

Species at Risk Act (SARA) Consultation, Cooperation and Accommodation Project

Road Mortality –

Reducing the Threat Together Workshop

Participant Summary Report

Hosted By:

Environment and Climate Change Canada –
Canadian Wildlife Service

Created by:

The Centre for Indigenous Environmental Resources (CIER)

November 2022



CIER

Centre for Indigenous
Environmental Resources

Acknowledgements

The Centre for Indigenous Environmental Resources (CIER) and Environment and Climate Change Canada, Canadian Wildlife Service (ECCC-CWS) would like to thank the participants that attended the virtual *Species at Risk Act (SARA) Consultation, Cooperation, and Accommodation Project* workshop titled Road Mortality – Reducing the Threat Together on Tuesday, November 29th, 2022.

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Introduction

The objective of the multi-year *Species at Risk Act (SARA) Consultation, Cooperation and Accommodation Project* is to facilitate Indigenous communities' and organizations' participation in Environment and Climate Change Canada's (ECCC) listing and recovery planning processes for terrestrial species as part of implementing the federal *Species at Risk Act (SARA)*. Each region will focus their resources on an area of study and development that maximizes efforts to each species.

The Centre for Indigenous Environmental Resources (CIER) role is to support and facilitate a range of activities between Indigenous communities and organizations, and ECCC on developing recovery documents, sharing knowledge and language, addressing threats to terrestrial species at risk survival and recovery, and land use planning for species at risk on reserve lands and within traditional territories. CIER also manages the provision of funds on behalf of ECCC, including: SARA participation fees, capacity funding and Expression of Interest funding for Indigenous-led species at risk (SAR) projects.

The information was shared through four presentations as follows:

- Working Together on Reducing Road Mortality for Wildlife
- Road Mortality Abatement Structures within National Parks
- Rattlesnakes and Roads: a Case Study from the South Okanagan
- Monitoring, Assessment and Enhancement of Badger Passage Through Highway 97 Drainage Culverts Between 100 Mile House and Williams Lake, B.C.

Following the presentations there was a fruitful discussion period in which all participants were invited to share their experiences with many species at risk animals, amphibians, and reptiles to discuss ongoing concerns and discover other projects of interest brought forth by the various communities and organizations.

Participants

The invite for this online event was distributed by ECCC to their First Nation contacts and in total, 16 individuals attended on the day. These 16 participants (not including CIER and ECCC staff) represented 13 Indigenous nations or organizations.

Workshop Purpose

Road mortality is a serious problem for many wildlife species in British Columbia, especially the American Badger. This workshop aimed to build upon past and present efforts to secure the long-term well-being of American Badger and other wildlife populations and provide an opportunity to strengthen Nation-to-Nation relationships by meaningfully including Indigenous perspectives, knowledge, and science while working together to reduce road mortality.

The Road Mortality – Reducing the Threat Together workshop was held to provide an opportunity for participants to discuss the possible impacts of road crossings on species listed as at risk or otherwise and learn about other projects communities and organizations are implementing. The workshop aimed to create an ethical space for participants to voice comments or concerns for inclusion in the public record to help inform and provide recommendations for future management planning.

Specific objectives of the workshop included:

- Communicate details of the federal process for assessing and potentially listing road mortality species under the *Species at Risk Act (SARA)*;

- Discuss the current status of road mortality species at risk including threats and reasons for the COSEWIC designation;
- Give space for participants to speak to the significance of road mortality species for their communities and voice comments or concerns about the potential management, and mitigation recovery listing of animals, amphibians, and reptiles;
- Provide a venue to build relationships and start a broader discussion on the recovery of animals, amphibians, and reptiles in B.C.;
- Have regional ECCC staff available to engage in a Q&A to clarify the Species at Risk recovery process and/or available funding opportunities to support Indigenous participation;
- Allow participants to provide verbal comments or concerns about the animals, amphibians, and reptiles included in this Road Mortality workshop and potential listing.

Overview of Presentations

Presentation 1: Workshop Background and Context

Presenter: Undiné Thompson, R.P. Bio, and Megan Harrison, Canadian Wildlife Service - Environment and Climate Change Canada

Email: undine.thompson@ec.gc.ca, megan.harrison@ec.gc.ca

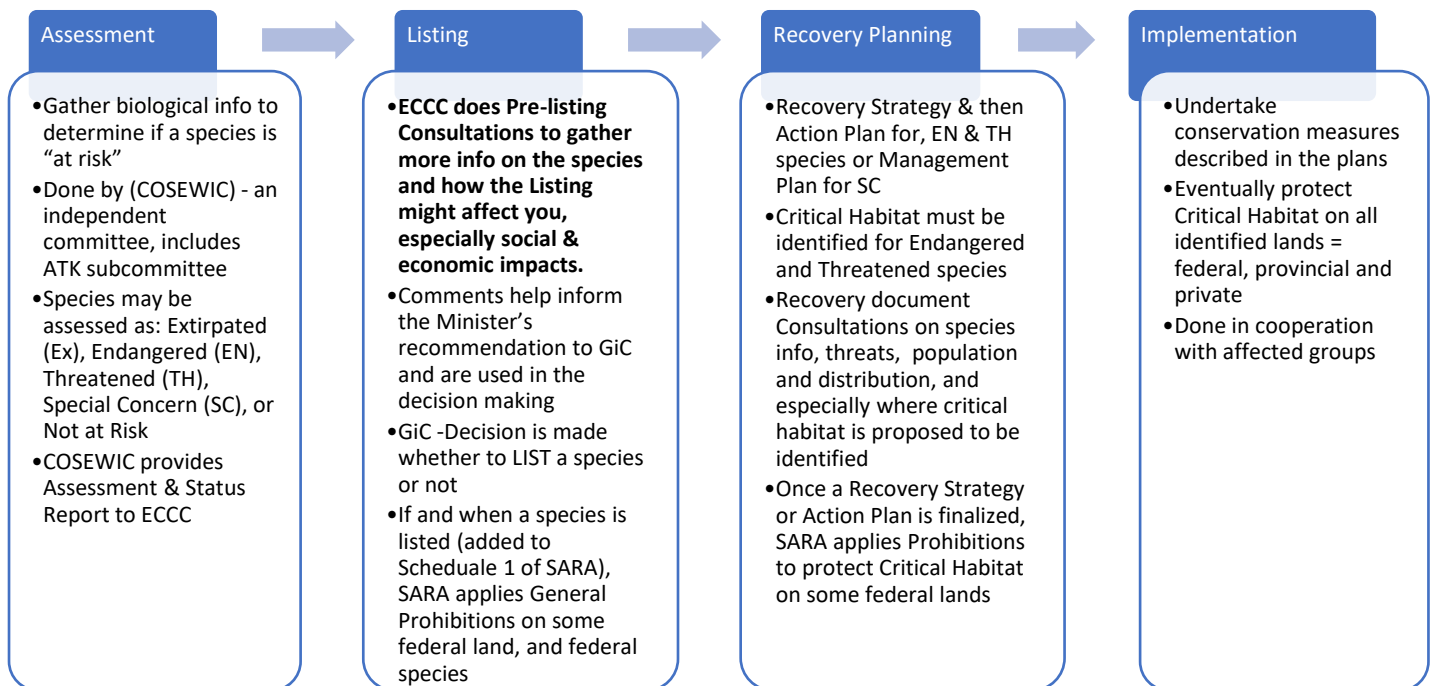
The objective for this presentation by ECCC-CWS was to share information about the federal process regarding the American Badger and an overview of population, net loss, critical habitat, rearing habitat, and bio-physical habitat data under the *Species at Risk Act* (SARA).

The *Species at Risk Act* is intended to protect wildlife species at risk in Canada and work in a complementary fashion with Provincial legislation to allow for the recovery of those species and their habitats.

When deciding whether to list a species, the Minister considers:

- Recommendations from the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Aboriginal Traditional Knowledge sub-committee;
- If the species supports livelihoods (e.g., through harvesting, subsistence, or medicine);
- Potential impacts to people's activities including cultural, social, or economic costs or benefits to individuals, communities, or organizations IF wild Plains Bison is listed;
- Any current/planned activities that may overlap the species' range or harm the species and/or destroy part of its habitat;
- Any other information people choose to share during consultation.

Figure 1. The SARA process as it relates to the road mortality of animals, reptiles, and amphibians
Adapted from SARA presentation by Wendy Eskowich, ECCC–CWS. Species are generally re-assessed every 10 years.



Presentation 2: Working Together on Reducing Road Mortality for Wildlife

Presenters: Leigh Anne Isaac, R.P.Bio, Small Mammal and Herpetofauna Specialist, and Karina Lamy, R.P.Bio, Carnivore Biologist, Ministry of Land, Water, and Resource Stewardship.

Email: leighanne.isaac@gov.bc.ca, karina.lamy@gov.bc.ca

The objective of this second presentation was to provide participants with an overview of the historical and current situation of the road mortality of wildlife, particularly herpetiles (reptiles and amphibians), and their status within the SARA recovery planning process. Topics included:

- The resources required to implement road mortality prevention, for example, large overpass structures can be as much as 8 million dollars; and,
- A look into two- or three-year mitigation projects in B.C.: Summit, Baines Lake, and Ucluelet.

Discussion with questions and answers:

Q: Will deer fencing along highways also work for badgers and amphibians?

A: The smaller underpasses need to be cleared completely out and often of gravel and sand. Maintenance dollars are hard to find and amphibians and snakes are good climbers.

Q: Is repurposing/modifying existing drainage structures (culverts) for animal crossing advisable?

A: The engineering and maintenance of underpass fencing for amphibians and snakes must be right to support the repurposing of water flow, ice removal, clog up by logs, and debris.

Q: Where is the best place to report roadkill observations?

A: Alberta Wildlife Watch is an amazing tool for wildlife/human safety that can be applied for our purposes in B.C. We will also provide links to some resources.

Links shared:

<https://albertawildlifewatch.ca/>

<https://badgers.bc.ca/>

#ReportABadger at <https://badgers.bc.ca/report-a-badger/>

<https://www.inaturalist.org/projects/canadian-amphibians-reptiles-on-roads>

<https://huntersforbc.ca/badger-ambassador-awareness-program/>

Here is a short video introducing the amphibian & reptile road guidance document produced in 2020:

<https://www.youtube.com/watch?v=Tix77RdPMxk>

<https://bcreptilesandamphibians.trubox.ca/>

Presentation 3: Road Mortality Abatement Structures within National Parks

Presenter: Trevor Kinley, Highway Engineering Services, Parks Canada

Email: trevor.kinley@pc.gc.ca

Key Themes:

- Experiences with large-mammal wildlife crossing projects;
- More recent amphibian and reptile work;
- Focus on terrestrial wetlands, not fish.

Underpasses, overpasses, and opportunistic over and underpasses are key to the many SAR in the 5 National Park discussed; 1) Pacific Rim National Park Reserve; 2) Glacier National Park; 3) Waterton Lake National Park; 4) Bruce Peninsula National Park; 5) Kouchibouquac National Park.

Discussion with questions and answers:

Q: Are the culverts mapped?

A: No, but they are checked by riding a bike to generally check culverts.

Presentation 4: Rattlesnakes and Roads: Case Study from the South Okanagan

Presenter: Karl Larsen Department of Natural Resources Sciences, Thompson Rivers University

Email: klarson@tru.ca

Key Themes from the presentation, noting no comments from the participants:

- Rattlesnake Ecology: Road mortality rate is at 6%
- STEP 1: What are the roadkill rates?
- STEP 2: What is the impact on the population?
- STEP 3: Can we reduce the impact?
- Try mitigating the impact and monitor for effectiveness in the immediate and long-term.

Presentation 5: Monitoring, Assessment and Enhancement of Badger Passage Through Highway 97 Drainage Culverts Between 100 Mile House and Williams Lake, BC

Presenter: Roger Packham, a mostly retired biologist at 100 Mile House, B.C.

Email: roger.m.packham@gmail.com

Key Themes from the presentation, noting no comments from the participants:

- Monitoring drainage culverts we know are used by badgers and other wildlife to cross Highway 97 in the interior region of the province.

<https://badgers.bc.ca/report-a-badger/for%20badger>

Key Themes/Discussion Summary

- *Loss of traditional knowledge of wildlife*
 - Due to residential schools and colonization in all its forms and the drastic decline in numbers after settlers arrived, many cultural practices, ways of knowing/life and economies regarding wildlife were not passed down through the generations.
 - However, there is hope for revitalization of this knowledge, as one participant put it, "We are re-learning what we were unable to learn for decades."
- *Support livelihoods*
 - As the population numbers are very low, it can be difficult to exercise harvesting/treaty rights.
 - Some Indigenous Peoples still hunt according to their traditional cultural practices.
 - Sustainability is inherent in traditional harvesting practices.
 - Several participants raised concern around the uncertainty and lack of a clear answer as to whether listing would affect Indigenous hunting rights.
- *Listing under the SARA*
 - General support for the listing of wildlife to ensure their protection.

- Aboriginal and Treaty rights must be recognized and respected; further engagement is required.
- *Additional comments*
 - Confusion around jurisdiction (Provincial or Federal 'ownership' of the land/leasing of the land). For example, the Indigenous, treaty, federal, and provincial authority, and jurisdictions of Indigenous access to parts of it for social, ceremonial, and harvesting activities.
 - Mostly roads, recreation and industry have 'taken over' wildlife habitat.
 - Skepticism remains regarding the inclusion of Indigenous groups/communities now, after years of being disregarded on account of the historical/current relationship of settlers and Indigenous Peoples where systemic racism and disenfranchisement has been prevalent.
 - Uncertainty around wild vs ranched vs cultural/conservation and how this applies to SARA listing, especially in relation to previously captive escapees.
 - Curiosity of the level of involvement/influence that other non-Indigenous organizations (stakeholders) have on the listing decision.
 - In-person workshops would be beneficial for the participation of older generations in SARA listing consultations.

Appendix A: Agenda

AGENDA		
9:00 – 9:15 am	Welcome Introductions Housekeeping	Kate Hewitt Centre for Indigenous Environmental Resources
9:15 – 9:30 am	Workshop Background and Context Q&A	Undiné Thompson and Megan Harrison Canadian Wildlife Service- Environment and Climate Change Canada
9:30 – 9:55 am	Working Together on Reducing Road Mortality for Wildlife Q&A	Karina Lamy and Leigh-Anne Isaac Ecosystems Branch, BC Ministry of Land, Water, and Resource Stewardship
9:55 – 10:20 am	Road Mortality Abatement Structures within National Parks Q&A	Trevor Kinley Parks Canada
10:20 – 10:35 am	Health Break (15 minutes)	
10:35 – 11:00 am	Rattlesnakes and roads: a Case Study from the South Okanagan Q&A	Karl Larsen Department of Natural Resource Sciences, Thompson Rivers University
11:00 – 11:25	Monitoring, Assessment and Enhancement of Badger Passage Through Highway 97 Drainage Culverts Between 100 Mile House and Williams Lake, BC Q&A	Roger Packham Mostly retired biologist
11:25 – 11:55 am	Discussion	
11:55 – 2pm	Closing	