



The ESA and Activities Under the *Drainage Act*

Drainage Superintendents Course

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Presentation Outline

- Species at Risk (SAR)
- Habitat Loss & Fragmentation
- Overview of the *Endangered Species Act, 2007* (ESA)
- Species and habitat protection
- Drainage Works and the ESA
- Authorizations
- What to do?
- Engaging MNRF
- Case Study



Common Five-lined Skink – Carolinian population (END)

Ontario's Natural Heritage

- Ontario is home to over 30,000 species, about 200 of which are considered at risk provincially
- Species at risk are part of Ontario's diversity - protecting diversity helps to ensure resilience, healthy, functioning ecosystems for future generations
- Many species are found on private land, therefore Ontario's farmers and landowners play a key role in the future of our provinces' natural heritage



What is a Species at Risk?

- A species at risk is any native plant or animal in danger of extinction or of disappearing from Ontario
- The five categories of “at risk” are:

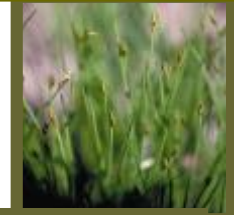
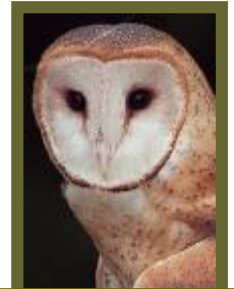
Extinct: A species that no longer exists anywhere (passenger pigeon)

Extirpated: A Native species that no longer exist in the wild in Ontario, but still exists elsewhere (e.g. Timber Rattlesnake)

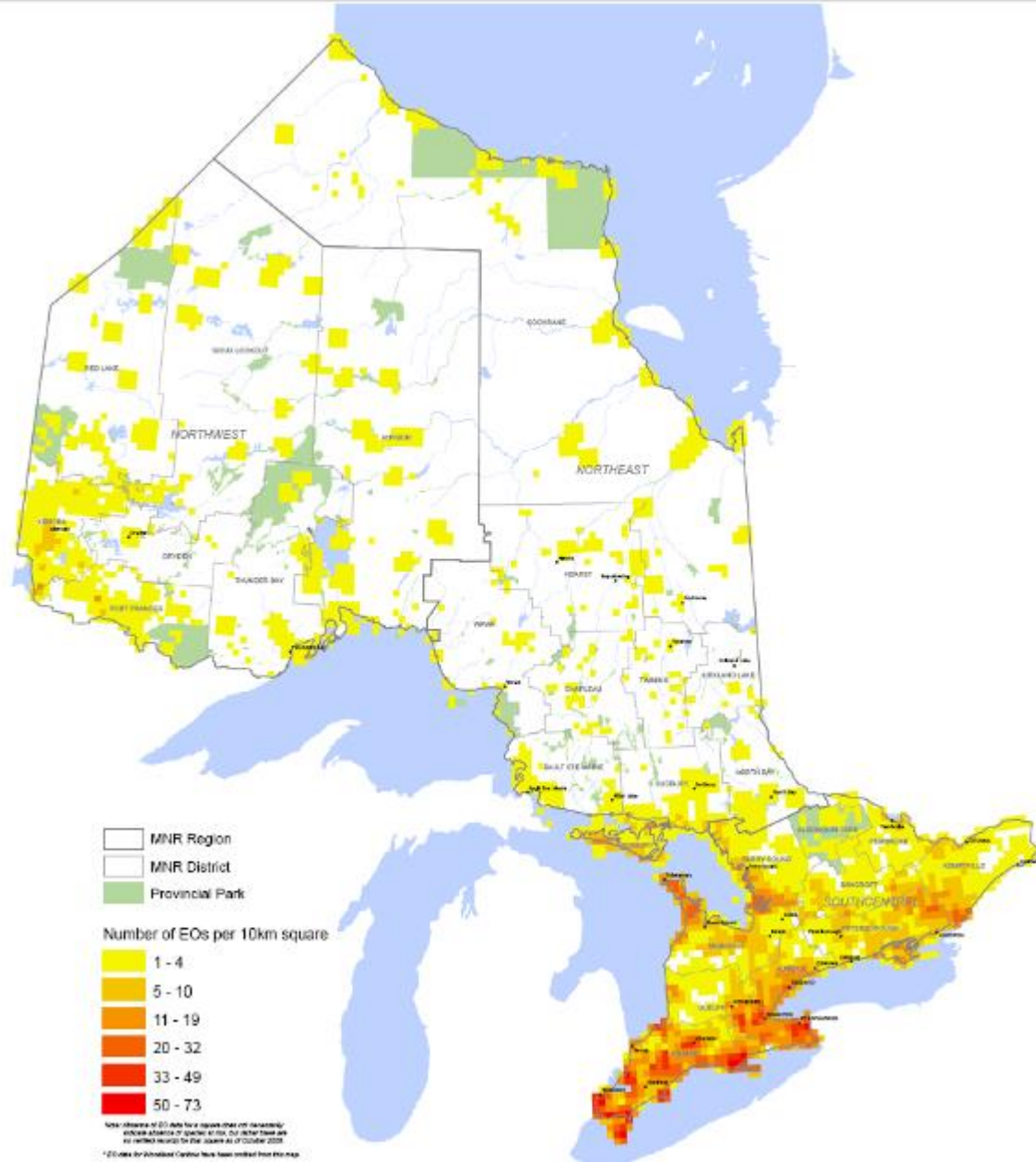
Endangered: A Native species facing extinction or extirpation (e.g. Spotted Gar)

Threatened: A Native species at risk of becoming endangered in Ontario (e.g. Eastern Hog-nosed Snake)

Special Concern: A native species that is sensitive to human activities or natural events which may cause it to become endangered or threatened (e.g. Monarch Butterfly)



Where are Ontario's Species at Risk?



Why do species become at risk?

- Natural Causes (Dinosaurs)
- Disease (Butternut tree)
- Invasive species (Fawnsfoot mussel)
- Over harvesting (American ginseng)
- Climate change (Polar bear)
- Poaching and the pet trade (Wood turtle)
- Environmental Contaminates (Peregrine Falcon - DDT)
- **Habitat loss, alteration or fragmentation (majority of species)**



Our Landscape Today



Fragmentation: breaking up of large continuous habitat patches into smaller patches

Improving Connectivity



Ontario's Endangered Species Act: An Overview

- Came into effect in June 2008
- Provides legal protection for both species and their habitats
- Offers flexibility in order to balance social and economic considerations
- Uses permits and regulation provisions (with stringent conditions) to allow activities that might otherwise be prohibited
- Promotes stewardship activities to help protect and recover species at risk and habitat
- Recognizes Aboriginal interests & knowledge

Least Bittern - Threatened



Purpose of the Endangered Species Act, 2007

- 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 that are at risk.

Application in Ontario

The ESA 2007 is a **law of general application**, which means:

- Binding on everyone (i.e. landowners, corporations, municipal and provincial governments)
- Applies to both private and public lands
- Applies all the time (i.e. regardless of approvals under other legislation)
- MNRF has the only approval authority under the ESA 2007



Species Assessment & Listing

- The Species At Risk in Ontario (SARO) (O. Reg 230/08) list is the regulated list of extirpated, endangered, threatened, and special concern species
- Committee on the Status of Species at Risk in Ontario (COSSARO)
- Automatic listing



Massasauga (END)

Protection under the ESA 2007

Endangered, Threatened and Extirpated Species and their **Habitats** (subject to transition provisions) are legally protected under the ESA.

1) Species Protection (section 9)

No person shall,

(a) kill, harm, harass, capture or take a living member of a species that is listed on the SARO List as an extirpated, endangered or threatened species;

(b) possess, transport, collect, buy, sell, lease, trade or offer to buy, sell, lease or trade,

- i. A living or dead member of a species that is listed as extirpated, endangered or threatened species,
- ii. Any part of a living or dead member of a species referred to in subclause (i),
- iii. Anything derived from a living or dead member of a species referred to in subclause (i).

Protection under the ESA 2007

2) Habitat Protection (section 10)

- Prohibits **damaging or destroying habitat** of endangered or threatened species
 - Protected habitat is either based on the general definition (**General Habitat Protection**) in the Act or prescribed through a regulation (**Regulated Habitat Protection**)
 - General habitat descriptions exist for some species with general habitat protection
 - Habitat regulation summaries exist for some species with regulated habitat protection
- **note that all END and THR species receive habitat protection**



Categorizing and Protecting Habitat under the Endangered Species Act available online at <http://www.ontario.ca/document/categorizing-and-protecting-habitat-under-endangered-species-act>

What is habitat under the ESA?

In the Act, “Habitat” is defined as [S.2]:

- a) the area prescribed by a regulation made under clause 55(1)(a) of the Act (“**Regulated Habitat**”), or
 - b) an area on which a species depends, directly or indirectly, to carry on its life processes (e.g., reproduction, rearing, hibernation, migration or feeding) (“**General Habitat**”) and includes places used as dens, nests, hibernacula or other residences
- General habitat descriptions exist for some species with general habitat protection
 - Habitat regulation summaries exist for some species with regulated habitat protection

****note that all END and THR species receive habitat protection**



Blanding's Turtle (THR)

ESA Regulation 242/08 Section 23.9: Drainage works

Many drainage projects can be registered online under ESA Regulation 242/08 section 23.9.

- **Projects that involve repair, maintenance, and improvement work under the *Drainage Act* fall under this regulation** and are exempt from some prohibitions under the ESA (e.g. *Drainage Act* Section 74 or 78 requests)
- Some species on the Species at Risk are excluded from the Regulation
 - E.g. Pugnose Minnow, False Hop Sedge
- Drainage Act Section 4 (new drains) **do not** fall under this regulation

ESA Regulation 242/08 Section 23.9: Drainage works

- Requirements:
 - The project must be registered online
 - steps must be taken to minimize the effects to the species
 - **create and implement a mitigation plan for each species**
 - report sightings of rare species
 - report on species and activities each year
- **Hire a professional!**



ESA Advice: Mitigation & Avoidance

- Timing windows
- Relocation of work
- Sediment control
- Avoidance of key habitat features
- Species exclusion (e.g. nets, fencing)
- Surveys for SAR species and/or habitat features



Incidental Encounters with Species at Risk

- Temporarily stop the activity to allow mobile species (snakes, turtles, amphibians) to leave the area
- Implement procedures for protecting and handling species if encountered during sensitive periods
- Collect and store dead individuals and contact MNRF to arrange for transfer



New Drains

- Where the construction of a new drain may impact extirpated, threatened or endangered species, options to avoid contravening the Act should be determined using the best available information including information obtained from MNRF.
- Can the impact be avoided?
- Where the impact cannot be avoided:
 - a Permit may be required



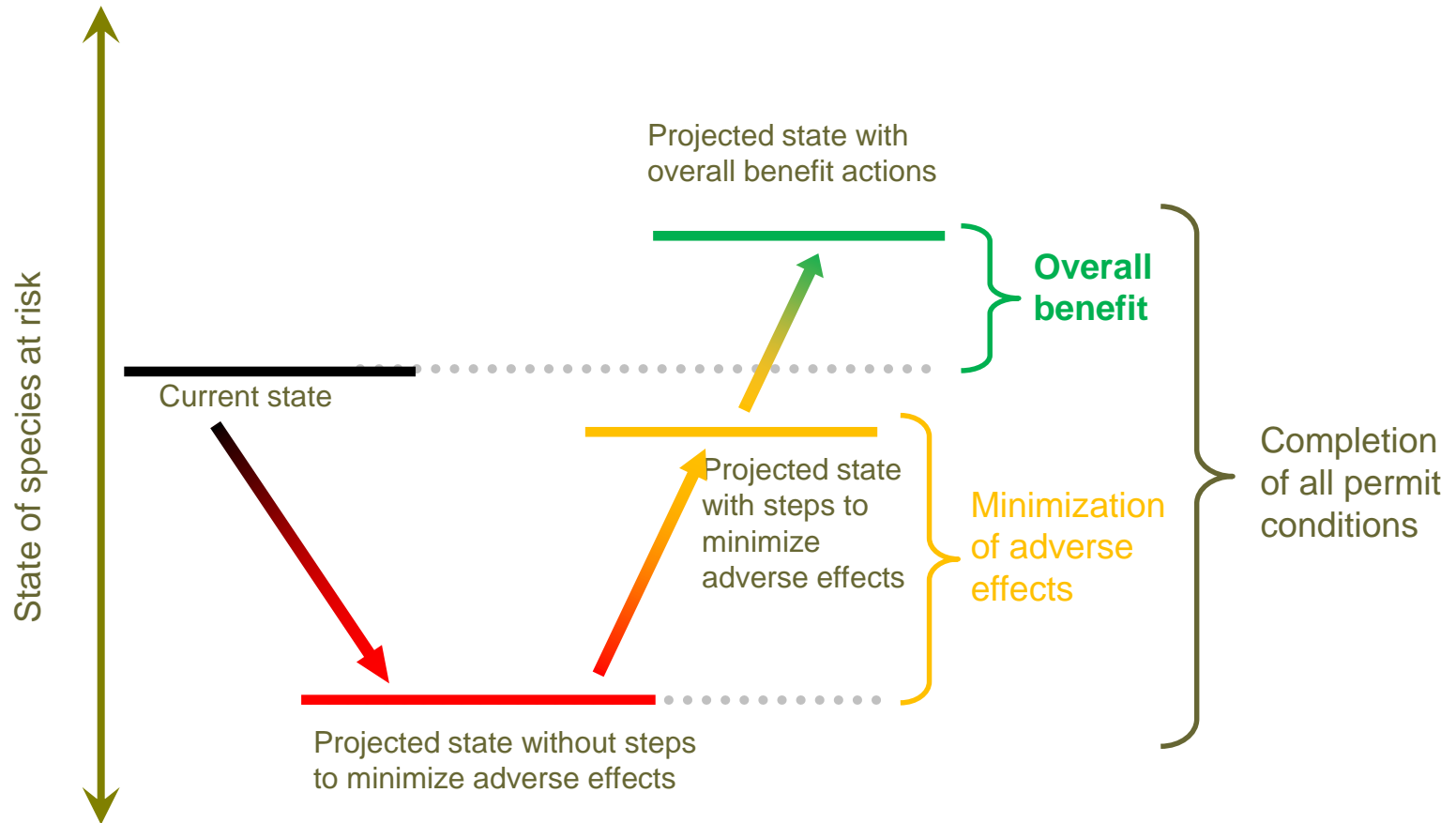
Authorizations

Authorizations provide flexibility to allow activities to occur that might otherwise be prohibited

- Permits under Section 17 of the ESA 2007:
 - 17(2)(a) = Human health and safety
 - 17(2)(b) = Protection or recovery of the species
 - 17(2)(c) = Purpose isn't protection or recovery (i.e. overall benefit)
 - 17(2)(d) = Social or economic benefit to Ontario
- Generally, only 'A' and 'C' permits would be applicable to Drain Construction and/or maintenance activities.
- Costly and time consuming process



17(2)c ESA Permit - Overall Benefit



What to do?

- A. Plan ahead
- B. Determine if Species At Risk are known to occur in the area and if the activity will adversely effect Species At Risk or protected habitat
- C. Minimize and/or avoid adverse effects
- D. Avoidance not possible



A: Plan Ahead

- Why?
 - Provides time to review existing data, sensitive area maps, locations, etc.
 - Provides time to schedule work to occur outside of the sensitive period(s)
 - Provides time to collect additional information where required – seasonal surveys
 - Provides time to work with other approval agencies to coordinate approaches (if required)
 - If required, time is needed to develop, consult on and seek approval for a permit

B: Species at Risk Occurrences and Impact of Activity on Species at Risk or Protected Habitat

- Review any available screening maps/area descriptions, sensitive period chart
- Review the activities to be undertaken and determine impacts



Black Redhorse (THR)

B: Species at Risk Occurrences and Impact of Activity on Species at Risk or Protected Habitat

Sources of Information:

1. Natural Heritage Information Centre
 - Database = **known** locations (occurrences) for species of conservation concern
 - No occurrence does not mean a species isn't there – no data
2. MNRF Species at Risk Website
3. Contact your local MNRF district office for advice and additional information.
 - Species at risk staff in all districts
 - There may be situations which will require the collection of additional information (information is limited and not complete).

C: Minimize and/or Avoid Adverse Effects

If you cannot avoid adverse effects...

- Follow a Mitigation Plan and Best Practices including (timing windows, modified management practices, minimize disturbance, habitat creation, etc.)

For Example:

- Take reasonable steps to minimize effects during critical periods (e.g. hibernation, overwintering, or reproduction).
- If an animal is encountered during operation, a person must cease operations in the area and provide the animal with time to leave the area prior to continuing operations.
- Control erosion and siltation where possible.
- If the species is a turtle, water levels must not be reduced where the species is likely to be hibernating.

D: Avoidance Not Possible

- Where impacts to SAR and/or SAR habitat cannot be avoided a permit may be required.
- Requirements may include: field surveys at appropriate times of the year; mitigation & avoidance measures; creation/enhancement of compensation habitat; creation/enhancement of key habitat features; increase in the number of individuals of a species
- Timely and costly process
 - Hire a professional



Engaging MNRF

Prior to Engaging MNRF

Proponents are expected to consult:

- Make a Map / NHIC / Biodiversity Explorer / LIO Datasets / DFO Data
- Species at Risk in Ontario (**SARO**) List

When to Engage MNRF

- When it is anticipated that a project may impact SAR species and/or their habitat OR if there is **uncertainty** if the project will impact SAR species and/or their habitat

How to Engage MNRF

- ESA specific emails (e.g. ESA.Aylmer@ontario.ca, ESAGUELPH@ontario.ca)

****Recommend engaging MNRF as early as possible**



Butternut (END)

Potential Responses from MNRF

- Information Requests:
 - Provide a list of species/confirm list of species
 - Indicate high or low potential for SAR and/or habitats
 - Intended to inform fieldwork and what additional measures may be required to avoid contravening the ESA
 - Preliminary response from MNRF – may require additional information/action
- Project Screenings:
 - Review documents provided and determine if contravention is **LIKELY** to occur or **NOT LIKELY** to occur
 - Letter of Advice with project specific mitigation and/or avoidance measures
 - Registration required
 - Permit required



Drooping Trillium (END)

Case Study

Project description: 3km full cleanout on an open channel drain through agricultural land and a 2 km full cleanout through a woodlot

1. Conduct SAR screening.

2. Contact MNRF for identification of restricted species.

- Species ID necessary for completion of mitigation plan
- Species may be exempted from the drainage works regulation



NHIC findings:

- Batternut
- Eastern Hog-nosed Snake
- Restricted species

MNRF Response:

- Restricted species = spotted turtle
- Works fall under drainage works regulation; all conditions specified in regulation must be met (e.g. mitigation plan)

Case Study Continued

3. Create and implement a mitigation plan for each species

- Key measures may include: minimize works (e.g. spot cleanout where possible; timing windows to avoid sensitive period for species (e.g. over-wintering); SAR plant surveys; avoidance of key habitat features (rock piles); if any brushing occurs in drainage works, woody debris may be kept on-site to create brush piles for snakes

4. Register the project online (before works begin)

Refer to:

<https://www.ontario.ca/page/ditch-and-drainage-work-and-endangered-or-threatened-species>

5. Report sightings of rare species

Update registration documents (if needed)

6. Report on species and activities each year

Learn More

- MNRF's species at risk website – <https://www.ontario.ca/page/species-risk>
- Endangered Species Act, 2007 – http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm
- Ontario Regulation 242/08 – http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_080242_e.htm
- Species at Risk in Ontario List – http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_080230_e.htm



Least Bittern (THR)

Questions?



Blanding's Turtle (THR)