Policy Guidance on Harm and Harass under the Endangered Species Act

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TABLE OF CONTENTS

1 CONTEXT

The purposes of the *Endangered Species Act, 2007* ("ESA" or "the Act") are to:

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

If a species is listed on the Species at Risk in Ontario (SARO) list[1] as an extirpated, endangered or threatened species ("protected species"), it receives protection under Section 9 of the ESA. If a species is listed as an endangered or threatened species, its habitat also receives protection under Section 10 of the ESA[2].

This policy focuses specifically on the implementation of clause 9(1)(a) of the ESA that states that *"No person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species."*

Subsection 9(6) clarifies that a member of a protected species is protected at any stage of its development, whether or not it originated in Ontario.

The Ministry of Natural Resources and Forestry ("MNRF" or "the Ministry") first and foremost encourages people to look for opportunities to carry out their activities in ways that will avoid any adverse effects on a species at risk or its habitat. However, where specific legislated requirements are met, the ESA enables the Minister the discretion to grant different types of permits or other authorizations allowing a person to engage in an activity that would otherwise be prohibited by Section 9 of the Act[3]. A person who carries out an activity that results in the killing, harming, harassing, capturing or taking of a protected species, without appropriate authorization under the ESA, may be prosecuted under clause 9(1)(a).

2 PURPOSE

The purpose of this document is to outline the overall approach and considerations that the Ministry or a proponent will use in determining whether a proposed activity is likely to kill, harm, or harass a member of a protected species under clause 9(1)(a) of the ESA. This determination will be carried out primarily in the context of determining whether it is advisable for the proponent to apply for an authorization (e.g., permit) or register a notice of activity under the Act prior to proceeding with the activity[4].

Specifically, this document:

- provides guidance on the terms "kill", "harm" and "harass" within the context of clause 9(1)(a) of the ESA;
- identifies a set of principles and considerations that MNRF will use when assessing an authorization, or a proponent should refer to when submitting a notice of activity under the Act to determine whether a proposed activity is likely to kill, harm or harass a living member of a protected species; and,
- explains the biological factors and activity details informing these determinations.

1. Ontario Regulation 230/08 under the *Endangered Species Act, 2007*.
2. Guidance regarding the implementation of section 10 of the ESA is provided in the policy entitled "*Categorizing and Protecting Habitat under the Endangered Species Act*" (link provided in section 7 of this document).
3. Where specific legislated requirements are met, the ESA also enables the Ministry the discretion to grant different types of permits or other authorizations allowing a person to engage in an activity that would otherwise be prohibited by section 10 of the Act (the habitat protection provision).
4. Additional guidance to help proponents determine whether they may require an ESA authorization prior to conducting their activity can be found in the document entitled "*Endangered Species Act Submission Standards for Activity Review and 17 (2)(c) Overall Benefit Permits*" (link provided in section 7 of this document).

3 KEY TERMS

Not every activity that occurs near a member of a protected species will kill, harm or harass that member. Determining whether a proposed activity is likely to kill, harm, or harass a member of a protected species requires the consideration of the biology and behaviour of the species, the activity details and how the activity may affect the species' ability to carry out its life processes. These life processes include, but are not limited to: reproduction, rearing, feeding, hibernation, resting, dispersal, migration, and diurnal movement.

3.1 Killing a Protected Species

An activity that kills a living member of a protected species is one that results in the death of the member.

3.2 Harming a Protected Species

An activity that harms a living member of a protected species is one that results in a physical injury, or change to one or more of its physiological processes, and adversely affects the ability of the member to carry out one or more of its life processes.

3.3 Harassing a Protected Species

An activity that harasses a living member of a protected species is one that disrupts its normal behaviour in a manner that adversely affects the ability of the member to carry out one or more of its life processes.

4 GUIDING PRINCIPLES

The following guiding principles provide a firm foundation for the implementation of clause 9(1)(a) of the ESA. These principles must be considered when determining whether a proposed activity is likely to kill, harm or harass a member of a protected species.

4.1 Species Protection and Recovery

One of the purposes of the ESA is to protect species at risk in Ontario and to promote their recovery. A fundamental indicator of effective protection and recovery is whether a member of a protected species is able to carry out its life processes that support its survival and normal development. Determining whether or not an effect is adverse for a member of a species at risk requires consideration of how an activity is reasonably expected to affect the ability of that member to carry out its life processes. Generally, activities that do not adversely affect the ability of a member to carry out its life processes would not be considered to harm or harass the member, whereas, activities that are likely to adversely affect the ability of a member to carry out its life processes would be considered to harm or harass the member.

4.2 Uncertainty and Risk Management

Determinations of whether an activity is likely to kill, harm, or harass a living member of a protected species will be based on the best available scientific information, including information obtained from community knowledge, and Aboriginal traditional knowledge. A lack of scientific certainty regarding a species' biology, or the effects of an activity on a species, is not considered a justifiable reason to postpone assessment decisions. Knowledge gaps resulting in substantial scientific uncertainty may highlight research, monitoring and stewardship opportunities that can help increase our understanding of a species, and the effects a specific activity may have on members of that species.

A risk-management approach is incorporated in determining whether an activity is likely to kill, harm or harass a member of a species at risk. In some cases, there will be a moderate to high level of understanding of the biology of a species at risk, and the effects a proposed activity will have on living members of that species. In others, the level of understanding will be very limited. The majority of activity scenarios are likely to fall between the two extremes of certainty. In specific cases where the anticipated effects of an activity on a member of a protected species cannot be predicted with reasonable confidence, determinations will generally err on the side of caution in favour of affording greater protection to the species. Decisions must be informed by the details of the activity, and the biology and behaviour of the species.

4.3 Adaptive Management

An adaptive management approach is key to implementing the ESA and its related policies and guidance. Knowledge and information gained through research and monitoring activities improves the understanding of species at risk, their needs, and the effects of various human activities on them. As our collective understanding grows, future approaches, guidance and decisions for protecting and recovering species at risk will be adapted accordingly.

4.4 The Presence of a Species

Determining whether an activity is likely to kill, harm, or harass a member of a protected species, will require consideration of whether there is evidence to suggest that a member of a protected species is likely to be present when the activity is taking place. Consideration is also required as to whether a member of a protected species is likely to be adversely affected by any delayed effects of the activity. Among the types of evidence of species' presence that may be considered are known species occurrences, auditory or visual observations of members of the species, observations of nests, dens, hibernacula, eggs, or other features or evidence suggesting the presence of the species. Some species may be more difficult to detect than others due to their secretive nature which could require a higher search effort to confirm their presence.

4.5 Case-by-Case Determinations

Given the unique biology and behaviours of each species at risk in Ontario and the variety of human activities occurring within the province, determining whether an activity is likely to kill, harm or harass a member of a protected species will generally need to be done on a species-by-species, case-by-case basis. This will involve consideration of the unique biology and behaviours of the species involved, the specific details of the situation, and likely effects of the activity on the member, or members, of that species at a given location.

4.6 Ecological Relationships

Some plants and animals depend on specialized ecological relationships to carry out their life processes. Determining whether an activity is likely to kill, harm or harass a member of a protected species, will consider the importance of ecological relationships for that species and how they are likely to be impacted by the activity.

5 FRAMEWORK FOR DETERMINING KILL, HARM OR HARASS UNDER THE ENDANGERED SPECIES ACT

There are a wide variety of protected species at risk, and activities that occur on the landscape in Ontario. However, not every activity that occurs near a member of a protected species will kill, harm or harass that member. Some activities may have no adverse effect on a member of a protected species, while others may cause effects that vary in severity from minor to serious.

Determining whether or not an activity is likely to kill, harm or harass a member of a protected species requires consideration of:

- how likely is it that the anticipated effect of the activity on a member of a protected species will actually occur; and,
- how serious that effect would be to a member or members of a protected species if it did occur.

Figure 1 provides a visual representation of how the likelihood of an activity's effects occurring, and the seriousness of those effects, informs determinations of whether an activity is likely to kill, harm or harass a member of a protected species. As indicated by the arrows in Figure 1, as the likelihood of effects occurring, and the severity of those effects increases, the more likely the activity is to kill, harm or harass a member of a protected species.

Determining where a particular activity sits within this figure requires consideration of the relevant biological factors, and activity-related details described in sections 5.1 and 5.2.

- Generally, determining the likelihood of an activity's expected effects occurring (vertical Y axis of Figure 1) requires consideration of the activity's details. Section 5.2 describes the activity-related details.
- Generally, determining the severity of the effect on a member or members of a protected species (horizontal X axis of Figure 1) requires consideration of the biology and behaviours of member(s) of a protected species in that given situation. Section 5.1 describes the biological factors.

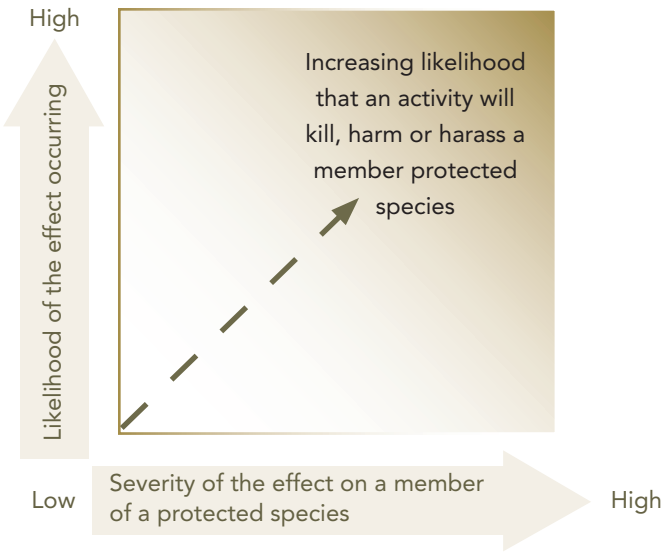

Figure 1: Visual representation of how the likelihood of an anticipated effect occurring, and the seriousness of that effect to a member or members of a protected species if it did occur, are considered in determining if an activity is likely to kill, harm or harass a member or members of a protected species.

It is important to note that, in some cases, alternate approaches to the activity may be adopted to avoid adverse effects on a protected species. These alternatives typically include:

- modifying the timing of the activity to avoid critical periods in a species' life processes;
- altering the methodology of an activity to avoid adverse effects; or,
- relocating the activity to an area where the members of a protected species do not occur.

5.1 The Biology of the Species

There are a number of extirpated, endangered, or threatened species that are afforded legal protection under the ESA in Ontario. These represent a significant diversity of organisms including plants, reptiles, amphibians, insects, mammals, birds and fishes. The relevant biology, daily and seasonal behaviours, and sensitivities both across and within each species will be considered when determining whether an activity is likely to kill, harm or harass a member of a protected species. Important biological factors to be considered in this determination are described in Table 1. These factors are designed to be considered collectively where applicable, and not in isolation of one another or in isolation of the activity-related details described in Table 2. It is recognized that not all biological factors will be relevant in all cases.

Table 1. Key biological factors to consider when assessing whether an activity is likely to kill, harm or harass a member of a protected species.

Biological Factor	Explanation
Site Fidelity	Members of a species that show repeated use of an area (e.g., a snake hibernation site) are often reluctant or unable to find alternative locations to successfully carry out their life processes. Generally, when an activity occurs within or near areas where members of a species show site fidelity, there is a greater risk that the activity will kill, harm or harass a member.
Concentration of Individuals	As the number of members of a species in an area increases, there is often a greater likelihood that at least one member will be killed, harmed or harassed by an activity. Generally, when an activity is likely to affect members of a species that live in groups during all or part of their lives (e.g., colonial nesting, plants), there is a greater risk that the activity will kill, harm or harass a member.
Mobility	Mobility of a member of a species can either put it at a greater or lesser risk of kill, harm or harass, depending on the situation. A member of a species that has limited mobility during parts of its life (e.g., hibernation, gestation, birthing) is often unable to physically escape the adverse effects of an activity. In these situations, having limited mobility may put it at greater risk to be killed, harmed or harassed. Having limited or restricted mobility (e.g., plants) may, however, in some cases, be an advantage to a member of a species, in that being able to predict the location and/or movement of a member may make it easier to plan an activity in a manner that is less, or not, likely to kill, harm or harass that member. Conversely, a member of a species that is highly mobile (e.g., travels extensively in search of food) may be at greater risk to be killed, harmed or harassed because this behaviour increases the member's likelihood of encountering, and being adversely impacted by an activity.
Ecological Sensitivities	Biological characteristics or tendencies of a species may limit a member's capacity to cope with certain disturbances. Generally, when members of a species have biological characteristics or tendencies that make them especially vulnerable (e.g., amphibians to chemical contaminants, shade-tolerant plants to high levels of light), activities that affect those characteristics or tendencies have a greater likelihood of killing, harming or harassing a member.
Current Condition	Members of a species that are already in a stressed condition or showing signs of poor health are generally less likely to be able to tolerate additional disturbance. Generally, when an activity is likely to affect members of a species that are exhibiting signs of stress or poor health (e.g., large mammals with low body mass) there is a greater likelihood that an activity will kill, harm or harass a member.
Life Stage	Members of a species may be more vulnerable to the effects of an activity at certain life stages. Generally, when an activity is likely to affect members of a species that are at particularly sensitive life stages (e.g., during juvenile development), there is a greater likelihood that the activity will kill, harm or harass a member.
Response to Disturbance	When an activity disturbs a member of a species that demonstrates less tolerance to disturbances (e.g., birds that abandon their nest after being flushed only a couple of times), there is a greater likelihood that the activity will kill, harm or harass a member.

5.2 Details and Effects of an Activity

In addition to the key biological factors described in section 5.1, determining whether an activity is likely to kill, harm, or harass a member of a protected species also involves consideration of the activity-related details described in Table 2. These details are designed to be considered collectively where applicable, and neither in isolation of one another nor in isolation of the biological factors described in Table 1. It is recognized not all activity-related details will be relevant in all cases.

Consideration of direct and indirect effects and immediate and delayed effects of an activity are important when evaluating the activity-related details described in Table 2. All components of an activity should be considered, including components associated with, but not limited to, site access and investigation, site preparation and construction, operation and maintenance, closure, decommissioning and completion and rehabilitation and restoration.

It is recognized that the cumulative effects of other human activities and natural events occurring at, or near the member of a protected species, may intensify the effects that an activity will have on the member.

Table 2. Key activity-related details to consider when assessing whether an activity is likely to kill, harm or harass a member of a protected species.

Activity Details	Explanation
Proximity to Species	Generally, when the components of an activity and their effects are located in close proximity to a member of a species there is a greater likelihood that the activity will kill, harm or harass a member of a species, than an activity which is farther away.
Timing	Generally, when an activity is likely to affect a member of a species during a particularly sensitive period for the species (e.g., spawning, nesting, over wintering, calving, migration) it is more likely to kill, harm or harass that member.
Intensity	Generally, when an activity is expected to result in a more significant change from current or baseline conditions, it is more likely to kill, harm or harass a member of a species than an activity that results in less, or no, change from the current or baseline conditions.
Duration and Persistence of Effects	Generally, when an activity's effects occur for a longer period of time, or an activity generates enduring effects to a member of a species over a longer period of time, it is more likely to kill, harm or harass a member than an activity that is shorter in duration or that has no residual or enduring effects.
Frequency	Generally, when an activity involves more frequent effects to a member of a species, or is likely to repeatedly disturb or stress a member of a species, it is more likely to kill, harm or harass a member.
Permanency	Generally, when an activity has adverse effects that are permanent, more difficult to reverse or that will continually impact members of a species over time, it is more likely to kill, harm or harass a member than an activity which has effects that can be reversed within a reasonable period of time[5].

5. What constitutes a reasonable time depends on the biology of the species, specific threats to the survival and recovery of the species, etc.

6 ADDITIONAL INFORMATION

The document entitled *Categorizing and Protecting Habitat under the Endangered Species Act* provides additional guidance to help proponents determine whether a proposed activity is likely to damage or destroy habitat protected under subsection 10(1) of the ESA. Where it is determined that a proposed activity cannot be carried out without contravening the ESA, it is advised that proponents apply for an authorization or adhere to relevant regulatory provisions under the ESA before proceeding with the activity.

The documents entitled *Endangered Species Act Submission Standards for Activity Review and 17 (2)(c) Overall Benefit Permits*, the *Information Gathering Form for Activities that may Affect Species or Habitat Protected under the Endangered Species Act* (IGF), and *Avoidance Alternative Form for Activities that may require an Overall Benefit Permit under 17(2)(c) of the Endangered Species Act* (AAF) have been developed to support the overall benefit permitting process under the ESA. Links to these documents are provided in section 7 of this document.

This document is one of a series of guidance documents being developed to support the implementation of the ESA. Information related to species at risk will continue to be updated as new information and guidance is developed. Regular visits to the MNRF Species at Risk website at *www.ontario.ca/speciesatrisk* are encouraged to find the most recent species at risk information and direction.

7 REFERENCES AND OTHER INFORMATION SOURCES

7.1 Legal

- *Endangered Species Act, 2007*
- *Exemptions Requiring Notice to be Given on Registry (Ontario Regulation 242/08)*
- *Ontario Regulation 242/08*
- *Species-specific Habitat Regulations under the ESA (Ontario Regulation 242/08)*
- *Species at Risk in Ontario (SARO) List (Ontario Regulation 230/08)*

7.2 Related

- *Avoidance Alternatives Form for Activities that may require an Overall Benefit Permit under 17(2)(c) of the Endangered Species Act*
- *Categorizing and Protecting Habitat under the Endangered Species Act*
- *Endangered Species Act Submission Standards for Activity Review and 17(2)(c) Overall Benefit Permits*
- *Finalized Provincial Government Response Statements*
- *Finalized Provincial Recovery Strategies*
- *Information Gathering Form for Activities that may Affect Species or Habitat Protected under the Endangered Species Act*
- *Ontario Ministry of Natural Resources and Forestry Species at Risk Website*
- *SAR policy 4.1 – Habitat protection for endangered, threatened and extirpated species under the Endangered Species Act, 2007*
- *SAR Bulletin 4.2 – Explanation of key terms relating to habitat identification, description and protection under the Endangered Species Act, 2007* (Clarification of some of the terms used in this document can be found in this bulletin)
- *Species status reports from the Committee on the Status of Endangered Wildlife in Canada (COSEWIC)*

8 GLOSSARY

Activity: in the context of this document, "activity" includes any commercial (e.g., aggregate, agriculture, construction and development, forestry, mining, renewable and non-renewable energy, mining, tourism, transportation) or non-commercial undertaking (e.g., inventory, monitoring, research, habitat restoration, etc.) that is being assessed for a potential contravention under subsection 9(1) or 10(1) of the ESA. In determining whether an activity is likely to contravene these subsections of the Act, all the components associated with all stages of the activity must be considered. This may include, but is not limited to, the components associated with the site access and investigation, site preparation and construction, operation and maintenance, closure, decommissioning and completion, and rehabilitation and restoration stages. An activity may have both beneficial and adverse effects on species at risk and their habitat. However only adverse effects on a species or its habitat are relevant when evaluating whether the activity will contravene subsection 9(1) or 10(1) of the ESA.

Behaviour: an action or reaction by a member of a protected species usually in response to effects or changes in its environment. Behaviour can be conscious or subconscious, overt or covert, and voluntary or involuntary. In animals, behaviour is controlled by the endocrine and nervous systems.

Delayed effects: the effects of an activity that do not occur at the time the activity is carried out.

Direct effects: effects including those of an activity that occur at the exact location or footprint where the activity is taking place (e.g., onsite).

Harassing a protected species: an activity that harasses a living member of a protected species is one that adversely disrupts its normal behaviour in a manner that adversely affects the ability of the member to carry out one or more of its life processes.

Harming a protected species: an activity that harms a living member of a protected species is one that results in a physical injury, or an adverse change to one or more of its physiological processes, and adversely affects the ability of the member to carry out one or more of its life processes.

Indirect effects: effects including those that occur in a location other than the location where the activity is taking place (e.g., offsite).

Killing a protected species: an activity that kills a living member of a protected species is one that results in the death of the member.

Immediate effects: the effects of an activity that occur at the time when the activity is carried out.

Life processes: processes that support the growth and survival of a member of a species including processes such as reproduction, rearing, feeding, hibernation, resting, dispersal, migration, and diurnal movement. Additional clarification and examples can be found in SAR Bulletin 4.2 – *Explanation of key terms relating to habitat identification, description and protection under the Endangered Species Act, 2007 (July 2008)* (link provided in section 7).

Physiological process: normal internal processes and functions of living organisms that enable them to carry out their life processes. Physiological processes are influenced by the internal and external environmental conditions experienced by an organism.