at Risk Stewardship Program is an important means for making progress on government-supported actions in response statements.

For the 20 species at risk featured in 2019 and 2020 Review of Progress reports, stewardship projects achieved progress on 76% of all associated response statement actions; for 15 of these species, stewardship projects achieved progress on 100% of high-priority government-supported response statement actions.

The Environment Ministry will also continue to identify response statement actions as a high priority for funding within the program's annual application guidelines, and to evaluate and provide annual summaries of the Stewardship Program in the annual, publicly posted progress reports.

Additionally, the Stewardship Program achieved value-for-money in job creation (9.5 jobs created per \$100,000 invested), volunteer involvement, public engagement through education and outreach activities, species at risk habitat creation and enhancement (90 hectares per \$100,000 invested), and significant leveraging of external funds (\$1.39 leveraged per program dollar disbursed).

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to evaluate and provide the annual funding needed for the Stewardship Program to implement government-supported actions in response statements.

RECOMMENDATION 17

To increase the efficiency and effectiveness of Ontario's Species at Risk Stewardship Program, and allow successful applicants to undertake protection and recovery actions in a timely manner, we recommend that the Ministry of the Environment, Conservation and Parks:

- follow the delegation of authority already in place by having the Deputy Minister approve use of program funding to enable prompt decision-making for this low-cost program; and
- modify the funding cycle to reduce the time required for the approvals process.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the recommendation.

The Environment Ministry will continue to apply the delegation of authority already in place by having the Deputy Minister approve use of program funding and modify the funding cycle.

AUDITOR GENERAL'S RESPONSE

We note that the Environment Minister, not the Deputy Minister, approved the list of recommended projects for funding for 2019/20 and 2020/21.

4.7 Governance and Accountability

4.7.1 No Long-term Strategic Plan to Improve the Status of Species at Risk

The Environment Ministry has not developed a long-term strategic plan to improve the status of species at risk. Strategic direction serves as a road map to guide decision making. It should describe the organizational values, identify priority program areas to leverage the best possible use of resources, show how collaboration will occur with other parties, and detail the tactics that staff will use to effectively and efficiently achieve successful outcomes.

A 2019 Ontario Public Service employee engagement survey conducted by the Environment Ministry found that 76% of the Species at Risk Branch staff believed that the Ministry was not on the right track in its planning for the future. Sixty percent of branch staff also did not clearly understand the Ministry's mandate and goals, and 52% of staff did not know how their work contributes to the achievement of Ministry goals.

According to the Ministry, species at risk priorities are informed by the 2018 Made-in-Ontario Environment Plan. This plan reaffirms the government's commitment to "protect species at risk and their habitats," and also commits to "ensuring that the legislation provides stringent protections for species at risk, while continuing to work with stakeholders to improve the effectiveness of the program." The Ministry's published plan and annual report for 2020/21 states that it will continue to implement the Species at Risk Stewardship Program; deliver on recovery products required by the law; and issue permits and authorizations to enable businesses and residents to prosper while protecting and recovering species at risk. Neither plan contains detailed actions and timelines for the conservation of species at risk.

In comparison, British Columbia publicly released a detailed five-year strategic plan in 2014 for species at risk with 39 actions and timelines to:

- improve species conservation through management at the ecosystem and landscape scale;
- provide the best available information to support identification, management and recovery of species at risk;
- encourage people to embrace stewardship of species at risk across all lands;
- apply protection for species at risk consistently across all sectors; and
- measure and report on government's investments in species at risk.

Other jurisdictions identify priority species, habitats and threats in their strategic directions as a best practice. For example, Australia and its states and territories use this approach to address the more than 1,700 species and ecological communities that are

known to be threatened and at risk of extinction. In 2015, Australia publicly identified 20 mammals, 20 birds, and 30 plants as priority species to focus conservation work in order to improve their populations by 2020.

Similarly, in 2018, the federal, provincial and territorial governments in Canada committed to “redouble their efforts” in species at risk conservation. Eleven priority places have been nationally identified, including Long Point Walsingham Forest on the north shore of Lake Erie in Ontario, and six shared priority species have been identified across Canada, including boreal caribou in Ontario.

Strategic direction with actions can also be used to address program risks. Risks can include damage to reputation and litigation if an organization is perceived not to be making meaningful progress according to its mandate and obligations. However, the Ministry does not have a description of the governance, oversight processes and risk management strategies for the species at risk program. In contrast, the Canadian Wildlife Service, Parks Canada, and Fisheries and Oceans Canada publicly identify key risks to core program responsibilities that relate to species at risk and outline annually how they will be addressed.

RECOMMENDATION 18

To guide decisions that can impact species at risk in Ontario, and to effectively, efficiently and accountably achieve successful outcomes for those species, we recommend that the Ministry of the Environment, Conservation and Parks:

- identify priority species, places, and systemic threats as well as how they are to be addressed;
- develop a long-term strategy that outlines specific protection and recovery actions, with associated timelines, that the Ministry will undertake for the program as a whole;
- implement the strategy; and
- publicly report on the progress toward achieving the strategy’s objectives as part of an annual report.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that the development of a long-term strategy focused on priority species, places and threats would be valuable in guiding decisions that can impact species at risk in Ontario and will undertake such work within budgetary and staffing realities.

At this time, the Environment Ministry is focused on fulfilling the purposes of the *Endangered Species Act, 2007*. The overarching purposes of the Act, which are articulated in section 1 of the Act, guide ministry decisions relating to species at risk in Ontario.

The Environment Ministry is also focused on preparing species-specific response statements that identify and prioritize specific protection and recovery actions that Ontario intends to take or support to help recover species.

Where possible, response statements may be developed to strategically address the recovery of multiple species at risk in a single policy, such as the:

- Blue Racer, Lake Erie Watersnake, Small-mouthed Salamander and Unisexual Ambystoma (Small-mouthed Salamander dependent population) government response statement; or the
- Pink Milkwort, Showy Goldenrod (Great Lakes Plains population), Skinner’s Agalinis and White Prairie Gentian government response statement.

In addition, as part of Species at Risk Stewardship Program delivery, the Environment Ministry conducts a rigorous annual priority-setting exercise in order to direct funding where stewardship can make a difference and where it is most urgently needed.

AUDITOR GENERAL’S RESPONSE

We note that developing a long-term strategy, with timebound and specific protection and recovery

actions that the Environment Ministry will undertake for the program as a whole, would allow for an effective, efficient and accountable method of contributing to meeting the purposes of the *Endangered Species Act, 2007*.

4.7.2 Ontario Risks Not Conforming with Federal Law Because of the Insufficiency of Provincial Habitat Protections for Some Species like Boreal Caribou

The Environment Ministry has not undertaken any risk assessment of its conformity with the federal *Species at Risk Act* and the sufficiency of habitat protections for species at risk. Ontario made legislative changes in 2019 and 2020 that impact the protection of species at risk and risk potential non-conformity with the federal law.

The federal government can issue orders under the *Species at Risk Act* when the federal Minister of the Environment and Climate Change is of the opinion that the laws of a province or territory do not effectively protect the critical habitat of a federally listed species at risk. For example, the federal government issued orders to protect the western chorus frog—classified nationally as threatened—in Quebec in 2015 because habitat protection there was insufficient. The western chorus frog is also found in Ontario but is not regulated under Ontario’s *Endangered Species Act, 2007* because the Assessment Committee assessed it as not at risk in 2009. If a species is federally classified as threatened but receives no habitat protection in Ontario, the province risks non-conformity. No order has been issued by the federal government yet for this species in Ontario.

The *More Homes, More Choice Act, 2019*, passed in June 2019, made several amendments to the *Endangered Species Act, 2007*. Changes include new species assessment criteria, and the Minister’s ability to temporarily suspend prohibitions for newly listed species for up to three years. The Ministry states that the authority to suspend protections will allow for “the right protection approaches that better consider

Ontarians’ social and economic realities and species’ needs.” For example, in September 2021 after our audit was complete, the Environment Ministry proposed a temporary two-year suspension of protections for the endangered black ash tree after it becomes regulated. Additionally, a new type of approval, a landscape agreement, can also allow multiple harmful activities impacting many species across a broad area, and does not hold parties accountable for actions that impact all of the species.

Before the Legislature passed these changes, the Environment Ministry consulted the public on proposed changes to the *Endangered Species Act, 2007*. The proposal was posted on the Environmental Registry for a 30-day comment period in April 2019 and received 45,214 public comments, including both form letters and unique comments. The Environment Ministry determined that 1,115 (or 98%) of the 1,138 unique comments were either opposed or concerned about the proposal. The majority of comments from the public, conservation organizations, scientists, Indigenous communities and municipalities expressed concern about reducing protections for species at risk. In contrast, the majority of comments from business and industry associations expressed support for changes to enhance certainty, streamline processes and reduce regulatory burden.

The 2019 amendments also created the Species at Risk Conservation Fund and provided the power to establish the Species at Risk Conservation Trust to administer the fund. The Minister may designate species as a “conservation fund species” and certain approval holders could pay a conservation charge instead of undertaking on-the-ground beneficial actions themselves. The funds can be awarded to other parties to undertake conservation work, but the work need not be in the same geographic area or for the same species. In 2020, the Ministry proposed six species for conservation fund designation. The federal government expressed concern over designating Blanding’s turtle in the Canadian Shield region as a conservation fund species, as an increase in the number of permitted activities could contribute to loss of critical habitat and decrease the viability of existing

local populations. At the time of our audit, the Ministry had not decided which species would be “conservation fund species,” an agency to administer the fund had not yet been established, and there was no funding to distribute. In September 2021, after our audit was complete, the Environment Ministry formally established the Species Conservation Action Agency to administer the fund.

The *Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*, passed in December 2020, included amendments to the *Crown Forest Sustainability Act, 1994* that exempts forestry operations conducted on Crown lands in accordance with an approved forest management plan from the *Endangered Species Act, 2007*. Forestry operations in Crown-managed forests—approximately 40% of the provincial land base—had been allowed under temporary conditional exemptions. This 2020 change enables forestry operations to proceed without requiring any approvals under the *Endangered Species Act, 2007*. The Natural Resources Ministry posted the proposed amendments on the Environmental Registry for a 31-day comment period in December 2019 and 762 (or 63%) of the 1,207 public comments received expressed opposition to the proposal.

This exemption is related to the Natural Resources Ministry’s 2020 forest-sector strategy that aims to “remove unnecessary regulatory duplication” in order to remove “policy barriers” to increase industry access to supplies of wood. The Natural Resources Ministry posted a draft of the forest strategy on the Environmental Registry for a 63-day comment period in December 2019. Of the 33,136 public comments on the strategy, 32,653 (or 99%) were opposed to the proposal, including expressing concern that the strategy does not protect species at risk or biodiversity more generally.

However, in 2019, the Environment Ministry determined that the Natural Resources Ministry’s rules for forestry could potentially subject 12 of the 54 endangered or threatened species in logged Crown forests to significant adverse effects (see **Appendix 8**). The Environment Ministry determined that these species are adversely impacted because:

- there is no species at risk direction in current forest management guides; or
- the direction does not align with scientific evidence, and/or the direction does not adequately address key threats to the species and its habitat.

In March 2021, the Environment Minister and Natural Resources Minister received letters from the federal Minister of Environment and Climate Change that warned of non-conformity with the federal *Species at Risk Act* due to portions of boreal caribou critical habitat remaining unprotected in Ontario. The federal Minister requested that corrective action be taken by November 2021—preferably in the form of a conservation agreement to support boreal caribou conservation—otherwise it would begin consultations on the development of an order to protect unprotected portions of boreal caribou critical habitat in Ontario.

In June 2021, the Environment Minister received a follow-up letter from the federal Minister re-iterating that a conservation agreement is preferred and that a recommendation had been made to the Governor in Council regarding the protection of critical caribou habitat in Ontario under section 61 of the *Species at Risk Act*. The federal Minister also noted that, should a conservation agreement or equivalent measures not be concluded by November 2021, the Government of Canada intends to begin consultations on developing an order for the protection of unprotected portions of critical boreal caribou habitat in Ontario. At the time of our audit, we asked the Environment Ministry and the Natural Resources Ministry for an update and were informed that next steps are under consideration. The Natural Resources Ministry had also received a letter in 2020 from the federal government expressing concern that the proposed changes to exempt forest operations from the Act, which subsequently became law, would weaken regulatory protections for species at risk and their habitat.

In 2020, the province created the Office of the Comptroller General tasking it with identifying and mitigating potential financial and policy risks. This

would include issues such as the lack of protections for boreal caribou habitat that could create larger issues that would take more time and resources to correct. Enterprise risk management is a best practice in the private sector, including forecasting and managing operational risk. Under the *Management Board of Cabinet Act*, the Enterprise Risk Management Directive requires ministries to have risk management practices in place tailored to their mandate, objectives, activities and responsibilities. This process involves identifying and assessing risks; planning and taking action; and monitoring and reporting.

RECOMMENDATION 19

So that the Province of Ontario conforms with the federal *Species at Risk Act*, we recommend that the Ministry of the Environment, Conservation and Parks:

- assess the risks of non-conformity with the federal *Species at Risk Act*;
- provide information on the risks to the Comptroller General for inclusion in the province's Enterprise Risk Plans;
- publicly report on those risks; and
- take corrective actions to ensure sufficient habitat protections for species at risk.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees that it is important to assess the risks of non-conformity of the provincial approach to protecting species at risk and their habitats with the federal *Species at Risk Act*.

The Environment Ministry regularly assesses its approach in regard to the federal approach and takes appropriate action to manage risks, as needed. Canada and Ontario have complementary approaches to protecting species at risk, which are codified under the National Accord for the Protection of Species at Risk. Ontario's approach is designed to meet provincial needs.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not clearly commit to assessing the risks of non-conformity with the federal *Species at Risk Act*, providing information on risks to the Comptroller General, and publicly reporting on those risks.

4.7.3 No Performance Measures to Evaluate Program Effectiveness

The Environment Ministry has not developed a performance measurement framework for its species at risk program to evaluate the effectiveness of efforts to improve the status of species at risk and their habitats. In addition, the Environment Ministry has not established any performance measures for enforcement and compliance with the *Endangered Species Act, 2007*. As a result, it is difficult to know whether threats to these species are being reduced in an effective and efficient manner, and whether overall efforts result in making species better off.

The Treasury Board Secretariat (Secretariat) establishes policies and standards for organizational practices across the provincial government. The Secretariat has provided guidance to ministries emphasizing the importance of developing key performance indicators and targets to track performance, report on progress and drive continuous improvement. Meaningful performance measures are important to drive progress.

It is a best practice to have performance measures that show whether current actions are working. These measures inform what corrective actions need to be taken by ministries to improve the individual and collective status of species at risk. For example, Canada set a goal in 2015 that by 2020 "species at risk listed under the federal law exhibit trends that are consistent with recovery strategies and management plans." The federal government uses indicators to benchmark its achievement and to be accountable for its international obligations to conserve biodiversity. The federal government reported that of the 113 species at

risk for which population trends could be determined as of 2019, 55 species at risk (or 42%) show progress toward their population objectives, 61 species (or 47%) do not show progress, and 14 species (or 11%) have mixed results.

Federal departments with responsibilities for species at risk use performance measures to be accountable. For example:

- The Canadian Wildlife Service (Service) has set a deadline and measurable target for recovering species at risk to address its responsibilities under the federal *Species at Risk Act*. It seeks to achieve changes in species populations that are consistent with the corresponding recovery objectives for 60% of species at risk by May 2025. The Service reports publicly on their actual performance toward this target each year. At the time our audit, the Service reported an actual result of 42% for 2018/19.
- Fisheries and Oceans Canada set an objective that negative impacts on oceans and other aquatic ecosystems be minimized or avoided. It uses the percentage of aquatic species at risk listed under the *Species at Risk Act* for which a recovery strategy or management plan is completed as a performance measure. Its target is at least 80% by March 31, 2023 and its actual results for 2018/19 were 75%.
- Parks Canada is responsible for the conservation of species at risk on the lands and waters that it manages. It uses the percentage of national park ecosystems where ecological integrity is maintained or improved as a performance measure. Its target is at least 92% by March 2023. The most recent data available shows that 86% were maintained or improved in the 119 national park ecosystems assessed in 2019.

RECOMMENDATION 20

To measure the effectiveness of its species at risk program at improving the status of species at

risk and their habitats, we recommend that the Ministry of the Environment, Conservation and Parks, adhering to guidance from the Treasury Board Secretariat:

- develop a performance measurement framework for the species at risk program that focuses on successful outcomes;
- include the performance measurement framework within the long-term strategy described in **Recommendation 18**; and
- publicly report on actual results against these performance measures as part of an annual report.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that performance measurement is important.

The Environment Ministry has a full spectrum of key performance indicators developed to measure the Environment Ministry's delivery of its mandate and commits to ensuring that they continue to be applied.

The Environment Ministry's priority in regard to performance measurement related to the species at risk programs includes fulfilling the commitment to ensure each response statement includes performance measures (see **Recommendation 5**) and exploring the feasibility of enhanced progress tracking and follow up on actions identified in government response statements (see **Recommendation 6**).

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not commit to developing performance measures for the species at risk program and publicly reporting on actual results.

4.7.4 No Transparency in Species at Risk Program Advisory Committee Appointments and Activities

The Species at Risk Program Advisory Committee (Advisory Committee) was established under the Act to advise the Minister on a broad range of species at risk matters but we found that there was a lack of transparency in appointing members and the committee's activities. The Act allows the committee to provide advice to the Minister on a wide variety of matters from developing outreach programs to delivering incentive programs.

We reviewed the appointments process for the Advisory Committee and found that there are no committee-specific screening criteria for applicants such as knowledge of species at risk conservation. Seven new members were recommended to be appointed in 2019/20 by the Environment Minister but the vacancies were not publicly advertised. These appointments were recommended to the Lieutenant Governor in Council by the Minister's office but the Ministry could not provide us with any information on how the new members were identified, screened and chosen.

At the time of our audit, members who work for industry associations or companies account for 10 of the 15 (or 67%) members. Half of these members also are registered lobbyists for the Ontario Forest Industries Association; the Ontario Home Builders' Association; the Ontario Stone, Sand & Gravel Association; the Ontario Waterpower Association; and Newmont Corporation (a mining company). Only five (or 33%) of the current Advisory Committee members are from conservation organizations. In comparison, 56% of members on the equivalent federal species at risk advisory committee are from conservation organizations and the remaining members are from industry associations.

The Advisory Committee may make recommendations to the Minister on the assembly of scientific information, community knowledge, and Indigenous traditional knowledge to assist in the classification of species. However, we noted that there was no

Indigenous representation on the Advisory Committee. In comparison, the equivalent federal species at risk advisory committee invites Indigenous participation from the National Aboriginal Council on Species at Risk, the Assembly of First Nations, the Metis National Council and Inuit Tapiriit Kanatami. Unlike the federal species at risk advisory committee, there are no experts from the academic community such as university scientists who specialize in biology or conservation. Additionally, there are no members from the 36 conservation authorities that manage 150,000 hectares of land that are home to many species at risk.

The Terms of Reference for the Advisory Committee require it to prepare and provide an annual written report on its activities to the Minister. However, no annual report was prepared for 2017/18 or 2018/19. The 2016/17 and 2019/20 annual reports were prepared by Ministry staff on behalf of the Advisory Committee. The Advisory Committee's annual reports are also not publicly available, which impairs the transparency of its work and advice.

The Advisory Committee's responsibilities include voting on recommendations and providing them in writing to the Minister. Our review found that no written recommendations were provided to the Minister in three of the last five fiscal years. In 2018/19, the Advisory Committee provided comments to the Environment Minister on the 10-year review of the Act. In 2020/21, the Advisory Committee provided written recommendations regarding the Species at Risk Conservation Fund regulatory proposal at the request of the Environment Ministry. The Advisory Committee also developed a workplan for 2021 that included reviewing permit implementation and providing input into the design of the new landscape agreements.

RECOMMENDATION 21

So that the appointments and work of the Species at Risk Program Advisory Committee (Advisory Committee) are transparent and helpful to the

Environment Minister for improving the status of species at risk, we recommend that the Ministry of the Environment, Conservation and Parks:

- assess the existing mix, composition, and competencies of the Advisory Committee, including Indigenous representation; and
- develop and implement transparent criteria and procedures for appointments and re-appointments to the Advisory Committee, including to address any identified competency and representation gaps.

ENVIRONMENT MINISTRY RESPONSE

The Ministry of the Environment, Conservation and Parks is committed to ensuring that the processes outlined by the Public Appointments Secretariat and the Agencies and Appointments Directive are adhered to in appointments and re-appointments to the Advisory Committee. The Environment Ministry does not intend to develop procedures that are unique to the Advisory Committee.

AUDITOR GENERAL'S RESPONSE

The Environment Ministry did not agree to assess the existing mix, composition, and competencies of the Advisory Committee. The Environment Ministry also did not agree to develop and implement transparent criteria and procedures for appointments and re-appointments to the Advisory Committee.

Appendix 1: Summary of Recommendations and Environment Ministry Responses

Prepared by the Office of the Auditor General of Ontario

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation	
				Sufficient	Insufficient
1.	<p>So that independent expertise is used to promptly assess species and improve the status of species at risk in line with the purpose of the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> ensure that membership on the Committee on the Status of Species at Risk in Ontario is sufficient for quorum to be able to carry out its mandate to assess and classify species for subsequent recovery and protection efforts; and develop, publish, and follow transparent and accountable procedures so that technical and program staff with species-at-risk expertise screen and recommend to the Minister candidates for appointment and reappointment to the Committee on the Status of Species at Risk in Ontario. 	<p>The Ministry of the Environment, Conservation and Parks agrees with the recommendation to ensure membership on the Committee on the Status of Species at Risk in Ontario is sufficient so that quorum is achieved to carry out its mandate.</p> <p>The <i>Endangered Species Act, 2007</i>, sets out the role and member qualifications of the Committee on the Status of Species at Risk in Ontario. The Environment Ministry will continue to ensure that the processes outlined by the Public Appointments Secretariat and the Agencies and Appointments Directive are adhered to in appointments and reappointments to the Committee on the Status of Species at Risk in Ontario. The Environment Ministry does not intend to develop procedures that are unique to the Committee on the Status of Species at Risk in Ontario.</p>	<p>The Environment Ministry did not agree to develop, publish, and follow transparent and accountable procedures so that technical and program staff with species-at-risk expertise screen and recommend to the Minister candidates for appointment and reappointment to the Committee on the Status of Species at Risk in Ontario.</p>	Sufficient	Insufficient

		Auditor General's Assessment of Environment Ministry's Response to Recommendation	
		Sufficient	Insufficient
#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response
2.	<p>So that the Committee on the Status of Species at Risk in Ontario (Assessment Committee) has the resources needed to effectively fulfill its mandate as required by the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks ensure that the Assessment Committee be provided access to the technical support it needs, and be supplied with the necessary tools and the funds to procure needed status reports to promptly and effectively assess species.</p>	<p>The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the recommendation to provide the Committee on the Status of Species at Risk in Ontario with technical support and tools to do its work.</p> <p>That is why the Environment Ministry is acquiring specific software for rapid screening to prioritize species in need of assessment, as requested by the Committee on the Status of Species at Risk in Ontario. The Environment Ministry will also continue to support the Committee on the Status of Species at Risk in Ontario in obtaining required information, as it identifies specific needs.</p>	<p>✓</p>
3.	<p>So that species at risk receive protections under the <i>Endangered Species Act, 2007</i> when appropriate, we recommend that the Ministry of the Environment, Conservation and Parks align the assessment and classification criteria used by the Committee on the Status of Species at Risk in Ontario with that used by the federal and other provincial or territorial assessment committees.</p>	<p>The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the recommendation to align the assessment and classification criteria used by the Committee on the Status of Species at Risk in Ontario, when appropriate.</p> <p>The Environment Ministry is supportive of the Committee on the Status of Species at Risk in Ontario continuing to utilize the existing International Union for Conservation of Nature and the Committee on the Status of Endangered Wildlife in Canada criteria with appropriate modifications taking into consideration the 2019 amendments to the <i>Endangered Species Act, 2007</i>.</p>	<p>✓</p>

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation
4.	<p>To identify goals, objectives and approaches to improve the status of all species at risk, and to be transparent and accountable to the public and timely in meeting its legislative responsibilities under the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> ensure the preparation and public release of recovery strategies for Algonquin wolf, mountain lion (cougar), and spoon-leaved moss by December 2022; and post the list of outstanding recovery strategies and management plans, and a timetable for their development on the Environmental Registry on a quarterly basis. 	<p>The Ministry of the Environment, Conservation and Parks agrees about the importance of transparency and accountability to the public and timeliness in meeting legislative responsibilities under the <i>Endangered Species Act, 2007</i>.</p> <p>As recommended, the Environment Ministry is committed to ensuring the preparation and public release of a recovery strategy for spoon-leaved moss by December 2022. The Environment Ministry will finalize the recovery strategy, as appropriate, for Algonquin wolf pending the outcome of the reassessment by the Committee on the Status of Species at Risk in Ontario which is occurring in November 2021. A draft recovery strategy for Algonquin wolf was posted on the Environmental Registry for public comment in January 2018. However, since the species was assessed and listed as threatened in 2016, questions have been raised about the abundance and distribution of this species and the history of breeding among canids (members of the dog family) in Ontario.</p> <p>The Environment Ministry will finalize the development of the recovery strategy for mountain lion (cougar), as appropriate pending the outcome of the upcoming reassessment by the Committee on the Status of Species at Risk in Ontario. The January 2020 Committee on the Status of</p>	<p>✓</p>	<p>Sufficient</p>
				<p>Insufficient</p>

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation	
				Sufficient	Insufficient
		<p>Species at Risk in Ontario report identified mountain lion on the list of species being considered for assessment or reassessment in 2021.</p> <p>The Environment Ministry agrees with the Auditor General's recommendation to share information publicly about the status and timelines for recovery strategies and management plans and will undertake an analysis to determine how best to achieve that objective.</p>		Sufficient	Insufficient

Auditor General's Assessment of Environment Ministry's Response to Recommendation		Auditor General's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation
#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Sufficient / Insufficient
5.	<p>To increase transparency and improve clarity about the government's actions to improve the status of all species at risk, and to increase accountability and progress in implementing identified protection and recovery actions, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> develop guidance for the preparation of response statements that will result in the achievement of meaningful outcomes for species at risk; complete the development of response statements for American eel and lake sturgeon by December 2022 so that actions to protect and recover species can be implemented; post the list of outstanding response statements, and a timetable for their development on the Environmental Registry on a quarterly basis; include performance measures in response statements based on recovery strategies so that success can be assessed and accountability established for undertaking required actions; and include cost and time estimates in response statements so that the needed allocation of resources for actions is clear to decision-makers and the public. 	<p>The Ministry of the Environment, Conservation and Parks is committed to having a clear and comprehensive consultation process for preparing response statements. Each response statement shall identify a provincial recovery goal for the species as well as key objectives and prioritized actions necessary to support the recovery of (and meaningful outcomes for) the species. This is the Environment Ministry's current focus and new guidance for the preparation of response statements is not being developed at this time.</p> <p>The Environment Ministry is finalizing the response statement for American eel and lake sturgeon. These will be completed by December 2023.</p> <p>The Environment Ministry agrees with the Auditor General's recommendation to share information publicly about the status and timelines for response statements and will undertake an analysis to determine how best to achieve that objective.</p> <p>The Environment Ministry will ensure each response statement includes a provincial recovery goal for each species as well as detailed objectives, performance measures and prioritized actions necessary to support the species' recovery. These will be used to assess and report on progress toward the protection and recovery of each species.</p>	<p>The Environment Ministry did not agree to develop guidance for the preparation of response statements that will result in the achievement of meaningful outcomes for species at risk. The Environment Ministry also did not agree to include cost estimates in response statements so that the needed allocation of resources for actions is clear to decision-makers and the public.</p>	<p>Insufficient</p> <p>✓</p>

Auditor General's Assessment of Environment Ministry's Response to Recommendation	Auditor General's Response	
	Sufficient	Insufficient
<p># Auditor General's Recommendation</p> <p>Environment Ministry's Response</p> <p>The Environment Ministry is committed to incorporating considerations of time into response statements through prioritization of the actions identified as necessary to support the protection and recovery of each species, as well as for some species by identifying short- and long-term goals or timelines for achieving the goals or particular actions.</p> <p>Cost estimates are not included in response statements, as statements identify actions necessary to support recovery, but remain flexible for stewards and stakeholders to identify the best approaches for implementing or achieving the actions.</p>		

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation
6.	<p>To increase accountability on progress made to improve the status of species at risk in Ontario, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> report on the outcomes of actions and impacts on species at risk in reviews of progress, based on the performance measures described in Recommendation 5; detail in reviews of progress how government-led actions were implemented; and report on progress for species every five years until the species is no longer on the Species at Risk in Ontario List. 	<p>The Ministry of the Environment, Conservation and Parks acknowledged this recommendation and recognizes the importance of regular reporting to provide transparency and effectively track progress on species at risk protection and recovery.</p> <p>The Committee on the Status of Species at Risk in Ontario maintains the priority list of species requiring assessment or reassessment, and generally performs species reassessments on an approximate 10-year cycle, which aligns with federal species assessment processes. Through its assessment work, the Committee provides a transparent and science-based evaluation of progress made toward species recovery. The Committee's reports are provided annually to the Minister and are made available to the public within three months of being received.</p> <p>The Ministry of the Environment, Conservation and Parks is exploring the feasibility of enhanced progress tracking and follow up on actions identified in government response statements.</p>	<p>The Environment Ministry did not agree to report on outcomes in reviews of progress, detail how government-led actions are implemented, and report on progress until the species is no longer at risk.</p> <p>We note that the Committee on the Status of Species at Risk in Ontario's species reassessments do not evaluate the outcomes of actions nor detail how government-led actions are implemented.</p>	<p>Insufficient ✓</p>

Auditor General's Assessment of Environment Ministry's Response to Recommendation	Sufficient	Insufficient
<p># Auditor General's Recommendation</p> <p>7. To minimize the harm to species at risk allowed by permit approvals under the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks (Ministry):</p> <ul style="list-style-type: none"> • develop and implement guidance for Ministry staff on when to deny approvals based on the needs of a species; and • ensure language used in proposed permits on the Environmental Registry clearly identifies expected impacts to species and their habitats. 	<p>Environment Ministry's Response</p> <p>The Ministry of the Environment, Conservation and Parks agrees that guidance for Environment Ministry staff in relation to approvals under the <i>Endangered Species Act, 2007</i> is important.</p> <p>The Environment Ministry's priority is guidance for staff on how to determine whether the Act's requirements have been met. Permit proposals that meet the Act's legal tests are recommended to the Environment Minister for issuance. Permit proposals that do not meet the legal tests are not recommended for approval.</p> <p>As noted in the Environment Ministry's responses to Recommendations 10 and 11, the Environment Ministry is committed to continuously improving and refining its guidance for Environment Ministry staff related to permit development under the <i>Endangered Species Act, 2007</i>.</p> <p>The Environment Ministry agrees that communication of information through the Environmental Registry should be as clear as possible for the public.</p> <p>That is why when the Environment Ministry prepares to post, each individual posting is evaluated and carefully reviewed to avoid technical and legal jargon and to ensure that it clearly identifies expected impacts to the natural environment. We will ensure that the same standard is applied for all Environmental Registry postings, including those under the <i>Endangered Species Act, 2007</i>.</p>	<p>Auditor General's Response</p> <p>The Environment Ministry did not agree to develop and implement guidance for Ministry staff on when to deny approvals based on the needs of a species.</p> <p>✓</p>

#	Auditor General's Recommendation	Auditor General's Assessment of Environment Ministry's Response to Recommendation	
		Environment Ministry's Response	Auditor General's Response
8.	<p>To minimize the harm to species at risk allowed by conditional exemption approvals under the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • evaluate the effects of conditional exemptions on species at risk and their habitats; • make the results of that evaluation public; and • take corrective action as necessary on the requirements and scope of conditional exemptions. 	<p>The Ministry of the Environment, Conservation and Parks agrees that evaluating the effects of conditional exemptions on species at risk and their habitats is beneficial to the provincial species at risk program.</p> <p>Within budgetary and staffing realities, the Environment Ministry will continue to evaluate the effectiveness of conditional exemptions.</p>	<p>The Environment Ministry did not commit to making an evaluation of the effects of conditional exemptions public, and taking corrective action as necessary.</p> <p style="text-align: right;">✓</p>
9.	<p>To minimize the harm to species at risk allowed by conditional exemption approvals under the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks require that health or safety conditional exemptions justify the need for the exemption and provide details of the activity, including an assessment of how species will be impacted.</p>	<p>The Ministry of the Environment, Conservation and Parks acknowledges and agrees with this recommendation in regard to structures and infrastructure.</p> <p>A condition to the exemption for activities involving structures and infrastructure under the conditional exemption for non-imminent threats to health and safety is that proponents must develop a mitigation plan prior to commencing their activity. This plan must include information about the need for the exemption and an assessment of the activity's likely effects on species at risk identified in their mitigation plan. Further, it is a condition to the exemption that the activity is carried out in accordance with the mitigation plan.</p> <p>Proponents must comply with the conditions of the exemption in order for the exemption to apply. Further, failure to comply with a requirement under a regulation is an offence under the <i>Endangered Species Act, 2007</i>.</p>	<p>The Environment Ministry did not agree to require that all registrations for health or safety conditional exemptions justify the need for the exemption and provide details of the activity, including how species will be impacted.</p> <p style="text-align: right;">✓</p>

Auditor General's Assessment of Environment Ministry's Response to Recommendation	
Auditor General's Recommendation	Auditor General's Response
<p># Auditor General's Recommendation</p> <p>10. To improve the status of species at risk affected by overall benefit permit approvals under the <i>Endangered Species Act, 2007</i>, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • evaluate the outcomes to species at risk from issuing overall benefit permits to confirm that required conditions are making species better off; • publicly report on that evaluation; and • update internal guidance using the best available scientific information to ensure overall benefit permits result in successful outcomes for species at risk and their habitats. 	<p style="text-align: center;">Environment Ministry's Response</p> <p>The Ministry of the Environment, Conservation and Parks agrees that the evaluation of the outcomes to species at risk from issuing overall benefit permits is important and will undertake such work within budgetary and staffing realities.</p> <p>The Environment Ministry is committed to using the best available scientific information to ensure overall benefit permits result in successful outcomes for species at risk and their habitats.</p> <p>The Environment Ministry will continue to apply and refine its internal guidance on an ongoing basis in the development of overall benefit permits consistent with the <i>Endangered Species Act, 2007</i>.</p> <p style="text-align: center;">Auditor General's Response</p> <p>The Environment Ministry did not agree to publicly report on the evaluation of the outcomes to species at risk from issuing overall benefit permits.</p>
<p>11. So that all permit approvals under the <i>Endangered Species Act, 2007</i> achieve the best possible outcomes for species at risk and their habitats, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • develop and implement guidance for staff to process all permits in a consistent manner; and • develop and implement guidance that delegates Ministerial authority back to Ministry staff to issue permits with the main purpose of assisting in the protection or recovery of the species. 	<p style="text-align: center;">Environment Ministry's Response</p> <p>The Ministry of the Environment, Conservation and Parks agrees that guidance for staff on processing permit applications in a consistent manner is important to ensure consistency and completeness in reviewing applications.</p> <p>The Environment Ministry is committed to continuously improving its internal guidance regarding permit development consistent with the <i>Endangered Species Act, 2007</i>.</p> <p>The Environment Ministry acknowledges the ability to delegate statutory powers and will continue to review delegations as needed to determine if they are appropriate.</p> <p style="text-align: center;">Auditor General's Response</p> <p style="text-align: center;">✓</p>

#	Auditor General's Recommendation		Auditor General's Response		Auditor General's Assessment of Environment Ministry's Response to Recommendation	
	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Sufficient	Insufficient	
12.	To minimize the harm to species at risk allowed by social or economic benefit permit approvals under the <i>Endangered Species Act, 2007</i> , we recommend that the Ministry of the Environment, Conservation and Parks develop and implement guidance based on the best available science that details when it is appropriate to issue a social or economic benefit permit rather than an overall benefit permit.	The Ministry of the Environment, Conservation and Parks acknowledges and agrees with the Auditor General's recommendation and notes that current work is under way to update guidance to support staff in the review of applications for approvals under the <i>Endangered Species Act, 2007</i> .		✓		
13.	To minimize the harm to species at risk allowed by approvals under the <i>Endangered Species Act, 2007</i> , we recommend that the Ministry of the Environment, Conservation and Parks: <ul style="list-style-type: none"> • evaluate the cumulative effects of approvals and other threats over time on species at risk and their habitats and factor this knowledge into the issuance or non-issuance of future approvals; • publicly report on this information; and • take corrective actions as necessary to ensure that approvals contribute to successful outcomes for species at risk and their habitats. 	The Ministry of the Environment, Conservation and Parks acknowledges the Auditor General's recommendation to evaluate the cumulative effects of approvals and other threats over time on species at risk and their habitats, to factor this knowledge into the issuance or non-issuance of future approvals, to publicly report, and take corrective actions as necessary. <p>Overall benefit permits are unique from other types of approvals in that the intended outcome of these permits is meant to improve the relative standing of a species after taking into account the residual adverse effects to the species or its habitat that are authorized by the permit.</p> <p>The Environment Ministry intends to initiate development of policy considerations to support the development of landscape agreements and to consider appropriate approaches to balancing across species the impacts on species at risk with the benefits provided.</p>	The Environment Ministry did not commit to evaluating the cumulative effects of approvals and other threats, publicly reporting on this evaluation, and taking any necessary corrective actions.		✓	

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation
14.	<p>So that regulated species at risk and their habitats are protected according to prohibitions under the <i>Endangered Species Act, 2007</i> and in the conditions of approvals, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> develop and implement a comprehensive risk-based and sector-based compliance and enforcement plan, including regular inspections of approval holders to confirm that they are operating as allowed and are fulfilling their commitments regarding species at risk; ensure the sufficiency of enforcement resources, including training requirements, information management strategies, and the number of appointed officers; provide information on its website that informs the public that it is responsible for enforcement of the <i>Endangered Species Act, 2007</i> and how to report possible violations; and publicly report on the Environment Ministry's enforcement actions as part of its yearly published plans and annual report. 	<p>The Ministry of the Environment, Conservation and Parks agrees with the Auditor General's recommendation.</p> <p>The Environment Ministry is currently implementing a comprehensive risk-based compliance and enforcement framework that would include responsive and project-based proactive activities, taking into consideration the Ministry's broad compliance and enforcement mandate and available resources.</p> <p>The Environment Ministry will ensure there is clear information on how to report potential violations under the Act on its website.</p> <p>The Environment Ministry recognizes that more can be done to improve transparency and public communication as it relates to enforcement actions under the <i>Endangered Species Act, 2007</i>. We will consider publishing information in the future.</p>	<p>The Environment Ministry did not commit to ensuring sufficient enforcement resources, including training requirements, information management strategies, and the number of appointed officers.</p>	<p>Insufficient ✓</p>

#		Auditor General's Assessment of Environment Ministry's Response to Recommendation		
		Sufficient	Insufficient	
#		Environment Ministry's Response	Auditor General's Response	
15.	<p>To improve the sufficiency of financial resources available for actions to protect and recover species at risk in Ontario, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> charge fees for approvals to harm species at risk that recover program costs and help discourage harmful activities; actively engage the public, businesses, and the philanthropic sector in cultivating new sources of investment for species recovery actions; and develop a business case to implement a specialty license plate program to raise funds for species at risk conservation. 	<p>The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that it is important to ensure sufficient financial resources to protect and recover species and acknowledges the potential sources of revenue that the Auditor General identifies.</p> <p>The Environment Ministry's current priority is to operationalize the Species Conservation Action Agency which may receive donations from members of the public and organizations.</p>	<p>The Environment Ministry did not commit to charging fees for approvals to harm species at risk and to develop other methods to raise funds for the conservation of all species at risk.</p>	✓
16.	<p>To increase the positive outcomes for species at risk made possible by the Species at Risk Stewardship Program, we recommend that the Ministry of the Environment, Conservation and Parks evaluate and provide the annual funding needed for the Stewardship Program to implement government-supported actions in response statements.</p>	<p>The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that the Species at Risk Stewardship Program is an important means for making progress on government-supported actions in response statements.</p> <p>For the 20 species at risk featured in 2019 and 2020 Review of Progress reports, stewardship projects achieved progress on 76% of all associated response statement actions; for 15 of these species, stewardship projects achieved progress on 100% of high-priority government-supported response statement actions.</p>	<p>The Environment Ministry did not agree to evaluate and provide the annual funding needed for the Stewardship Program to implement government-supported actions in response statements.</p>	✓

#	Auditor General's Recommendation	Environment Ministry's Response	Auditor General's Response	Auditor General's Assessment of Environment Ministry's Response to Recommendation
		<p>The Environment Ministry will also continue to identify response statement actions as a high priority for funding within the program's annual application guidelines, and to evaluate and provide annual summaries of the Stewardship Program in the annual, publicly posted progress reports.</p> <p>Additionally, the Stewardship Program achieved value-for-money in job creation (9.5 jobs created per \$100,000 invested), volunteer involvement, public engagement through education and outreach activities, species at risk habitat creation and enhancement (90 hectares per \$100,000 invested), and significant leveraging of external funds (\$1.39 leveraged per program dollar disbursed).</p>		<p>Sufficient</p>
17.	<p>To increase the efficiency and effectiveness of Ontario's Species at Risk Stewardship Program, and allow successful applicants to undertake protection and recovery actions in a timely manner, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • follow the delegation of authority already in place by having the Deputy Minister approve use of program funding to enable prompt decision-making for this low-cost program; and • modify the funding cycle to reduce the time required for the approvals process. 	<p>The Ministry of the Environment, Conservation and Parks agrees with the recommendation.</p> <p>The Environment Ministry will continue to apply the delegation of authority already in place by having the Deputy Minister approve use of program funding and modify the funding cycle.</p>	<p>We note that the Environment Minister, not the Deputy Minister, approved the list of recommended projects for funding for 2019/20 and 2020/21.</p>	<p>Insufficient</p>

Auditor General's Assessment of Environment Ministry's Response to Recommendation	Sufficient	Insufficient	
<p># Auditor General's Recommendation</p> <p>18. To guide decisions that can impact species at risk in Ontario, and to effectively, efficiently and accountably achieve successful outcomes for those species, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • identify priority species, places, and systemic threats as well as how they are to be addressed; • develop a long-term strategy that outlines specific protection and recovery actions, with associated timelines, that the Ministry will undertake for the program as a whole; • implement the strategy; and • publicly report on the progress toward achieving the strategy's objectives as part of an annual report. 	<p>Environment Ministry's Response</p> <p>The Ministry of the Environment, Conservation and Parks agrees that the development of a long-term strategy focused on priority species, places and threats would be valuable in guiding decisions that can impact species at risk in Ontario and will undertake such work within budgetary and staffing realities.</p> <p>At this time, the Environment Ministry is focused on fulfilling the purposes of the <i>Endangered Species Act, 2007</i>. The overarching purposes of the Act, which are articulated in section 1 of the Act, guide ministry decisions relating to species at risk in Ontario.</p> <p>The Environment Ministry is also focused on preparing species-specific response statements that identify and prioritize specific protection and recovery actions that Ontario intends to take or support to help recover species.</p> <p>Where possible, response statements may be developed to strategically address the recovery of multiple species at risk in a single policy, such as the:</p> <ul style="list-style-type: none"> • Blue Racer, Lake Erie Watersnake, Small-mouthed Salamander and Unisexual Ambystoma (Small-mouthed Salamander dependent population) government response statement; or the • Pink Milkwort, Showy Goldenrod (Great Lakes Plains population), Skinner's Agalinis and White Prairie Gentian government response statement. 	<p>Auditor General's Response</p> <p>We note that developing a long-term strategy, with timebound and specific protection and recovery actions that the Environment Ministry will undertake for the program as a whole, would allow for an effective, efficient and accountable method of contributing to meeting the purposes of the <i>Endangered Species Act, 2007</i>.</p>	<p>✓</p>

#	Auditor General's Recommendation		Environment Ministry's Response		Auditor General's Response		Auditor General's Assessment of Environment Ministry's Response to Recommendation	
					Sufficient	Insufficient		
			<p>In addition, as part of Species at Risk Stewardship Program delivery, the Environment Ministry conducts a rigorous annual priority-setting exercise in order to direct funding where stewardship can make a difference and where it is most urgently needed.</p>					
19.	<p>So that the Province of Ontario conforms with the federal <i>Species at Risk Act</i>, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • assess the risks of non-conformity with the federal <i>Species at Risk Act</i>; • provide information on the risks to the Comptroller General for inclusion in the province's Enterprise Risk Plans; • publicly report on those risks; and • take corrective actions to ensure sufficient habitat protections for species at risk. 		<p>The Ministry of the Environment, Conservation and Parks agrees that it is important to assess the risks of non-conformity of the provincial approach to protecting species at risk and their habitats with the federal <i>Species at Risk Act</i>.</p> <p>The Environment Ministry regularly assesses its approach in regard to the federal approach and takes appropriate action to manage risks, as needed. Canada and Ontario have complementary approaches to protecting species at risk, which are codified under the National Accord for the Protection of Species at Risk. Ontario's approach is designed to meet provincial needs.</p>		<p>The Environment Ministry did not clearly commit to assessing the risks of non-conformity with the federal <i>Species at Risk Act</i>, providing information on risks to the Comptroller General, and publicly reporting on those risks.</p>		<p>✓</p>	

Auditor General's Assessment of Environment Ministry's Response to Recommendation		Auditor General's Response	
		Sufficient	Insufficient
<p># Auditor General's Recommendation</p> <p>20. To measure the effectiveness of its species at risk program at improving the status of species at risk and their habitats, we recommend that the Ministry of the Environment, Conservation and Parks, adhering to guidance from the Treasury Board Secretariat:</p> <ul style="list-style-type: none"> • develop a performance measurement framework for the species at risk program that focuses on successful outcomes; • include the performance measurement framework within the long-term strategy described in Recommendation 18; and • publicly report on actual results against these performance measures as part of an annual report. 	<p>Environment Ministry's Response</p> <p>The Ministry of the Environment, Conservation and Parks agrees with the Auditor General that performance measurement is important.</p> <p>The Environment Ministry has a full spectrum of key performance indicators developed to measure the Environment Ministry's delivery of its mandate and commits to ensuring that they continue to be applied.</p> <p>The Environment Ministry's priority in regard to performance measurement related to the species at risk programs includes fulfilling the commitment to ensure each response statement includes performance measures (see Recommendation 5) and exploring the feasibility of enhanced progress tracking and follow up on actions identified in government (see Recommendation 6).</p>	<p>Auditor General's Response</p> <p>The Environment Ministry did not commit to developing performance measures for the species at risk program and publicly reporting on the results.</p>	✓
	<p>21. So that the appointments and work of the Species at Risk Program Advisory Committee (Advisory Committee) are transparent and helpful to the Environment Minister for improving the status of species at risk, we recommend that the Ministry of the Environment, Conservation and Parks:</p> <ul style="list-style-type: none"> • assess the existing mix, composition, and competencies of the Advisory Committee, including Indigenous representation; • develop and implement transparent criteria and procedures for appointments and reappointments to the Advisory Committee, including to address any identified competency and representation gaps. 	<p>The Ministry of the Environment, Conservation and Parks is committed to ensuring that the processes outlined by the Public Appointments Secretariat and the Agencies and Appointments Directive are adhered to in appointments and re-appointments to the Advisory Committee. The Environment Ministry does not intend to develop procedures that are unique to the Advisory Committee.</p>	<p>The Environment Ministry did not agree to assess the existing mix, composition, and competencies of the Advisory Committee. The Environment Ministry also did not agree to develop and implement transparent criteria and procedures for appointments and reappointments to the Advisory Committee.</p>

Appendix 2: Glossary of Terms

Prepared by the Office of the Auditor General of Ontario

Term	Definition
Aichi Targets	A set of 20 targets to conserve biodiversity, including to prevent the extinction of known threatened species and improve their conservation status. The targets were agreed to in 2010 in Nagoya (Aichi Prefecture), Japan by the 196 countries that are signatories of the Convention on Biological Diversity.
Biodiversity	The variety of life on Earth—it includes plants, animals and all other living things, as well as how they interact with one another and their environment.
Conservation	The maintenance of sustainable use of the Earth's resources. Conservation may or may not involve the use of resources; that is, certain areas, species or populations may be excluded from human use as part of an overall landscape/waterscape conservation approach.
Critical habitat	Under the federal <i>Species at Risk Act</i> , critical habitat is the habitat that is necessary for the survival or recovery of listed extirpated, endangered, or threatened species, and is identified in a recovery strategy or action plan.
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living, abiotic environment interacting as a functional unit.
Ecosystem services	Direct and indirect benefits derived from properly functioning ecosystems. These include food and water supply, oxygen production, climate regulation, flood and storm control and recreational opportunities.
Endangered species	Species that live in the wild in Ontario but are facing imminent extinction or extirpation.
Extirpated species	Species that live somewhere in the world, and at one time lived in the wild in Ontario, but no longer live in the wild in Ontario.
Extinct species	Species that no longer exist.
Habitat	The place or type of site where an organism or population naturally occurs and depends on to carry out its life processes such as reproduction, rearing, hibernation, migration or feeding. Species may require different habitats for different uses throughout their lifecycle.
Lichens	Two biological organisms, fungi and algae, living in close association with one another.
Molluscs	The group of soft-bodied invertebrate animals that includes snails, slugs, mussels, and octopuses.
Organism	A synonym for "life form," any individual entity that embodies the properties of life.
Polluter pays principle	A norm that recognizes those that harm the environment should bear the costs involved for the activity and any remediation.
Protected area	A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
Range	An area that a species depends upon for all or parts of its life cycle.
Recovery actions	Are taken to reduce or eliminate a condition or circumstance that causes a species to be listed as threatened, endangered or extirpated.
Restoration	The return of a species, a population or an ecosystem to its state prior to a disturbance.
Species	The biological definition of species is a group of living organisms that are similar to one another and are capable of reproducing with one another to make offspring that are capable of reproducing with one another. As defined in the <i>Endangered Species Act, 2007</i> , "species" means a species, subspecies, variety or genetically or geographically distinct population of animal, plant or other organism, other than a bacterium or virus, that is native to Ontario.

Term	Description
Species at risk (or imperilled species)	The plants, animals and other organisms in danger of going extinct and being lost forever.
Species (or ecosystem) of conservation concern	A species (or ecosystem) is of conservation concern when it is in decline, rare or scarce in the wild.
Species of special concern	Species that live in the wild in Ontario, are not threatened or endangered, but may become threatened or endangered due to a combination of biological characteristics and identified threats.
Stewardship	The co-operative planning and management of environmental resources in which individuals, organizations, communities and other groups actively engage in the prevention of habitat loss and the facilitation of resource recovery and/or restoration.
Threatened species	A species that lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
Watershed	The area of land that drains into a river, lake or other waterbody.

Appendix 3: Species Found Nowhere Else in the World Except Ontario

Sources of data: Nature Conservancy of Canada and NatureServe Canada

Name	Location in Ontario	Global rank by NatureServe*	Ontario Assessment by the Committee on the Status of Species at Risk
False northwestern moonwort (<i>Botrychium pseudopinnatum</i>)	Found in only two locations on the north shore of Lake Superior	Critically imperilled	Not assessed
Slender notchwort (<i>Crossocalyx tenuis</i>)	Found only on the Bruce Peninsula and Eugenia Falls on the Niagara Escarpment	Critically imperilled	Not assessed
A small scavenger beetle (<i>Hydnobius autumnalis</i>)	Only known from eastern Ontario	Critically imperilled	Not assessed
Guarded guest thin ant (<i>Leptothorax paraxenus</i>)	Found near Mississauga and Milton	Unranked	Not assessed
A rust fly (<i>Loxocera ojibwayensis</i>)	Found only in Ojibway Prairie Provincial Nature Reserve	Unranked	Not assessed
Macoun's shining moss (<i>Neomacounia nitida</i>)	Original site near Belleville was cleared by 1892 and not been found since	Presumed extinct	Extinct
Insignificant small minnow mayfly (<i>Procloeon insignificans</i>)	Last found near Ottawa in 1925	Unranked	Not assessed
Cain's screw moss (<i>Syntrichia cainii</i>)	Restricted to alvars (a limestone plain with thin or no soil)	Critically imperilled	Not assessed

* NatureServe Canada is a non-profit organization that collects, manages and distributes scientific data on biodiversity for decision-making purposes. The data collected by the organization are used by governments and other parties.

Appendix 4: Extinct Species Found Historically in Ontario

Source of data: Government of Canada

Name	Species Type
Atlantic salmon (Lake Ontario population)	Fish
Blue walleye	Fish
Deepwater cisco	Fish
Lake Ontario kiyi	Fish
Lake whitefish (Como Lake large-bodied population)	Fish
Lake whitefish (Como Lake small-bodied population)	Fish
Macoun's shining moss	Moss
Passenger pigeon	Bird

Appendix 5: Species at Risk Laws in Canada

Prepared by the Office of the Auditor General of Ontario

While British Columbia, Alberta, Saskatchewan, Prince Edward Island, Yukon and Nunavut do not have standalone species at risk legislation, federal and other provincial/territorial legislation and programs contribute to the protection and recovery of species at risk.

		Ontario	Canada	Manitoba	New Brunswick	Newfoundland & Labrador	Northwest Territories	Nova Scotia	Quebec
Law	Standalone species at risk legislation	<i>Endangered Species Act, 2007</i>	<i>Species at Risk Act, 2002</i>	<i>The Endangered Species and Ecosystems Act, 1990</i>	<i>Species at Risk Act, 2012</i>	<i>Endangered Species Act, 2001</i>	<i>Species at Risk Act (NWT), 2009</i>	<i>Endangered Species Act, 1998</i>	<i>Act Respecting Threatened or Vulnerable Species, 1989</i>
Species Assessment Committee	Independent advisory committee	✓	✓	✓	✓	✓	✓	✓	
	Scientific knowledge and expertise	✓	✓	✓	✓	✓	✓	✓	
	Indigenous, traditional or community knowledge	✓	✓		✓	✓	✓		
Species Assessment and Listing Process	Annual report of assessments by committee	✓	✓	✓		✓		✓	
	Real-time assessment reports by committee				✓		✓		✓
	Mandated response time for Ministry	✓	✓		✓	✓	✓	✓	✓
	Minister may request reconsideration by committee	✓		✓	✓				
	Minister has final authority on listing		✓	✓		✓	✓	✓	✓
Protections Afforded	Life and welfare protections	✓	✓	✓	✓	✓	✓	✓	✓
	Habitat and ecosystem protections	✓	✓	✓	✓	✓	✓	✓	✓
	Temporary suspension of listing protections by Ministerial order	✓							

		Ontario	Canada	Manitoba	New Brunswick	Newfoundland & Labrador	Northwest Territories	Nova Scotia	Quebec
Species Recovery Strategy and Management Plan	Recovery strategy co-ordinated by Ministry			✓	✓				✓
	Recovery strategies independently drafted	✓	✓			✓	✓	✓	
	Mandated government response timeframe	✓	✓		✓	✓	✓	✓	
	Technical feasibility considerations		✓		✓	✓	✓	✓	
	Economic feasibility considerations	✓			✓	✓		✓	
	Implementation schedule required for actions		✓		✓		✓	✓	
Review of Progress and Actions	Review at Ministry discretion				✓	✓			
	Mandated one-time review	✓							
	Periodic review required until objectives achieved		✓				✓	✓	
Permitting Mechanism	Minister may issue permits for otherwise prohibited activities	✓	✓	✓	✓	✓	✓	✓	✓
	Ministerial or conditional exemptions from Act	✓	✓	✓	✓	✓	✓		✓
	All reasonable alternatives considered	✓	✓		✓		✓		
	Public registry for all permissions or annual report		✓	✓	✓	✓	✓		
Fines and Penalties	Prescribed fines for corporations >\$500,000	✓	✓				✓	✓	
	Prescribed fines for individuals >\$100,000	✓	✓		✓	✓	✓	✓	
	Penalty of imprisonment	✓	✓	✓		✓	✓	✓	

Appendix 6: Species at Risk Regulated under the *Endangered Species Act, 2007*, October 2021

Source of data: *Endangered Species Act, 2007*; O. Reg. 230/08

Endangered Species

Amphibian

Allegheny Mountain dusky salamander
Fowler's toad
Jefferson salamander
Northern dusky salamander
Small-mouthed salamander
Unisexual ambystoma¹

Bird

Acadian flycatcher
Barn owl
Golden eagle
Henslow's sparrow
King rail
Kirtland's warbler
Loggerhead shrike
Northern bobwhite
Piping plover
Prothonotary warbler
Red knot rufa subspecies
Yellow-breasted chat

Fish

American eel
Eastern sand darter
Lake sturgeon²
Northern madtom
Redside dace
River darter²
Shortnose cisco
Spotted gar
Warmouth

Insect

Aweme borer moth
Bogbean buckmoth
Gypsy cuckoo bumble bee
Hine's emerald
Hoptree borer
Hungerford's crawling water beetle
Laura's clubtail
Mottled duskywing
Nine-spotted lady beetle

Northern barrens tiger beetle
Pygmy snaketail
Rapids clubtail
Riverine clubtail
Rusty-patched bumble bee
Transverse lady beetle

Lichen

Golden-eye lichen³
Pale-bellied frost lichen

Moss

Spoon-leaved moss

Mammal

American badger⁴
Eastern small-footed myotis (bat)
Little brown myotis (bat)
Mountain lion (cougar)
Northern myotis (bat)
Tri-colored bat

Mollusc

Broad-banded forestsnail
Eastern banded tigersnail
Fawnsfoot
Hickorynut
Kidneyshell
Northern riffleshell
Proud globelet
Rayed bean
Round hickorynut
Round pigtoe
Salamander mussel
Snuffbox

Plant

American chestnut
American columbo
American ginseng
Bent spike-rush
Bird's-foot violet
Bluehearts
Blunt-lobed woodsia
Butternut

Cherry birch
Colicroot
Cucumber tree
Drooping trillium
Eastern flowering dogwood
Eastern prairie fringed-orchid
Eastern prickly pear cactus
Engelmann's quillwort
False hop sedge
Few-flowered club-rush
Forked three-awned grass
Four-leaved milkweed
Gattinger's agalinis
Heart-leaved plantain
Hoary mountain-mint
Horsetail spike-rush
Juniper sedge
Large whorled pogonia
Lowland toothcup
Nodding pogonia
Ogden's pondweed
Pink milkwort
Red mulberry
Scarlet ammannia
Showy goldenrod⁵
Skinner's agalinis
Slender bush-clover
Small white lady's-slipper
Small whorled pogonia
Virginia goat's-rue
Virginia mallow
Western silvery aster
White prairie gentian
Wood-poppy

Reptile

Blue racer
Butler's gartersnake
Common five-lined skink⁶
Eastern foxsnake⁶
Gray ratsnake⁶
Massasauga rattlesnake⁶
Queensnake
Spiny softshell
Spotted turtle
Wood turtle

Threatened Species

Bird

American white pelican
Bank swallow
Barn swallow
Bobolink
Cerulean warbler
Chimney swift
Eastern meadowlark
Eastern whip-poor-will
Least bittern
Louisiana waterthrush

Fish

Black redhorse
Cutlip minnow
Lake chubsucker
Lake sturgeon⁷
Pugnose minnow
Pugnose shiner
Shortjaw cisco
Silver chub
Silver shiner

Insect

Lake Huron grasshopper

Mammal

Algonquin wolf
Caribou⁸
Gray fox
Polar bear
Wolverine

Mollusc

Lilliput
Threehorn wartyback
Wavy-rayed lampmussel

Plant

American water-willow
Blue ash
Branched bartonia
Common hoptree
Deerberry
Dense blazing star
Dwarf hackberry

False rue-anemone
Goldenseal
Hill's thistle
Houghton's goldenrod
Kentucky coffee-tree
Lakeside daisy
Pitcher's thistle
Purple twayblade
Round-leaved greenbrier
Showy goldenrod⁸
Small-flowered lipocarpha
Spotted wintergreen
White wood aster
Wild hyacinth
Willowleaf aster

Reptile

Blanding's turtle
Eastern foxsnake⁹
Eastern hog-nosed snake
Gray ratsnake¹⁰
Massasauga rattlesnake¹¹

Special Concern Species

Bird

Bald eagle
Black tern
Canada warbler
Common nighthawk
Eastern wood-pewee
Evening grosbeak
Golden winged warbler
Grasshopper sparrow
Horned grebe
Olive-sided flycatcher
Peregrine falcon
Red-headed woodpecker
Red-necked phalarope
Rusty blackbird
Short-eared owl
Wood thrush
Yellow rail

Fish

Blackstripe topminnow
Bridle shiner

Channel darter
Grass pickerel
Lake sturgeon¹²
Northern brook lamprey
Northern sunfish²
River redhorse
Silver lamprey¹³
Upper Great Lakes kiyi

Insect

Monarch
West Virginia white
Yellow-banded bumble bee

Mammal

Beluga
Caribou¹⁴
Eastern mole
Woodland vole

Mollusc

Eastern pondmussel
Mapleleaf
Rainbow

Plant

American hart's tongue fern
Broad beech fern
Climbing prairie rose
Crooked-stem aster
Dwarf lake iris
Green dragon
Hill's pondweed
Riddell's goldenrod
Shumard oak
Swamp rose-mallow
Tuberous Indian-plantain

Reptile

Common five-lined skink¹⁵
Eastern musk turtle
Eastern ribbonsnake
Lake Erie watersnake
Northern map turtle
Snapping turtle

Extirpated Species**Amphibian**

Blanchard's cricket frog
 Eastern tiger salamander
 Spring salamander

Bird

Eskimo curlew
 Greater prairie-chicken

Fish

Gravel chub

Paddlefish**Insect**

American burying beetle
 Eastern persius duskywing
 Frosted elfin
 Karner blue

Moss

Incurved grizzled moss

Plant

Illinois tick-trefoil

Spring blue-eyed Mary**Reptile**

Eastern box turtle
 Timber rattlesnake

1. Jefferson salamander dependent and small-mouthed salamander dependent populations.
2. Great Lakes – Upper St. Lawrence populations.
3. Great Lakes population.
4. Northwestern and Southwestern Ontario populations.
5. Great Lakes Plains population.
6. Carolinian population.
7. Saskatchewan - Nelson River populations.
8. Boreal population.
9. Georgian Bay population.
10. Frontenac Axis population.
11. Great Lakes – St. Lawrence population.
12. Southern Hudson Bay – James Bay populations.
13. Great Lakes – Upper St. Lawrence population.
14. Eastern Migratory population.
15. Southern Shield population.

Appendix 7: Audit Criteria

Prepared by the Office of the Auditor General of Ontario

-
1. Roles, responsibilities and accountability requirements for identifying, protecting, recovering, researching, monitoring and progress reporting on species at risk and their habitats are clearly defined.
-
2. Species are effectively and promptly assessed and classified as at risk based on the best available scientific information, community and Indigenous traditional knowledge. Species at risk and their habitats are effectively and efficiently regulated.
-
3. Sufficient programs to protect and recover species at risk and their habitats exist and are based on best practices, and are developed and implemented in an effective and efficient manner.
-
4. Processes and procedures for permissions and compliance are based on best practices and are implemented in an effective and efficient manner to protect and recover species at risk and their habitats as appropriate.
-
5. Meaningful performance measures and targets are established, status and progress are regularly monitored and publicly reported on, and corrective actions are taken on a timely basis when issues are identified.
-

Appendix 8: Species at Risk Potentially Significantly Adversely Affected by Commercial Forestry Operations as Determined by the Ministry of the Environment, Conservation and Parks

Prepared by the Office of the Auditor General of Ontario

Species	Status under the <i>Endangered Species Act, 2007</i>	Status under the federal <i>Species at Risk Act</i>
American ginseng	Endangered	Endangered
Blanding's turtle	Threatened	Threatened
Boreal caribou	Threatened	Threatened
Eastern hog-nosed snake	Threatened	Threatened
Eastern small-footed myotis (bat)	Endangered	Not assessed
Little brown myotis (bat)	Endangered	Endangered
Massasauga rattlesnake (Great Lakes – St. Lawrence population)	Threatened	Threatened
Northern myotis (bat)	Endangered	Endangered
Pale-bellied frost lichen	Endangered	Endangered
Tri-coloured bat	Endangered	Endangered
Wolverine	Threatened	Special Concern
Wood turtle	Endangered	Threatened



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ISSN 1911-7078 (Online)
ISBN 978-1-4868-5562-9
(PDF, 2021 ed.)

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