British Columbia Guide to Recovery Planning
for Species and Ecosystems

Appendix 6. Recovery Plan Template (for Species)

July 2016

**Version 2.2**



Recovery Plan for Species Common Name
(*Scientific name*) in British Columbia

(Include a photograph or illustration of the target for the cover)

Prepared by Team Name or Agency [e.g., B.C. Ministry of Environment]



Month Year



**Month YYYY**

About the British Columbia Recovery Strategy Series

This series presents the recovery documents that are prepared as advice to the Province of British Columbia on the general approach required to recover species at risk. The Province prepares recovery documents to ensure coordinated conservation actions and to meet its commitments to recover species at risk under the *Accord for the Protection of Species at Risk in Canada* and the *Canada–British Columbia Agreement on Species at Risk*.

What is recovery?

Species at risk recovery is the process by which the decline of an endangered, threatened, or extirpated species is arrested or reversed, and threats are removed or reduced to improve the likelihood of a species’ persistence in the wild.

What is a provincial recovery document?

Recovery documents summarize the best available scientific and traditional information of a species or ecosystem to identify goals, objectives, and strategic approaches that provide a coordinated direction for recovery. These documents outline what is and what is not known about a species or ecosystem, identify threats to the species or ecosystem, and explain what should be done to mitigate those threats, as well as provide information on habitat needed for survival and recovery of the species. The provincial approach is to summarize this information along with information to guide implementation within a recovery plan. For federally led recovery planning processes, information is most often summarized in two or more documents that together make up a recovery plan: a strategic recovery strategy followed by one or more action plans used to guide implementation.

Information in provincial recovery documents may be adopted by Environment and Climate Change Canada for inclusion in federal recovery documents that federal agencies prepare to meet their commitments to recover species at risk under the *Species at Risk Act*.

What’s next?

The Province of British Columbia accepts the information in these documents as advice to inform implementation of recovery measures, including decisions regarding measures to protect habitat for the species.

Success in the recovery of a species depends on the commitment and cooperation of many different constituencies that may be involved in implementing the directions set out in this document. All British Columbians are encouraged to participate in these efforts.

For more information

To learn more about species at risk recovery in British Columbia, please visit the B.C. Recovery Planning webpage at:

< <http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/recovery-planning> >

Recovery Plan for Species Common Name
(*Scientific name*) in British Columbia

Prepared by the Team Name or Agency [e.g., B.C. Ministry of Environment]

Month Year

Recommended citation

Recovery Team Name. YEAR. Recovery plan for Species Common Name (*Scientific* *name*) in British Columbia. Prepared for the B.C. Ministry of Environment, Victoria, BC. ## pp.

OR

B.C. Ministry of Environment. YEAR. Recovery plan for Species Common Name (*Scientific* *name*) in British Columbia. B.C. Ministry of Environment, Victoria, BC. ## pp.

Cover illustration/photograph

First and last name

Additional copies

Additional copies can be downloaded from the B.C. Recovery Planning webpage at:

<<http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/recovery-planning>>

Disclaimer

This recovery plan has been prepared by the Name X Recovery Team/Working Group/Agency (e.g., British Columbia Ministry of Environment), as advice to the responsible jurisdictions and organizations that may be involved in recovering the species. The B.C. Ministry of Environment has received this advice as part of fulfilling its commitments under the *Accord for the Protection of Species at Risk in Canada* and the *Canada–British Columbia Agreement on Species at Risk*.

This document identifies the recovery strategies and actions that are deemed necessary, based on the best available scientific and traditional information, to recover Species Common Name populations in British Columbia. Recovery actions to achieve the goals and objectives identified herein are subject to the priorities and budgetary constraints of participatory agencies and organizations. These goals, objectives, and recovery approaches may be modified in the future to accommodate new findings.

The responsible jurisdictions and all members of the recovery team have had an opportunity to review this document. However, this document does not necessarily represent the official positions of the agencies or the personal views of all individuals on the recovery team.

Success in the recovery of this species depends on the commitment and cooperation of many different constituencies that may be involved in implementing the directions set out in this plan. The B.C. Ministry of Environment encourages all British Columbians to participate in the recovery of Species Common Name.

ACKNOWLEDGEMENTS

[insert text]

[Use applicable portions]This recovery plan was prepared by Name of main writer(s). It is based on an earlier draft prepared by Name. Or It builds on/is an update to the Title of document (Reference). Funding for this document was provided by the Agency. Team/Names participated in the threats assessment. Team/Name(s) provided review comments. Agency/Name provided permission to incorporate new information from the interim report title. Agency/Name provided the maps/figures.

RECOVERY TEAM MEMBERS (label and use if appropriate)

First and last name, affiliation

First and last name, affiliation

EXECUTIVE SUMMARY

The Species Common Name (*Scientific name*) is a [brief description] OR

The Species Common Name (*Scientific name*) was designated as Special Concern/Threatened/Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) insert reasons XXXX. It is listed as Special Concern/Threatened/Endangered in Canada on Schedule 1 of the *Species at Risk Act* (SARA). OR It is not yet listed in Canada on Schedule 1 of the *Species at Risk Act* (SARA).[[1]](#footnote-1) OR It is found on Schedule 3 of the *Species at Risk Act* (SARA).[[2]](#footnote-2) In British Columbia, the Species Common Name is ranked S# (description) by the Conservation Data Centre and is on the provincial Yellow/Blue/Red list. The B.C. Conservation Framework ranks Species Common Name as a priority # under goal # (fill in with appropriate goal here: 1 = contribute to global efforts for species and ecosystem conservation; 2 = prevent species and ecosystems from becoming at risk; 3 = maintain the diversity of native species and ecosystems). [Include the following text as appropriate] It is protected from capture and killing, under the B.C. *Wildlife Act*. It is also listed as a species that requires special management attention to address the impacts of forest and range activities under the *Forest and Range Practices Act* (FRPA) and/or the impacts of oil and gas activities under the *Oil and Gas Activities Act* (OGAA) on Crown land (as described in the Identified Wildlife Management Strategy). OR It is also listed as a species for which an ungulate winter range is necessary for the winter survival of the species and requires special management attention to address the impacts of forest and range activities under the *Forest and Range Practices Act* (FRPA) and/or the impacts of oil and gas activities under the *Oil and Gas Activities Act* (OGAA) on Crown land. Recovery is considered to be biologically and technically feasible.

[Insert additional text here]

The recovery (population and distribution) goal is to XXXXXXXX.

The following are the recovery objectives:

1. to…Objective (Use: “Numberlist” style);
2. to...protection[[3]](#footnote-3)…; and
3. Etc.

RECOVERY FEASIBILITY SUMMARY

The recovery of Species Common Name in B.C. is considered technically and biologically feasible based on the following four criteria that Environment and Climate Change Canada uses to establish recovery feasibility:

OR

Based on the four criteria that Environment and Climate Change Canada uses to establish recovery feasibility, there are unknowns regarding the technical and biological feasibility of recovery of Species Common Name. Following a precautionary principle, a recovery plan has been prepared that addresses the unknowns surrounding the feasibility of recovery.

1. Individuals of the wildlife species that are capable of reproduction are available now or in the foreseeable future to sustain the population or improve its abundance.

 Response here

1. Sufficient suitable habitat is available to support the species or could be made available through habitat management or restoration.

 Response here

1. The primary threats to the species or its habitat (including threats outside Canada) can be avoided or mitigated.

 Response here

1. Recovery techniques exist to achieve the population and distribution objectives or can be expected to be developed within a reasonable timeframe.

 Response here

TABLE OF CONTENTS

ACKNOWLEDGEMENTS iii

RECOVERY TEAM MEMBERS (label and use if appropriate) iii

EXECUTIVE SUMMARY iv

RECOVERY FEASIBILITY SUMMARY v

1 COSEWIC\* Species Assessment Information 1

2 Species Status Information 1

3 species Information 2

3.1 Species Description 2

3.2 Populations and Distribution 2

3.3 Habitat and Biological Needs of Species Common Name 2

3.4 Ecological Role (if applicable) 3

3.5 Limiting Factors 3

4 Threats 4

4.1 Threat Assessment 5

4.2 Description of Threats 8

5 RECOVERY goal and objectives 9

5.1 Recovery (Population and Distribution) Goal 9

5.2 Rationale for the Recovery (Population and Distribution) Goal 9

5.3 Recovery Objectives 9

6 Approaches to Meet Objectives 9

6.1 Actions Already Completed or Underway 9

6.2 Recovery Action Table 11

6.3 Narrative to Support Recovery Action Table 13

6.3.1 Compile Status Report 13

6.3.2 Planning 13

6.3.3 Inventory 13

6.3.4 Monitor Trends 13

6.3.5 Habitat Protection and Private Land Stewardship 13

6.3.6 Habitat Restoration and Private Land Stewardship 13

6.3.7 Habitat Protection, Restoration, and Private Land Stewardship 13

6.3.8 Species and Population Management 14

6.3.9 Review Resource Use 14

7 Species survival and recovery HABITAT 14

7.1 Biophysical Description of the Species’ Survival/Recovery Habitat 14

7.2 Spatial Description of the Species’ Survival/Recovery Habitat 14

8 Measuring progress 14

9 Effects on Other Species 15

10 REFERENCES 16

APPENDIX 1. 18

LIST OF TABLES

**Table 1**. Status and description of Species Common Name populations/locations in B.C. 2

**Table 2.** Summary of essential functions, features, and attributes of Species Common Name habitat in British Columbia. 3

**Table 2.** Summary of essential functions and features of Species Common Name habitat in British Columbia. 3

**Table 3.** Threat classification table for Species Common Name in British Columbia. (delete rows not used) 5

**Table 4.** Existing mechanisms that afford habitat protection for Species Common Name**.** 10

**Table 5.** Recovery actions for Species Common Name. 11

**Table 5.** Recovery actions for Species Common Name. 12

LIST OF FIGURES

**Figure 1.** Illustration of Species Common Name (source). 2

**Figure 2.** Species Common Name distribution in Canada/North America (source). 2

**Figure 3.** Species Common Name distribution in British Columbia (source). 2

# COSEWIC\* Species Assessment Information

 **Assessment Summary:** Month YYYY

 **Common Name**:a

 **Scientific Name:** a

 **Status:**

 **Reason for Designation:** [Copy all text for this box exactly as it is posted by COSEWIC]

 **Criteria:** b

 **Occurrence:**

 **Status History:**

\* Committee on the Status of Endangered Wildlife in Canada.

a [use this footnote only if naming conventions differ] Common and scientific names reported in this recovery plan follow the naming conventions of the B.C. Conservation Data Centre, which may be different from names reported by COSEWIC.

b See COSEWIC quantitative criteria and guidelines for the status assessment of wildlife species ([Table 2](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl2) of the COSEWIC assessment process guidelines: <http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm>)

# Species Status Information

|  |
| --- |
| **Species Common Namea** |
| **Legal Designation:** |
| [FRPA](http://www.env.gov.bc.ca/wld/frpa/iwms/):**b** No/Species at Risk/Ungulate/Regionally Important Wildlife/[OGAA](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_08036_01):**b** No/Species at Risk/Ungulate/Regionally Important Wildlife/ | B.C. *Wildlife Act:***c** No/Schedule A/D/E | [SARA](http://www.sararegistry.gc.ca/species/default_e.cfm):d No or [Schedule 1](http://www.sararegistry.gc.ca/species/schedules_e.cfm?id=1) –Special Concern/Threatened/Endangered (YEAR)\* or [Schedule 3](http://www.sararegistry.gc.ca/species/schedules_e.cfm?id=3) - Special Concern/ (YEAR) |
| [**Conservation Status**](http://a100.gov.bc.ca/pub/eswp/)**e** |
| B.C. List: Red/Blue/Yellow B.C. Rank: S# (YEAR) [National Rank](http://www.natureserve.org/explorer/): N# (YEAR) Global Rank: G# (YEAR)  |
| Other [Subnational Ranks](http://www.natureserve.org/explorer/):**f** State/Province/Territory: S#; etc. |
| [**B.C. Conservation Framework**](http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/setting-priorities) **(CF)g** |
| Goal 1: Contribute to global efforts for species and ecosystem conservation. | Priority:h# (YEAR) |
| Goal 2: Prevent species and ecosystems from becoming at risk. | Priority: # (YEAR) |
| Goal 3: Maintain the diversity of native species and ecosystems. | Priority: # (YEAR) |
| [[CF Action Groups](http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/setting-priorities/conservation-action-tools)](http://www.env.gov.bc.ca/conservationframework/how.html):g | Review Status Rank; Compile Status Report; Inventory; Monitor Trends; Review Taxonomy; Planning; List under *Wildlife Act*; Send to COSEWIC; Habitat Protection; Habitat Restoration; Private Land Stewardship; Species and Population Management; Review Resource Use |

a Data source: B.C. Conservation Data Centre (YEAR) unless otherwise noted.

b No = not listed in one of the categories of wildlife that requires special management attention to address the impacts of forestry and range activities on Crown land under the *Forest and Range Practices Act* (FRPA; Province of British Columbia 2002) and/or the impacts of oil and gas activities on Crown land under the *Oil and Gas Activities Act* (OGAA; Province of British Columbia 2008). / Ungulate = a listed species for which an ungulate winter range is necessary for the winter survival of the species and requires special management attention to address the impacts of forestry and range activities on Crown land under the *Forest and Range Practices Act* (FRPA; Province of British Columbia 2002) and/or the impacts of oil and gas activities on Crown land under the *Oil and Gas Activities Act* (OGAA; Province of British Columbia 2008). / [Species at Risk](http://www.env.gov.bc.ca/wld/frpa/species.html) = a listed species that requires special management attention to address the impacts of forestry and range activities on Crown land under the *Forest and Range Practices Act* (FRPA; Province of British Columbia 2002) and/or the impacts of oil and gas activities on Crown land under the *Oil and Gas Activities Act* (OGAA; Province of British Columbia 2008) as described in the Identified Wildlife Management Strategy (Province of British Columbia 2004). / Regionally Important Wildlife = a listed species that requires special management attention to address the impacts of forestry and range activities on Crown land under the *Forest and Range Practices Act* (FRPA; Province of British Columbia 2002) and/or the impacts of oil and gas activities on Crown land under the *Oil and Gas Activities Act* (OGAA; Province of British Columbia 2008) as described in the Identified Wildlife Management Strategy (Province of British Columbia 2004).

c No = not designated as wildlife under the British Columbia *Wildlife Act* (Province of British Columbia 1982). Schedule A = designated as wildlife under the B.C. *Wildlife Act*, which offers it protection from direct persecution and mortality (Province of British Columbia 1982). / Schedule D = listed as Threatened under the B.C. *Wildlife Act* (Province of British Columbia 1982) / Schedule E = listed as Endangered under the B.C. *Wildlife Act* (Province of British Columbia 1982).

d No = not on any Schedules under the *Species at Risk Act* (SARA; Government of Canada 2002). Also include if appropriate: The COSEWIC assessment will be reviewed by the Governor in Council who may, on the recommendation of the Minister, amend the List to include this species on Schedule 1 of SARA. Schedule 1 = found on the List of Wildlife Species at Risk under the *Species at Risk Act* (SARA; Government of Canada 2002). / Schedule 3 = found on Schedule 3 under the *Species at Risk Act* (SARA; Government of Canada 2002). This species was designated at risk by COSEWIC before October 1999 and must be reassessed using revised criteria before it can be considered for addition to Schedule 1 of SARA.

\*[use this footnote only if required] This species was recently reassessed by COSEWIC as Threatened/Endangered. This assessment will be reviewed by the Governor in Council who may on the recommendation of the Minister, make a decision as to whether or not to amend the List to reclassify this species as Threatened/Endangered. If the GIC does not make a decision within nine months of receiving the COSEWIC assessment, the Minister shall by order amend the List according to COSEWIC's assessment.

e Red: Includes any indigenous species or subspecies that have, or are candidates for, Extirpated, Endangered, or Threatened status in British Columbia. Blue: Includes any indigenous species or subspecies considered to be of Special Concern (formerly Vulnerable) in British Columbia. S = subnational; N = national; G = global; T = refers to the subspecies level; B = breeding; X = presumed extirpated; H = possibly extirpated; 1 = critically imperiled; 2 = imperiled; 3 = special concern, vulnerable to extirpation or extinction; 4 = apparently secure; 5 = demonstrably widespread, abundant, and secure; NA = not applicable; NR = unranked; U = unrankable.

f Data source: NatureServe (YEAR).

g Data source: B.C. Ministry of Environment 2009.

h Six-level scale: Priority 1 (highest priority) through to Priority 6 (lowest priority).

# species Information

## Species Description

[insert text]

**Figure 1.** Illustration of Species Common Name (source).

## Populations and Distribution

[insert text]

**Figure 2.** Species Common Name distribution in Canada/North America (source).

**Figure 3.** Species Common Name distribution in British Columbia (source).

**Table 1**. Status and description of Species Common Name populations/locations in B.C.

|  |  |  |  |
| --- | --- | --- | --- |
| Population/ Location | B.C. CDC EO# / COSEWIC # / Map # [optional] | Statusa and description | Land tenure |
| Name 1  | # | Extant. 2012: 250 plants in 4 subpopulations over approximately 1500 m2 (Reference).  | Private land  |
| Name 2  | # | Historical. 1972: 25 plants observed. Habitat developed in 1973 and no longer suitable. | Provincial/Federal Crown land |

Table footnotes go here. [additional columns can be added as needed.

a Extant: occurrence has been recently verified as still existing. Historical: used when there is a lack of recent field information verifying the continued existence of the occurrence. Generally, if there is no known survey for [choose appropriate text] 20 years for an animal occurrence or 20 to 40 years for a plant occurrence it should be considered historical (NatureServe 2002).

## Habitat and Biological Needs of Species Common Name

[insert text, use sub-headings as necessary]

[chose format of summary table (1 or split into 2) that best suits your information (for clarity and to avoid repetition of information)]

**Table 2.** Summary of essential functions, features, and attributes of Species Common Name habitat in British Columbia.

| **Life stage** | **Functiona** | **Feature(s)b** | **Attributesc** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

a Function: a life-cycle process of the species (e.g., include either animal or plant examples: spawning, breeding, denning, nursery, rearing, feeding/foraging and migration; flowering, fruiting, seed dispersing, germinating, seedling development).

b Feature: the essential structural components of the habitat required by the species.

c Attribute: the building blocks or *measurable* characteristics of a feature.

OR this combo

**Table 3.** Summary of essential functions and features of Species Common Name habitat in British Columbia.

| **Life stage** | **Functiona** | **Feature(s)b** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

a Function: a life-cycle process of the species (e.g., include either animal or plant examples: spawning, breeding, denning, nursery, rearing, feeding/foraging and migration; flowering, fruiting, seed dispersing, germinating, seedling development).

b Feature: the essential structural components of the habitat required by the species.

**Feature:** Name of Feature

|  |  |
| --- | --- |
| Attributea | Description |
|  |  |
|  |  |

a Attribute: the building blocks or *measurable* characteristics of a feature.

## Ecological Role (if applicable)

[insert text]

## Limiting Factors

Limiting factors are generally not human induced and include characteristics that make the species less likely to respond to recovery/conservation efforts (e.g., [remove examples that do not apply to your species] inbreeding depression, small population size, long-lived species with low rate of reproduction, genetic isolation).

[insert text]

# Threats

Threats are defined as the proximate activities or processes that have caused, are causing, or may cause in the future the destruction, degradation, and/or impairment of the entity being assessed (population, species, community, or ecosystem) in the area of interest (global, national, or subnational) (adapted from Salafsky *et al.* 2008). For purposes of threat assessment, only present and future threats are considered.[[4]](#footnote-4) Threats presented here do not include limiting factors,[[5]](#footnote-5)

which are presented in Section 3.5.

[omit this paragraph if no “natural” threats (e.g., 7.1, 10.1, 10.2, 10.3) have been identified in the threat classification table] For the most part, threats are related to human activities, but they can also be natural. The impact of human activity may be direct (e.g., destruction of habitat) or indirect (e.g., introduction of invasive species). Effects of natural phenomena (e.g., fire, flooding) may be especially important when the species is concentrated in one location or has few occurrences, which may be a result of human activity ([Master *et al.* 2012)](http://www.natureserve.org/publications/ConsStatusAssess_StatusFactors.pdf). As such, natural phenomena are included in the definition of a threat, though they should be considered cautiously. These stochastic events should only be considered a threat if a species or habitat is damaged from other threats and has lost its ability to recover. In such cases, the effect on the population would be disproportionately large compared to the effect experienced historically (Salafsky *et al.* 2008).

## Threat Assessment

The threat classification below is based on the IUCN-CMP (World Conservation Union–Conservation Measures Partnership) unified threats classification system and is consistent with methods used by the B.C. Conservation Data Centre. For a detailed description of the threat classification system, see the Open Standards website (Open Standards 2014). Threats may be observed, inferred, or projected to occur in the near term. Threats are characterized here in terms of scope, severity, and timing. Threat “impact” is calculated from scope and severity. For information on how the values are assigned, see [Master *et al.*](http://www.natureserve.org/sites/default/files/publications/files/natureserveconservationstatusfactors_apr12_1.pdf) (2012) and table footnotes for details. Threats for Species Common Name were assessed for the entire province (Table #).

**Table 4.** Threat classification table for Species Common Name in British Columbia. (delete rows not used)

Note: a description of the threats included in this table are found in section 4.2.

| Threat #a | Threat description | **Impactb** | **Scopec** | **Severityd** | **Timinge** | Population(s) or location(s) |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Residential & commercial development |  |  |  |  |  |
| 1.1 |  Housing & urban areas |  |  |  |  |  |
| 1.2 |  Commercial & industrial areas |  |  |  |  |  |
| 1.3 |  Tourism & recreation areas |  |  |  |  |  |
| 2 | Agriculture & aquaculture |  |  |  |  |  |
| 2.1 |  Annual & perennial non-timber crops |  |  |  |  |  |
| 2.2 |  Wood & pulp plantations |  |  |  |  |  |
| 2.3 |  Livestock farming & ranching |  |  |  |  |  |
| 2.4 |  Marine & freshwater aquaculture |  |  |  |  |  |
| 3 | Energy production & mining |  |  |  |  |  |
| 3.1 |  Oil & gas drilling |  |  |  |  |  |
| 3.2 |  Mining & quarrying |  |  |  |  |  |
| 3.3 |  Renewable energy |  |  |  |  |  |
| 4 | Transportation & service corridors |  |  |  |  |  |
| 4.1 |  Roads & railroads |  |  |  |  |  |
| 4.2 |  Utility & service lines |  |  |  |  |  |
| 4.3 |  Shipping lanes |  |  |  |  |  |
| 4.4 |  Flight paths |  |  |  |  |  |
| 5 | Biological resource use |  |  |  |  |  |
| 5.1 |  Hunting & collecting terrestrial animals |  |  |  |  |  |
| 5.2 |  Gathering terrestrial plants |  |  |  |  |  |
| 5.3 |  Logging & wood harvesting |  |  |  |  |  |
| 5.4 |  Fishing & harvesting aquatic resources |  |  |  |  |  |
| 6 | Human intrusions & disturbance |  |  |  |  |  |
| 6.1 |  Recreational activities |  |  |  |  |  |
| 6.2 |  War, civil unrest, & military exercises |  |  |  |  |  |
| 6.3 |  Work & other activities |  |  |  |  |  |
| 7 | Natural system modifications |  |  |  |  |  |
| 7.1 |  Fire & fire suppression |  |  |  |  |  |
| 7.2 |  Dams & water management/use |  |  |  |  |  |
| 7.3 |  Other ecosystem modifications |  |  |  |  |  |
| 8 | Invasive & other problematic species, genes & diseases |  |  |  |  |  |
| 8.1 |  Invasive non-native/alien species/diseases |  |  |  |  |  |
| 8.2 |  Problematic native species/diseases |  |  |  |  |  |
| 8.3 |  Introduced genetic material |  |  |  |  |  |
| 8.4 |  Problematic species/diseases of unknown origin |  |  |  |  |  |
| 8.5 |  Viral/prion-induced diseases |  |  |  |  |  |
| 8.6 |  Diseases of unknown cause |  |  |  |  |  |
| 9 | Pollution |  |  |  |  |  |
| 9.1 |  Domestic & urban waste water |  |  |  |  |  |
| 9.2 |  Industrial & military effluents |  |  |  |  |  |
| 9.3 |  Agricultural & forestry effluents |  |  |  |  |  |
| 9.4 |  Garbage & solid waste |  |  |  |  |  |
| 9.5 |  Air-borne pollutants |  |  |  |  |  |
| 9.6 |  Excess energy |  |  |  |  |  |
| 10 | Geological events |  |  |  |  |  |
| 10.1 |  Volcanoes |  |  |  |  |  |
| 10.2 |  Earthquakes/tsunamis |  |  |  |  |  |
| 10.3 |  Avalanches/landslides |  |  |  |  |  |
| 11 | Climate change & severe weather |  |  |  |  |  |
| 11.1 |  Habitat shifting & alteration |  |  |  |  |  |
| 11.2 |  Droughts |  |  |  |  |  |
| 11.3 |  Temperature extremes |  |  |  |  |  |
| 11.4 |  Storms & flooding |  |  |  |  |  |
| 11.5 |  Other impacts |  |  |  |  |  |

**a** Threat numbers are provided for Level 1 threats (i.e., whole numbers) and Level 2 threats (i.e., numbers with decimals).

**b Impact** – The degree to which a species is observed, inferred, or suspected to be directly or indirectly threatened in the area of interest. The impact of each threat is based on severity and scope rating and considers only present and future threats. Threat impact reflects a reduction of a species population. The median rate of population reduction for each combination of scope and severity corresponds to the following classes of threat impact: Very High (75%), High (40%), Medium (15%), and Low (3%). Unknown: used when impact cannot be determined (e.g., if values for either scope or severity are unknown); Not Calculated: impact not calculated as threat is outside the assessment time (e.g., timing is insignificant/negligible [past threat] or low [possible threat in long term]); Negligible: when scope or severity is negligible; Not a Threat: when severity is scored as neutral or potential benefit.

**c Scope** – Proportion of the species that can reasonably be expected to be affected by the threat within 10 years. Usually measured as a proportion of the species’ population in the area of interest. (Pervasive = 71–100%; Large = 31–70%; Restricted = 11–30%; Small = 1–10%; Negligible < 1%).

**d Severity** – Within the scope, the level of damage to the species from the threat that can reasonably be expected to be affected by the threat within a 10-year or 3-generation timeframe. For this species a 10-year timeframe was used [OR] generation time of # years ([insert reference if available]) was used resulting in severity being scored over a #-year timeframe. Severity is usually measured as the degree of reduction of the species’ population. (Extreme = 71–100%; Serious = 31–70%; Moderate = 11–30%; Slight = 1–10%; Negligible < 1%; Neutral or Potential Benefit > 0%).

e **Timing** – High = continuing; Moderate = only in the future (could happen in the short term [< 10 years or 3 generations]) or now suspended (could come back in the short term); Low = only in the future (could happen in the long term) or now suspended (could come back in the long term); Insignificant/Negligible = only in the past and unlikely to return, or no direct effect but limiting.

## Description of Threats

The overall province-wide Threat Impact for this species is Very High/High/Medium/Low.[[6]](#footnote-6) This overall threat considers the cumulative impacts of multiple threats. The greatest threat is XXX or Primary threats include XXX (Table #). Details are discussed below under the Threat Level 1 headings.

If the 3-generation timeframe used in determining severity scores was based on a different generation time than stated in the COSEWIC status report, provide a rationale here.

Include as many Threat headings as needed, followed by descriptions of threat to the species. You may use subheadings if you wish (e.g., 1.1 Housing & Urban Areas).

If there are many threats, sub-headings (format level 3) can be included to group the threats so that the most significant threats are presented first (e.g., “Threats with impacts” and “Threats with negligible or not calculated impacts”).

#### Threat 1. Residential & commercial development

#### Threat 2. Agriculture & aquaculture

#### Threat 3. Energy production & mining

#### Threat 4. Transportation & service corridors

#### Threat 5. Biological resource use

#### Threat 6. Human intrusions & disturbance

#### Threat 7. Natural system modifications

#### Threat 8. Invasive & other problematic species, genes & diseases

#### Threat 9. Pollution

#### Threat 10. Geological events

#### Threat 11. Climate change & severe weather

# RECOVERY goal and objectives

[No text required, start text under sub-headings]

## Recovery (Population and Distribution) Goal

The following is the recovery (population and distribution) goal:

[insert text]

## Rationale for the Recovery (Population and Distribution) Goal

[insert text]

## Recovery Objectives

The following are the recovery objectives for Species Common Name:

1. to…Write objective here [Use: “Numberlist” style];
2. to…Write next objective here;
3. to…Add as many objectives as needed; and
4. Insert this footnote if objective makes reference to protection of habitat.Footnote # [Footnote: Protection can be achieved through various mechanisms including voluntary stewardship agreements, conservation covenants, sale of private lands by willing vendors, land use designations, and protected areas.]

# Approaches to Meet Objectives

## Actions Already Completed or Underway

The following actions have been categorized by the action groups of the B.C. Conservation Framework (B.C. Ministry of Environment 2009). Status of the action group for this species is given in parentheses.

Include only action groups of the Conservation Framework that have been assigned to the species. Delete action groups for which there are no actions.

#### Compile Status Report (complete)

* COSEWIC report completed (COSEWIC YEAR).

#### Send to COSEWIC (complete)

* Species Common Name assessed as Threatened/Endangered (COSEWIC YEAR). [optional text: Re-assessment due YEAR.]

#### Planning (in progress)

* B.C. Recovery Plan completed (this document, YEAR).

#### Inventory (in progress)

* [insert text (Use: “Bullet1” style)]

#### Monitor Trends (in progress)

* [insert text (Use: “Bullet1” style)]

#### Habitat Protection and Private Land Stewardship (in progress)

* [insert text (Use: “Bullet1” style)]
* Optional table:

**Table 5.** Existing mechanisms that afford habitat protection for Species Common Name**.**

|  |  |  |
| --- | --- | --- |
| **Existing mechanisms that afford** **habitat protection** | **Threata or concern addressed** | **Site** |
|  |  |  |
|  |  |  |

a Threat numbers according to the IUCN-CMP classification (see Table X for details).

#### Habitat Restoration and Private Land Stewardship (in progress)

* [insert text (Use: “Bullet1” style)]

#### Species and Population Management (in progress)

* [insert text (Use: “Bullet1” style)]

#### Review Resource Use (in progress)

* [insert text (Use: “Bullet1” style)]

## Recovery Action Table

[Introduction goes here if needed (optional)]

**Table 6.** Recovery actions for Species Common Name.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Objective | Conservation Framework action group | Actions to meet objectives | Threata or concern addressed | Priorityb |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 1, 3 |  |  |  |  |

a Threat numbers according to the IUCN-CMP classification (see Table X for details).

b Essential (urgent and important, needs to start immediately); Necessary (important but not urgent, action can start in 2–5 years); or Beneficial (action is beneficial and could start at any time that was feasible).

OR

**Table 5.** Recovery actions for Species Common Name.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Objective | Conservation Framework action group | Actions to meet objectives | Performance measures | Threata or concern addressed | Priority*b* |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 1, 3 |  |  |  |  |  |

a Threat numbers according to the IUCN-CMP classification (see Table X for details).

b Essential (urgent and important, needs to start immediately); Necessary (important but not urgent, action can start in 2–5 years); or Beneficial (action is beneficial and could start at any time that was feasible).

## Narrative to Support Recovery Action Table

[Section 6.3 optional, introduction optional] Recommended actions have been categorized by the action groups of the B.C. Conservation Framework.

### Compile Status Report

Description of the actions (if needed, optional) in the recovery planning table (grouped by Conservation Framework action groups)

### Planning

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Inventory

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Monitor Trends

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Habitat Protection and Private Land Stewardship

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Habitat Restoration and Private Land Stewardship

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Habitat Protection, Restoration, and Private Land Stewardship

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Species and Population Management

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)

### Review Resource Use

Description of the approaches that fall under this Conservation Framework action group in the recovery planning table (if needed, optional)]

#  Species survival and recovery HABITAT

Survival/recovery habitat is defined as the habitat that is necessary for the survival or recovery of the species. This is the area that the species naturally occurs or depends on directly or indirectly to carry out its life-cycle processes or formerly occurred on and has the potential to be reintroduced.

## Biophysical Description of the Species’ Survival/Recovery Habitat

A description of the known biophysical features and their attributes of the species’ habitat that are required to support these life-cycle processes (functions) are provided in Section 3.3. [Include a qualifying statement if there is more information required and include next sentence] Additional work required to fulfill habitat knowledge gaps are included in the Recovery Action Table.

## Spatial Description of the Species’ Survival/Recovery Habitat

The area of survival/recovery habitat required for a species is guided by the amount of habitat needed to meet the recovery goal. [Include the appropriate statement] At this time, there are no known threats to Species Common Name’shabitat (see Section 4) and habitat does not appear to be limiting. As such, a spatial description of the species’ habitat is not required at this time to meet the recovery goal for this species. OR Provide a spatial description OR Although no maps are included with this document, it is recommended that locations of survival/recovery habitat be described on the landscape to mitigate habitat threats and to facilitate the actions for meeting the recovery (population and distribution) goals.

# Measuring progress

The following performance measures provide a way to define and measure progress toward achieving the recovery (population and distribution) goal and recovery objectives. Performance measures are listed below for each objective.
[Additional introduction goes here if needed (optional)]

**Measurable(s) for Objective 1**

* XXXX by YEAR.
* XXXX by YEAR

**Measurable(s) for Objective 2**

* XXXX by YEAR.

OR If the expanded recovery planning table was used in Section 6.2 (last table option), use this introduction to refer to that table:

Performance indicators provide a way to define and measure progress toward achieving the recovery (population and distribution) goals and objectives. Performance indicators have been integrated into the Recovery Action Table in Section 6.2.

# Effects on Other Species

[insert text]….[include this final sentence as appropriate where there are other co-occurring species at risk] Recovery planning activities for Species Common Name will be implemented with consideration for all co-occurring species at risk, such that there are no negative impacts to these species or their habitats.

# REFERENCES

Use Reference style for list of references. Note: The references below are cited in the template.

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**Other common references used:**

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#### Personal Communications

First and last name, affiliation

APPENDIX 1.

Use appendices as needed.

1. The COSEWIC assessment will be reviewed by the Governor in Council who may, on the recommendation of the Minister, amend the List to include this species on Schedule 1 of SARA. [↑](#footnote-ref-1)
2. Species that were designated at risk by COSEWIC before October 1999 must be reassessed using revised criteria before they can be considered for addition to Schedule 1 of SARA. After they have been assessed, the Governor in Council may, on the recommendation of the Minister, decide whether they should be added to the List of Wildlife Species at Risk. The protection and/or conservation measures afforded by SARA apply only to species once they are on Schedule 1. [↑](#footnote-ref-2)
3. Protection can be achieved through various mechanisms including: voluntary stewardship agreements, conservation covenants, sale by willing vendors on private lands, land use designations, protected areas, and mitigation of threats. [↑](#footnote-ref-3)
4. Past threats may be recorded but are not used in the calculation of threat impact. Effects of past threats (if not continuing) are taken into consideration when determining long-term and/or short-term trend factors (Master *et al.* 2012). [↑](#footnote-ref-4)
5. It is important to distinguish between limiting factors and threats. Limiting factors are generally not human induced and include characteristics that make the species or ecosystem less likely to respond to recovery/conservation efforts (e.g., inbreeding depression, small population size, and genetic isolation). [↑](#footnote-ref-5)
6. The overall threat impact was calculated following Master *et al.* (2012) using the number of Level 1 Threats assigned to this species where timing = High or Moderate, which included # Very High, # High, # Medium, and # Low (Table #). The overall threat impact considers the cumulative impacts of multiple threats. [↑](#footnote-ref-6)