

### **HIGHWAY 413 PROJECT**

# Key Risks to Federal Terrestrial Species at Risk

Federal Provincial Working Group

June 18, 2024



### Objective

 Brief on risks to federal terrestrial species at risk (SAR) under SARA as a result of the Highway 413 Project

 Provide details on federal SAR concerns that can be used as discussion points at future bilateral federal-provincial Working Group meetings

### Key Authorities under SARA

#### Permitting (SARA s.73)

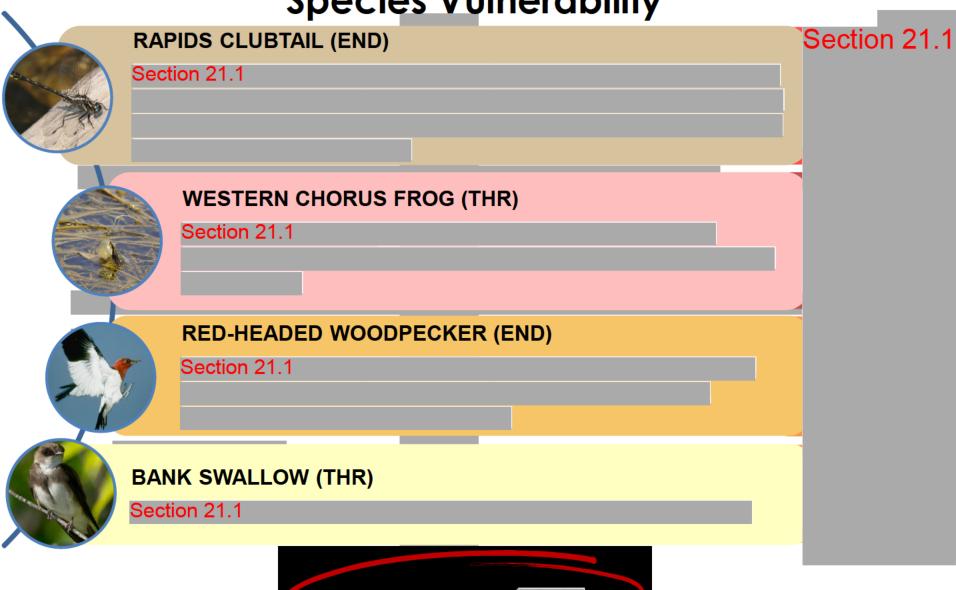
- SARA-listed migratory bird species individuals and their residences are protected under SARA everywhere in Canada (s.32-33)
- Minister may issue a permit for an activity affecting a SARA-listed species
- Pre-conditions must be met (s.73(3)):
  - All reasonable alternatives to the activity have been considered and the best solutions for the species have been adopted;
  - All feasible measures will be taken to minimize the impact of the activity on the species and their habitat; and
  - The activity will not jeopardize the survival and recovery of the species.

### **Emergency Orders (SARA s.80)**

- The Minister must recommend to GIC to make an emergency order to provide for the protection of a species if he is of the opinion that the species faces imminent threats to its survival or recovery
- ECCC welcomes the opportunity to review and collaborate with Ontario on mitigation plans to reduce this risk.

# Section 21.1

Risk Characterization Summary Species Vulnerability



# **SARA Permitting - RHWO Residence**

- Cavity trees used for nesting or roosting by the Red-headed Woodpecker (RHWO) are considered residence year-round because the species is likely to reuse them in consecutive years
- A residence for RHWO is protected until it is documented to not have been used for two consecutive years. Residence damage or destruction would contravene SARA, unless done under the authority of a SARA permit
- To determine whether a SARA permit is needed, the proponent should provide detailed occurrence data, mapped suitable habitat within the proposed Project footprint, and a description of the proposed activities in relation to the mapped suitable habitat

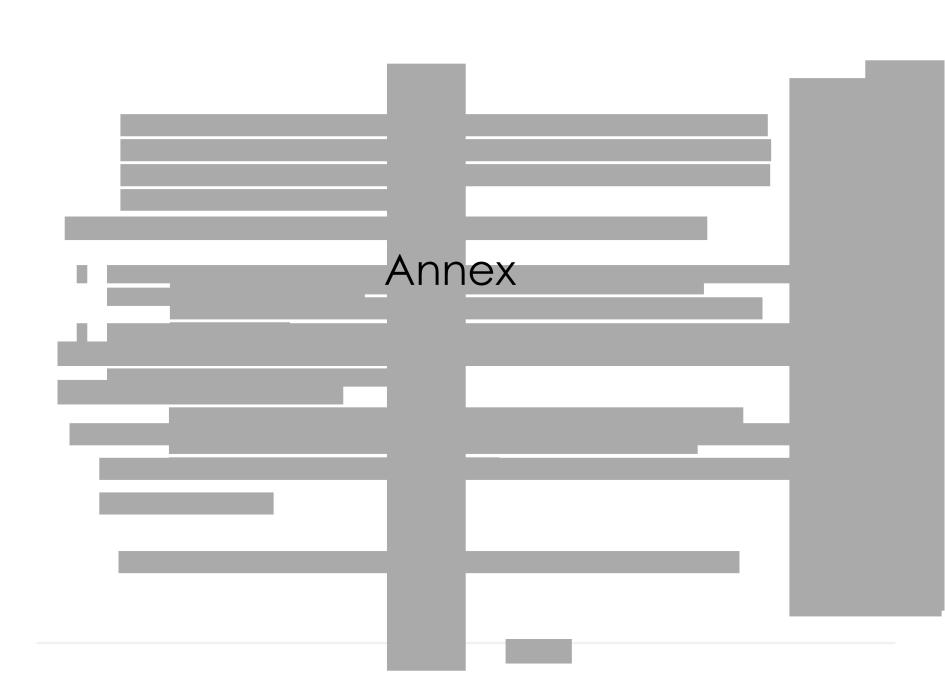
## Preliminary Advice on Mitigation

- Currently, CWS is not aware of a plan to follow a mitigation hierarchy for terrestrial SAR that would ensure impacts are mitigated sufficiently and provide assurances that recovery objectives would not be jeopardized.
- For both WCF and especially for RACL avoidance of adverse effects will be key as CH may be very challenging or impossible to offset.
- Section 21.1

### Policy and Legal Risks

- ENGO interest and increased media attention
  - The request to designate the Project was received from Ecojustice on behalf of Environmental Defence
  - Project is located within the Greenbelt
- Section 21.1

- Mississaugas of the Credit First Nation and Six Nations of the Grand River raised concerns related to the cumulative effects on the exercise of section 35 rights of Indigenous Peoples in Canada
- Mississaugas of the Credit First Nation is of the view that as their traditional territory becomes more urbanized due to projects like the Highway 413, they continue to lose space where their community can perform ceremonies and exercise their harvesting rights



## Risks to Other Federally-Listed SAR\*

| Acadian Flycatcher Endangered Endangered Special Concern Barn Swallow Threatened Special Concern Bobolink Threatened Threatened Special Concern Black Ash Threatened (COSEWIC) Endangered Endangered Endangered Endangered Black Ash Threatened (COSEWIC) Endangered End |                        | 2 10 C          |                       |                     | erany-  |                      |                       |
|--|------------------------|-----------------|-----------------------|---------------------|---|----------------------|-----------------------|
| Acadian Flycatcher Endangered Endangered Barn Swallow Threatened Special Concern Bobolink Threatened Threatened Special Concern Bobolink Threatened Threatened Canada Warbler Threatened Threatened Threatened Common Nighthawk Special Concern Common Nighthawk Special Concern Special Concern Threatened Threatened Threatened Threatened Threatened Eastern Meadowlark Threatened Threatened Threatened Threatened Threatened Eastern Whip-poor-will Threatened Threatened Threatened Eastern Whip-poor-will Threatened Threatened Special Concern Special | Species                | SARA Status     | Provincial ESA Status |                     | Species   | SARA Status          | Provincial ESA Status |
| Barn Swallow Threatened Special Concern Bobolink Threatened Threatened Threatened Special Concern Black Ash Threatened (COSEWIC) Endangered Bobolink Threatened Threatened Special Concern Black Ash Threatened (COSEWIC) Endangered Endangered Endangered Chimney Swift Threatened Threatened Dense Blazingstar Threatened Threatened Common Nighthawk Special Concern Special Concern Special Concern Eastern Meadowlark Threatened Threatened Threatened Eastern Whip-poor-will Threatened Threatened Eastern Whip-poor-will Threatened Threatened Special Concern Special  | Birds                  |                 |                       | Section 21.1        | Plants  |                      |                       |
| Bobolink Threatened Threatened Special Concern Butternut Endangered Endangered Common Nighthawk Special Concern Special Concer | Acadian Flycatcher     | Endangered      | Endangered            |                     | American Chestnut   | Endangered           | Endangered            |
| Canada Warbler Threatened Special Concern Chimney Swift Threatened Threatened Threatened Threatened Threatened Dense Blazingstar Threatened Threatened Threatened Common Nighthawk Special Concern Special Concern Special Concern Eastern Headowlark Threatened Threatened Eastern Howering Dogwood Endangered Unisexual Ambystoma (Lefferson Salamander Endangered Endangered Endangered Endangered Unisexual Ambystoma (Lefferson Salamander Endangered Endangered Endangered Endangered Unisexual Ambystoma (Lefferson Salamander Endangered Endan | Barn Swallow           | Threatened      | Special Concern       |                     | American Columbo  | Endangered           | Endangered            |
| Chimney Swift Threatened Threatened Special Concern Special Co | Bobolink               | Threatened      | Threatened            |                     | Black Ash   | Threatened (COSEWIC) | Endangered            |
| Eastern Flowering Dogwood Endangered Endangered Eastern Meadowlark Threatened Threatened Eastern Whip-poor-will Threatened Threatened Eastern Whip-poor-will Threatened Special Concern Special Concern Solden-winged Warbler Threatened Special Concern Grasshopper Sparrow Special Concern Special Concern Henslow's Sparrow Endangered Endangered Eastern Milksnake Special Concern Not at Risk Endangered Endangered Eastern Milksnake Special Concern Not at Risk Eastern Milksnake Special Concern Special Concern Least Bittern Threatened Threatened Endangered Endangered Endangered Endangered Endangered Endangered Endangered Endangered Eastern Milksnake Special Concern Not at Risk Eastern Milksnake Special Concern Special Concern Jefferson Salamander Endangered Endangered Mildland Painted Turtle Special Concern Not at Risk Louisiana Waterthrush Threatened Threatened Dilive-sided Flycatcher Special Concern Special Concern Prothonotary Warbler Endangered Endangered Short-eared Owl Special Concern Threatened Wood Thrush Threatened Special Concern Mammals  Eastern Flowering Dogwood Endangered Eastern Flowering Dogwood Endangered Endangered Endangered Endangered Endangered Endangered Eastern Flowering Dogwood Endangered Endangered Endangered Endangered Endangered Endangered Eastern Flowering Dogwood Endangered Endanger | Canada Warbler         | Threatened      | Special Concern       |                     | Butternut   | Endangered           | Endangered            |
| Eastern Meadowlark Threatened Threatened Threatened Eastern Whip-poor-will Threatened Threatened Threatened Eastern Whip-poor-will Threatened Threatened Special Concern Not at Risk Special Special Concern S | Chimney Swift          | Threatened      | Threatened            |                     | Dense Blazingstar   | Threatened           | Threatened            |
| Eastern Whip-poor-will Threatened Threatened Special Concern S | Common Nighthawk       | Special Concern | Special Concern       |                     | Eastern Flowering Dogwood   | Endangered           | Endangered            |
| Eastern Wood-pewee Special Concern Subspecies Endangered Endangered Shrike, Eastern Subspecies Endangered Endangered Shrike, Eastern Special Concern Special C | Eastern Meadowlark     | Threatened      | Threatened            |                     | Eastern Prairie Fringed-orchid  | Endangered           | Endangered            |
| Golden-winged Warbler Grasshopper Sparrow Special Concern Henslow's Sparrow Endangered Eastern Milksnake Special Concern Special Concern Special Concern Not at Risk Eastern Musk Turtle Special Concern Special Concern Special Concern Midland Painted Turtle Special Concern Not at Risk S | Eastern Whip-poor-will | Threatened      | Threatened            |                     | Purple Twayblade  | Threatened           | Threatened            |
| Grasshopper Sparrow Special Concern Special Concern Blanding's Turtle Endangered Threatened Eastern Milksnake Special Concern Not at Risk Eastern Milksnake Special Concern Subspecies Endangered Endangered Midland Painted Turtle Special Concern Not at Risk Snapping Turtle Special Concern Not at Risk Snapping Turtle Special Concern Sp | Eastern Wood-pewee     | Special Concern | Special Concern       |                     | Red Mulberry  | Endangered           | Endangered            |
| Henslow's Sparrow  Endangered  Eastern Milksnake  Eastern Musk Turtle  Special Concern  Special Concern  Special Concern  Special Concern  Special Concern  Midland Painted Turtle  Special Concern  Not at Risk  Shapping Turtle  Special Concern  Special Concern  Special Concern  Not at Risk  Snapping Turtle  Special Concern  Anthropods  Anthropods  American Bumblebee  Special Concern  Endangered  En | Golden-winged Warbler  | Threatened      | Special Concern       | Reptiles/Amphibians |   |                      |                       |
| King Rail Endangered Endangered Endangered  Least Bittern Threatened Threatened  Loggerhead Shrike, Eastern subspecies  Louisiana Waterthrush Threatened Endangered  Olive-sided Flycatcher Special Concern Special Concern  Prothonotary Warbler Endangered Endangered  Short-eared Owl Special Concern Threatened  Wood Thrush Threatened Special Concern Threatened  Wood Thrush Threatened Special Concern Endangered  Midland Painted Turtle Special Concern Special Concern Special Concern Special Concern Special Concern Spiny Softshell Endangered Endangered  Unisexual Ambystoma (Jefferson Salamander dependant population)  Mammals  Eastern Milksnake Special Concern Special Concern Special Concern Special Concern Not at Risk  Eastern Musk Turtle Special Concern Special Concern Not at Risk  Eastern Musk Turtle Special Concern Not at Risk  Snapping Turtle Special Concern Special Concern Spiny Softshell Endangered Endangered  Unisexual Ambystoma (Jefferson Salamander dependant population)  Anthropods  American Bumblebee Special Concern Special Concer | Grasshopper Sparrow    | Special Concern | Special Concern       |                     | Blanding's Turtle   | Endangered           | Threatened            |
| Least Bittern Threatened Threatened Threatened Jefferson Salamander Endangered Endangered Endangered Midland Painted Turtle Special Concern Not at Risk Snapping Turtle Special Concern Unisexual Ambystoma (Jefferson Salamander dependant population) Endangered Endangered Special Concern  | Henslow's Sparrow      | Endangered      | Endangered            |                     | Eastern Milksnake   | Special Concern      | Not at Risk           |
| Loggerhead Shrike, Eastern subspecies  Endangered  Endangered  Endangered  Endangered  Endangered  Midland Painted Turtle  Special Concern  Not at Risk  Snapping Turtle  Special Concern  Unisexual Ambystoma (Jefferson Salamander  dependant population)  Wood Thrush  Threatened  Special Concern  Anthropods  American Bumblebee  Special Concern  Special Concern  Special Concern  Endangered  Endangered  Endangered  Endangered  Endangered  Endangered  Anthropods  American Bumblebee  Special Concern  Monarch  Endangered  Endangered  Endangered  Endangered  Endangered  Endangered  Endangered  Endangered  Anthropods  American Bumblebee  Special Concern  Special Concern  Special Concern   | King Rail              | Endangered      | Endangered            |                     | Eastern Musk Turtle   | Special Concern      | Special Concern       |
| Subspecies  Louisiana Waterthrush  Threatened  Threatened  Dive-sided Flycatcher  Prothonotary Warbler  Special Concern  Special Concern  Endangered  Endangered  Frothonotary Warbler  Special Concern  Endangered  Endangered  Endangered  Unisexual Ambystoma (Jefferson Salamander dependant population)  Wood Thrush  Threatened  Special Concern  Endangered  Endangered  Endangered  Endangered  Endangered  Midland Painted Turtle  Special Concern  Special Concern  Special Concern  Endangered  Endangered  Endangered  Endangered  Endangered  Manthropods  Anthropods  American Bumblebee  Special Concern  Monarch   | Least Bittern          | Threatened      | Threatened            |                     | Jefferson Salamander  | Endangered           | Endangered            |
| Colive-sided Flycatcher  Special Concern  Prothonotary Warbler  Endangered  Endangered  Endangered  Special Concern  Frothonotary Warbler  Short-eared Owl  Special Concern  Threatened  Special Concern  Threatened  Special Concern  Threatened  Wood Thrush  Threatened  Special Concern  Threatened  Special Concern  Anthropods  American Bumblebee  Special Concern  Monarch  Endangered  Endangered  Endangered  Endangered  Special Concern  Special Concern  Special Concern  | ,                      | Endangered      | Endangered            |                     | Midland Painted Turtle  | Special Concern      | Not at Risk           |
| Prothonotary Warbler Endangered Endangered (Jefferson Salamander dependant population)  Wood Thrush Threatened Endangered Endangered Mammals  Warbler Endangered Endangered (Jefferson Salamander dependant population)  Anthropods  American Bumblebee Special Concern Specia | Louisiana Waterthrush  | Threatened      | Threatened            |                     | Snapping Turtle   | Special Concern      | Special Concern       |
| Prothonotary Warbler Endangered Endangered (Jefferson Salamander dependant population)  Wood Thrush Threatened Special Concern Endangered (Jefferson Salamander dependant population)  Anthropods  Yellow-breasted Chat Endangered Endangered Endangered Monarch Endangered Endangered Special Concern Special | Olive-sided Flycatcher | Special Concern | Special Concern       |                     | Spiny Softshell   | Endangered           | Endangered            |
| Short-eared Owl Special Concern Threatened dependant population)  Wood Thrush Threatened Special Concern Anthropods  Yellow-breasted Chat Endangered Endangered Mammals  Mammals  dependant population)  Anthropods  American Bumblebee Special Concern Specia | Prothonotary Warbler   | Endangered      | Endangered            |                     | (Jefferson Salamander   | Endangered           | Endangered            |
| Yellow-breasted Chat Endangered Endangered American Bumblebee Special Concern Special Concern  Mammals Endangered Endangered Endangered Special Concern  | Short-eared Owl        | Special Concern | Threatened            |                     |   |                      |                       |
| Mammals Monarch Endangered Special Concern   | Wood Thrush            | Threatened      | Special Concern       |                     | Anthropods  |                      |                       |
|  | Yellow-breasted Chat   | Endangered      | Endangered            |                     | American Bumblebee  | Special Concern      | Special Concern       |
| Little Brown Myotis Endangered Endangered Rusty-patched Bumblebee Endangered Endangered  | Mammals                |                 |                       |                     | Monarch   | Endangered           | Special Concern       |
|  | Little Brown Myotis    | Endangered      | Endangered            |                     | Rusty-patched Bumblebee   | Endangered           | Endangered            |
|  | Northern Myotis        | Endangered      | Endangered            |                     | *Please note that the risk levels determined for these species fully evaluated and were based on CWS-ON knowledge of the species, habitat preferences, and limited data provided by the |                      |                       |
| Tolored Data Sedemand Sedemand   | Tri-colored Bat        | Endangered      | Endangered            |                     |   |                      |                       |

Proponent

### Unaddrossad Effacts to SAD

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|-----------------------------|-------------------------------------|---|--|--|--|--|
| Pathway of<br>Effect        | Avoidance Measures                  | Minimization Measures   |  |  |  |  |
| DIRECT                      |                                     |   |  |  |  |  |
| Habitat Removal             | Avoid the destruction of habitat by | Partial rerouting of the highway corridor, specifically near the Humber River |  |  |  |  |

outside of these species' habitats Construction · Avoid establishing construction staging areas and materials

Mortalities

INDIRECT

Sensory

Altered

Quality

Disturbance Noise

 Vibration Light Dust

Groundwater/

Surface Water

Quantity and

Discharge of

Barriers and

Fragmentation

Habitat

**Pollutants** 

through Collisions

SAR on both sides of the highway corridor

specifically during critical SAR life stages

SAR on both sides of the highway corridor

critical lifecycle timing windows

of Humber River

pollution from road runoff

pollution from road runoff

like heated pavement

Create overpasses (such as viaducts) wide enough that bridge footings do not impact the

· Providing a buffer zone from known species' occurrences when conducting construction activities

Create overpasses (such as viaducts) wide and tall enough to allow for potential movement of

Maintain a buffer zone from known species' occurrences when conducting construction activities

Minimize construction activities to a specific decibel threshold to reduce impacts to SAR during

Maintain a buffer zone from known species' occurrences when conducting construction activities,

Create overpasses (such as viaducts) wide enough that bridge footings do not impact hydrology

Implement a stormwater management plan to maintain current hydrological cycles and avoid

Creation of stormwater retention ponds for highway runoff (not recommended close to WCF)

Implement a stormwater management plan to maintain current hydrological cycles and avoid

Utilize environmentally friendly alternatives to road de-icing salt, including physical road solutions

Create overpasses (such as viaducts) wide and tall enough to allow for potential movement of

hydrology of the Humber River and limit habitat destruction/disturbance

Partial rerouting of the highway corridor, specifically near the Humber River

Minimize in-water structures or activities that would change flow regimes

Partial rerouting of the highway corridor, specifically near the Humber River

Keeping the footprint of the disturbed area as small as possible

No median in the highway section that crosses the Humber River

Avoid the destruction of nabital by Keeping the footprint of the disturbed area as small as possible rerouting the highway corridor to Road

stockpiles within areas containing

Avoid the destruction of habitat by

rerouting the highway corridor to

outside of these species' habitats

· Avoid major road construction

lifecycle timing windows

activities during critical SAR

· Avoid the destruction of habitat by rerouting the highway corridor to

 Avoid major road construction activities during critical SAR

Avoid the destruction of habitat by

rerouting the highway corridor to

outside of these species' habitats

lifecycle timing windows

outside of these species' habitats

critical habitat for SAR