

BRITISH COLUMBIA'S VERTEBRATES AT RISK

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1 INTRODUCTION

Loss of the natural world in British Columbia is ongoing daily, due to urbanization, sprawl, logging, oil and gas exploration and production, energy and mining projects, tourism, and motorized recreation. Many British Columbian species are at risk.

This compilation includes mammals, birds, reptiles, amphibians and non-anadromous freshwater fish listed as extinct, extirpated, endangered, threatened or special concern by the Species at Risk Act (SARA) or the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or red-listed (extirpated, endangered or threatened) or blue-listed (vulnerable or of concern) by the BC Conservation Data Centre (CDC). The objective of SARA is recovery of the at risk species.

Many listed species are not described here: those of rare or localized occurrence in the province but not in decline; those for which insufficient data are available to determine if declines have occurred; or those for which possible recovery measures in BC are limited. These are listed in Section 4.

In the following tables, missed deadlines by SARA are highlighted in red.

Some species (e.g., Northern Spotted Owl and Vancouver Island Marmot) have declined to the point where their survival is dependent upon sustained intervention by humans, because insufficient natural habitat has been retained. Keeping species in existence through sustained human intervention rather than protecting habitat is not 'recovery', nor was this the intent of SARA.

Section 3 deals with legislation pertaining to species at risk, and includes a summary of successful lawsuits against Environment Canada and Fisheries & Oceans Canada.

An index of common and Latin names of the species in this compilation is at the back.

References:

BC Ministry of Environment, BC Species and Ecosystems Explorer – website <http://a100.gov.bc.ca/pub/eswp/>

Government of Canada Species at Risk Public Registry – website - http://www.sararegistry.gc.ca/default_e.cfm

Government of BC, Northern Spotted Owl Population Enhancement and Recovery in BC – website - http://www.env.gov.bc.ca/wld/speciesconservation/so/files/SOPET_Proposed_5year_Action_Plan_20070330.pdf

Larry Pynn, Vancouver Sun, June 4, 2011, Logging, nesting failures put northern spotted owls on brink

Ecojustice – website - <http://www.ecojustice.ca/>

2 SPECIES DETAILS

Legend: Causes of decline: U = urbanization/settlement A = agriculture L = logging G = livestock grazing
 R = recreation, particularly motorized winter recreation O = oil & gas

FRPA BC Forest and Range Practices Act WMA Wildlife Management Area
 UWR Ungulate Winter Range under FRPA NWA National Wildlife Area
 WHA Wildlife Habitat Area under FRPA THLB Timber Harvesting Land Base

Southwest Mainland / Lower Fraser Valley / Southeast Vancouver Island

European settlement of the lower Fraser basin began in the 1820s. Over 70% of the area of the basin consisted of coniferous forest, three-quarters of it old-growth. 10% of the basin was wetlands^[1]. Today, the old-growth forests are largely eliminated, along with 90% of the wetlands. Similarly, the Douglas-fir forests and Garry Oak woodlands of southeast Vancouver Island have been decimated. These changes in the landscape have had a profound impact on the fauna.

This subsection covers species indigenous in BC only to this region.

[1] Boyle, C.A., L. Lavkulich, H. Schreier, E. Kiss. Changes in Land Cover and Subsequent Effects on Lower Fraser Basin Ecosystems from 1827 to 1990. Environmental Management vol. 21, no. 2, pp. 185 – 196. 1997.

SPECIES	STATUS	HABITAT	CAUSE(S) OF DECLINE	RECOVERY MEASURES IN PLACE & MISC. INFORMATION
Long-tailed Weasel <i>Mustela frenata altifrontalis</i>	EXTIRPATED Not listed by COSEWIC	Inhabited the lower Fraser valley – open grasslands, river bottoms	Loss of habitat – U, A, L	Only limited suitable habitat remains. No recent records.
Yellow-billed Cuckoo <i>Coccyzus americanus</i>	EXTIRPATED Not listed by COSEWIC	Dense deciduous riparian vegetation	Loss of habitat – U, A	Only limited suitable habitat remains. Last records as likely breeding birds early 1900s.
Pacific Gophersnake <i>Pituophis catenifer catenifer</i>	EXTIRPATED COSEWIC & SARA	Grasslands	Loss of habitat – U, A	Recovery strategy was due Jan 07; not yet produced. Suitable habitat largely eliminated. No sightings in more than 50 years.
Pacific Pond Turtle <i>Actinemys marmorata</i>	EXTIRPATED COSEWIC & SARA	Wetlands	Harvesting for food Loss of habitat – U, A	Recovery strategy was due Jan 07; not yet produced. Only limited habitat remains. Last recorded in BC in 1959.
Horned Lark <i>Eremophila alpestris strigata</i>	ENDANGERED COSEWIC & SARA	Breeds in open areas with short, sparse vegetation	Loss of habitat – U, A	Recovery strategy was prepared Nov 07; critical habitat was not identified; the strategy states an action plan will be prepared by Mar 09 – not yet produced. Only limited suitable habitat remains. The last confirmed breeding record was 1978. One male was heard singing south of Nanaimo in spring of 2002. Never abundant, populations declined to the point of extirpation sometime between the 1920s and 1980s.

Oregon Spotted Frog <i>Rana pretiosa</i>	ENDANGERED COSEWIC & SARA	Wetlands	Loss of habitat – U, A Introduced invasive species	Recovery strategy was due June 06 - not yet produced. Only limited suitable habitat remains. Three sites are known to be occupied, each with small population size and habitat area. It is estimated that the species has been lost from >90% of its historic range in North America. A captive breeding program has been established to provide frogs for future re-introductions.
Pacific Water Shrew <i>Sorex bendirii</i>	ENDANGERED COSEWIC & SARA	Lowland riparian and wetlands in the lower Fraser valley	Loss of habitat – U, A, L	Recovery strategy was due 2007. BC produced a recovery strategy June 09, but not posted on SARA registry; critical habitat not identified; no action plan. Only a small number of known occurrences remain, all with low abundance. Much of its range is on private and urban land. There are occurrences in provincial and regional parks. WHAs under FRPA have been established.
Painted Turtle, Pacific Coast pop. <i>Chrysemys picta bellii</i> pop. 1	ENDANGERED COSEWIC & SARA	Wetlands	Loss of habitat – U, A	Recovery strategy was due Dec 08; not yet produced. There are six known sites. In 2005 surveys, this turtle was found at only one of these sites (Burnaby Lake). This population has always been considered rare, but has experienced significant declines.
Northern Spotted Owl <i>Strix occidentalis caurina</i>	ENDANGERED COSEWIC & SARA	Old-growth forests southwest mainland.	Loss of habitat – L	A recovery plan, designed to limit impacts to the timber industry, was announced in 1995. However, owl numbers continued to decline, to fewer than 33 pairs by 2002. Known owl sites continued to be logged. The historic population has been estimated at 500 adult pairs. A revised recovery strategy was produced in October 06. Critical habitat was not identified. In March 07 the provincial government proposed an action plan, in which the recommended option was captive breeding and re-introduction. The recovery team stated that captive breeding and re-introduction should not be implemented without an explicit commitment to protect habitat in the areas where captive-bred owls settle. The captive breeding program commenced, without a commitment to protect habitat. Logging is ongoing in owl habitat. It is estimated that only 6 individuals remain in the wild in BC as of 2010. Twelve owls are in the captive breeding program; none have given birth to young in the past two years.
Vesper Sparrow <i>Pooecetes gramineus affinis</i>	ENDANGERED COSEWIC & SARA	Grasslands, grassy clearings, Garry Oak ecosystems.	Loss of habitat – U, A Introduced vegetation	Recovery strategy was due Dec. 08, as an update to the Horned Lark strategy; not yet produced. Little suitable natural habitat remains. This subspecies used to nest on southern Vancouver Island and in the lower Fraser valley. Today, it is considered a rare summer visitor to the Fraser lowland. The only known nesting population is at Nanaimo Airport, where between 5 and 10 pairs make up the total population. Although it is not known how many Vesper Sparrows <i>affinis</i> subspecies once nested in Canada, the population is believed to have declined.
Coastal Giant Salamander <i>Dicamptodon tenebrosus</i>	THREATENED COSEWIC & SARA	Inhabits only the Chilliwack River drainage. Preferred	Loss of habitat – L, U	Recovery strategy was due June 07; BC produced a recovery strategy April 2010, not posted on SARA registry; critical habitat not

		habitat is old or mature riparian forests and their streams. Now found primarily in small, headwater streams.		identified ; action plan scheduled for April 2012 Several WHAs are established.
Short-eared Owl <i>Asio flammeus</i>	Special Concern COSEWIC	Breeding is widespread in BC, but significant winter concentrations occur only in lower Fraser valley. Wintering populations have declined substantially. Most winter habitat is on private land.	Loss of habitat – U, A	In Nov 2011 Cabinet received assessment from COSEWIC and is to decide by Aug 2012 whether to add this species to SARA Sch. 1 as Special Concern. Small areas of wintering habitat are within Alaksen NWA & Boundary Bay WMA. There is a Canadian Wildlife Service/Delta farmers voluntary old field management program.
Purple Martin <i>Progne subis</i>	BLUE LIST	Natural breeding habitat - areas with older, decaying trees or snags near water; sheltered estuaries & harbours	Loss of habitat – U, invasive species	Most nesting now is in artificial nest boxes. Little suitable natural nesting habitat remains.

South Okanagan / Lower Similkameen

White-tailed Jackrabbit <i>Lepus townsendii</i>	EXTIRPATED Not listed by COSEWIC or SARA	Open grassland/shrub-steppe	Loss of habitat – U, A	Only limited suitable habitat remains. Last confirmed sighting in BC in 1981.
Greater Sage-Grouse <i>Centrocercus urophasianus phaios</i>	EXTIRPATED COSEWIC & SARA	Grasslands	Over-hunting; loss of habitat – U, A, G	Recovery strategy was due June 07; not yet produced. Only limited suitable habitat remains. Last reported from its original population in 1918. An attempt to reintroduce this species in 1958 failed.
Pygmy Short-horned Lizard <i>Phrynosoma douglasii</i>	EXTIRPATED COSEWIC & SARA	Sagebrush shrub-steppe/open forest	Loss of habitat – U, A	Recovery strategy was due June 07; not yet produced. Only limited suitable habitat remains. Last observation appropriately documented was in 1957.
Desert Nightsnake <i>Hypsiglena chlorophaea</i>	ENDANGERED COSEWIC & SARA	Sandy or rocky habitats in arid shrub-steppe; forages in grasslands and Ponderosa Pine parkland	Loss of habitat – U, A Road mortality	Recovery strategy was due June 06; BC produced a recovery strategy Feb 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Some occurrences are in protected areas.
Sage Thrasher <i>Oreoscoptes montanus</i>	ENDANGERED COSEWIC & SARA	Breeding habitat – sagebrush /shrub-steppe	Loss of habitat – U, A, G	Recovery strategy was due June 06; not yet produced. Most of remaining suitable habitat is on private land or IR.
White-headed Woodpecker <i>Picoides albolarvatus</i>	ENDANGERED COSEWIC & SARA	Mature and old-growth Ponderosa Pine forests	Loss of habitat – U, L (including fire suppression)	Recovery strategy was due June 06; a proposed recovery strategy was produced in 2011; critical habitat not identified; action plan to be completed in 2016. 4 WHAs, 0 ha mature THLB
Yellow-breasted Chat <i>Icteria virens auricollis</i>	ENDANGERED COSEWIC & SARA	Valley bottom shrubby and riparian habitats	Loss of habitat – U, A, G	Recovery strategy was due June 06; not yet produced. Only limited suitable habitat remains, mostly on private land or IR. Once common, now rare. Some occurrences are in protected areas. Several WHAs, 0 ha mature THLB.
Pallid Bat <i>Antrozous pallidus</i>	THREATENED COSEWIC & SARA	Arid, sparsely-vegetated areas	Loss of habitat – U, A	Recovery strategy was due June 07; BC produced a recovery strategy Sept 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2013. Some occurrences are in protected areas.
Lark Sparrow <i>Chondestes grammacus</i>	RED LIST	Breeding habitat – lower-elevation shrub-steppe grasslands	Loss of habitat – U, A	60% of remaining suitable habitat is on private land or IR. Several breeding sites are in protected areas.

Coast, Marine Islands & Offshore BC

Dawson Caribou <i>Rangifer tarandus dawsoni</i>	EXTINCT COSEWIC	Inhabited Haida Gwaii. Last individual recorded was in 1908.	Unknown	
Killer Whale, NE Pacific southern resident pop. <i>Orcinus orca</i>	ENDANGERED COSEWIC & SARA		Anthropogenic threats include pollution, reductions in prey, physical and acoustic disturbance.	Recovery strategy produced March 08, revised Aug 2011 as result of lawsuit by Ecojustice. Action plans to be produced by March 2013. Critical habitat was registered by federal Order in Feb 09. See page 16 of this document.
Vancouver Island Marmot <i>Marmota vancouverensis</i>	ENDANGERED COSEWIC & SARA	Historic occurrence was along the eastern spine of the Vancouver Island Mtns. from north of Victoria to Strathcona Park. Habitat - steep-sloped subalpine meadows	Northern Van. Island pops. – reasons for decline unclear Southern Van. Island pops. – cause of decline: loss of habitat due to logging and accompanying roads; immediate threat now is predation	Recovery strategy was due June 06; BC produced a recovery strategy Nov 08, not posted on SARA registry; critical habitat not identified; action plan was to be produced by 2010 – not yet produced. The current strategy is focused on captive breeding and re-introduction, with sustained human intervention and vigilance to control losses to predators. Predators have been killed as part of this program. Experimental non-lethal methods of preventing predator attacks, including the use of human shepherds, fencing and netting, have also been introduced. The numbers declined precipitously during the 1990s and the species has disappeared from much of its historic range within the past few decades. The wild population has declined to near-extinction levels; fewer than 30 mature wild-born individuals in the wild as of 2008. There are a few dozen captive-released marmots and over 100 captive marmots. Most historically occupied (1972-2006) marmot habitat is in the Nanaimo Lakes region on private land. The landscape surrounding natural habitat patches has been heavily modified by logging which began in the late 1940s. Less than 15% of the primary forest remains. An extensive network of logging roads extends up to the high elevations. Two relatively small areas of habitat in this region are protected, Haley Lake Ecological Reserve and the Green Mountain Critical Wildlife Mgmt. Area. There is substantial habitat in Strathcona Park. Occurrences are now concentrated on a few ridges in the Nanaimo-Cowichan Lake area.
Killer Whale, NE Pacific northern resident pop. <i>Orcinus orca</i>	THREATENED COSEWIC & SARA		Anthropogenic threats include pollution, reductions in prey, physical and acoustic disturbance.	Recovery strategy produced March 08, revised Aug 2011 as result of lawsuit by Ecojustice. Action plans to be produced by March 2013. Critical habitat was registered by federal Order in Feb 09. See page 16 of this document.
Killer Whale, West Coast transient pop. <i>Orcinus orca</i>	THREATENED COSEWIC & SARA		Anthropogenic threats include pollution, reductions in prey, physical and acoustic disturbance.	Recovery strategy produced Dec 07; no action plan; critical habitat not identified.

Killer Whale, NE Pacific offshore pop. <i>Orcinus orca</i>	THREATENED COSEWIC & SARA		Anthropogenic threats include pollution, reductions in prey, physical and acoustic disturbance.	Management Plan produced Dec 09. Reclassified from Special Concern to Threatened in June 2011. Recovery strategy due June 2013.
Marbled Murrelet <i>Brachyramphus marmoratus</i>	THREATENED COSEWIC & SARA	Breeds – entire coast; old-growth or mature coniferous forests, generally low elevation	Loss of habitat – L, U, A	Recovery strategy was due June 07 – not yet produced. Several occurrences are in parks. Numerous WHAs.
Northern Goshawk <i>Accipiter gentilis laingi</i>	THREATENED COSEWIC & SARA	Coastal BC. Habitat - mature & old-growth low to mid-elevation coniferous forests. Large foraging areas.	Loss of habitat – L	Recovery strategy was due June 07; BC produced a draft recovery strategy Apr 08, not posted on SARA registry; critical habitat not identified; critical habitat to be determined within an action plan to be produced within 2 years of approval of the recovery strategy which is not yet approved. Some nesting areas protected in parks. Several WHAs established.
Northern Saw-whet Owl <i>Aegolius acadicus brooksi</i>	THREATENED COSEWIC & SARA	Resident of Haida Gwaii; low to mid-elevation mature and old-growth coniferous forests	Loss of habitat – L	Recovery strategy was due Dec. 09 – not yet produced. Several breeding areas within Gwaii Haanas NP
Ancient Murrelet <i>Synthliboramphus antiquus</i>	Special Concern COSEWIC & SARA	Breeds on Haida Gwaii, with stands of mature/old-growth forests, near shore.	Introduced predators – rats, raccoons Human disturbance	Management plan due Aug 09; not yet produced. Several colonies are in protected areas, others are in WHAs (which do not address non-logging threats). Large numbers are concentrated in relatively few colonies.
Red-legged Frog <i>Rana aurora</i>	Special Concern COSEWIC & SARA	Vancouver Island, Haida Gwaii and extreme sw mainland. Wetlands, or moist forests; prefers mature forests	Loss of habitat – U, A, L Predation and competition from introduced Bullfrogs	Management plan was due Jan. 2010 –not yet produced. Some occurrences are in protected areas. There are several WHAs.
Sea Otter <i>Enhydra lutris</i>	Special Concern COSEWIC & SARA RED LIST	W. coast of Vancouver Island and part of the c. coast. Shallow coastal waters.	Formerly extirpated from the BC coast by the fur trade.	Recovery strategy was produced Dec. 07; critical habitat was not identified; strategy states action plan will be produced by Dec. 2013. Re-introduction program started in 1969. Since then, abundance and range have increased substantially; 25 – 33% of the original range has been repopulated.
American Water Shrew <i>Sorex palustris brooksi</i>	RED LIST	Endemic to Vancouver Island Extensive loss of its e. and s. Van. Is. riparian habitat	Loss of habitat – U, A, L	Some occurrences in protected areas
Keen's Myotis <i>Myotis keenii</i>	COSEWIC – Data Deficient RED LIST	Cool, wet coastal old-growth or mature coniferous forest, and karst	Loss of habitat – L	The only known maternity colony is protected in Gwaii Haanas NP. Cave hibernation sites are in protected area. Most known usage sites are unprotected.
Pelagic Cormorant <i>Phalacrocorax pelagicus pelagicus</i>	RED LIST	Breeds on Haida Gwaii & n. mainland coast	Human disturbance	Populations and number of breeding localities are declining. Several colonies protected in Gwaii Haanas NP.
Cassin's Auklet <i>Ptychoramphus aleuticus</i>	BLUE LIST	Breeds on coastal islands	Introduced predators – rats, raccoons Sensitive to human disturbance	70% of the population is in the Triangle Island colony. Most colonies are in protected areas, however major colonies on Frederick & Lihou Islands are not. Several WHAs in Haida Gwaii, 0 ha mature THLB.
Double-crested Cormorant <i>Phalacrocorax auritus</i>	COSEWIC – Not at Risk BLUE LIST	Breeds in Strait of Georgia, typically on offshore rocks and islands.	Nest disturbance by humans and eagles	The landbases of several of the remaining important colonies are protected, however little protection exists for surrounding marine and foraging areas. Significant declines in BC breeding populations since mid-1980s.

Southern BC

Burrowing Owl <i>Athene cunicularia</i>	FORMERLY EXTIRPATED, NOW ENDANGERED COSEWIC & SARA	S. interior. Breeding habitat – shrub-steppe plains and valley bottoms	Loss of habitat – U, A	Listed under SARA in June 03; latest recovery strategy was posted in 2010. No action plan has ever been produced, critical habitat has not been mapped. Efforts to re-introduce the species in BC began in 1989. Only small re-introduced populations remain, not self-perpetuating. Only limited suitable habitat remains, and only a small amount is on Crown land.
American Badger <i>Taxidea taxus jeffersonii</i>	ENDANGERED COSEWIC & SARA	Grasslands & open forests, primarily in valleys of dry s. interior. Large home ranges.	Loss of habitat – U, A Highway mortality Elimination of prey colonies (ground squirrels)	Recovery strategy was due June 06; BC produced a recovery strategy Sept 08; not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012, including identification of critical habitat. Limited protected occurrences. Several WHAs. Has declined to fewer than 350 breeding adults.
Northern Leopard Frog, Rocky Mountain pop. <i>Lithobates pipiens</i>	ENDANGERED COSEWIC & SARA	Wetlands	Loss of habitat – U, A Introduced predatory fish and other exotic species Disease	Recovery strategy was due June 06; not yet produced. Last remaining breeding population is in Creston Valley WMA. Disease has been found in this population. Has disappeared from all previously known sites. Species is in sharp decline. Re-introduction program was initiated in 2001.
Rocky Mountain Tailed Frog <i>Ascaphus montanus</i>	ENDANGERED COSEWIC & SARA	Cool mountain streams and adjacent land in mid-elevation mature and old forests	Loss of habitat – L	Recovery strategy was due June 06; not yet produced. Restricted to two isolated populations in se. BC. Several WHAs.
Blotched Tiger Salamander, <i>Ambystoma mavortium</i>	ENDANGERED COSEWIC & SARA	S. Okanagan, lower Similkameen, lower Kettle River. Bunchgrass and ponderosa pine habitats with wetlands.	Loss of habitat – U, A, G Fish introductions, road mortality	Recovery strategy was due June 06; BC produced a recovery strategy Jan 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Has disappeared from several sites, numbers have declined dramatically in others. Much of remaining habitat is on private land or IR. Several breeding sites in protected areas; several WHAs.
Western Screech-Owl <i>Megascops kennicottii macfarlanei</i>	ENDANGERED COSEWIC & SARA	Low-elevation deciduous riparian mature or old forests in sc. interior.	Loss of habitat – U, A	Recovery strategy was due Jan 06; BC produced a draft recovery strategy Feb 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Several WHAs, 0 ha known to be in mature THLB. Most of habitat in s. Okanagan is on private land or IR.
Ferruginous Hawk <i>Buteo regalis</i>	THREATENED COSEWIC & SARA	Breeds in grasslands and open shrub-steppe	Loss of habitat – A Sensitive to human disturbance	Listed by SARA Mar. 2010. Recovery strategy due Mar. 2012. The only confirmed breeding record was in 1968. Much of the remaining potential breeding habitat is on private land.
Great Basin Gophersnake <i>Pituophis catenifer deserticola</i>	THREATENED COSEWIC & SARA	Dry valleys of s. interior.	Loss of habitat – U, A, G & forestry	Recovery strategy was due Jan 07; BC produced a recovery strategy Feb 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Some occurrences are in protected areas. Much of remaining habitat is on private land or IR.

Great Basin Spadefoot <i>Spea intermontana</i>	THREATENED COSEWIC & SARA	Low-elevation grasslands of s. interior	Loss of habitat – U, A, G	Recovery strategy was due June 07; BC produced a recovery strategy Jan 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Some occurrences are in protected areas. Much of the remaining habitat is on private land or IR. Several WHAs.
Western Rattlesnake <i>Crotalus oregonus</i>	THREATENED COSEWIC & SARA	Dry valleys of the s. interior	Loss of habitat – U, A, L, G Persecution by humans	Recovery strategy was due July 07; BC produced a recovery strategy Jan 08, not posted on SARA registry; critical habitat not identified; action plan to be produced by 2012. Some occurrences are in protected areas. Some populations have been extirpated in recent years. Over 90% of remaining grasslands are privately owned.
Peregrine Falcon <i>Falco peregrinus anatum</i>	THREATENED SARA	Typically nests on inaccessible cliff ledges, usually near wetlands; in cities has adapted to tall buildings, towers, bridges.	Pesticide poisoning Loss of foraging habitat – U, A	Recovery strategy was due June 07; not yet produced. Formerly bred in the Peace, Okanagan, Fraser, now mainly sw BC.
Coastal Tailed Frog <i>Ascaphus truei</i>	Special Concern COSEWIC & SARA	Inhabits clear, cool mountain streams and adjacent land in mature and old forests, Coast & Cascade Mtns.	Loss of habitat – L	Management plan was due June 08; not yet produced. Some occurrences are in protected areas. There are several WHAs.
Coeur d'Alene Salamander <i>Plethodon idahoensis</i>	Special Concern COSEWIC & SARA	Se. BC, up to 1,500 m elevation. Inhabits wet seeps, waterfall splash zones, streamside riparian habitats; requires forest cover.	Loss of habitat – L	Management plan was due June 08; not yet produced. Some of the known occurrence sites are in protected areas.
Flammulated Owl <i>Otus flammeolus</i>	Special Concern COSEWIC & SARA	Breeds in s. interior. Inhabits mature and old-growth midslope Douglas-fir and ponderosa pine forests.	Loss of habitat – L, G, U	Management plan was due June 08; not yet produced. Some occurrences are in protected areas, although grazing is permitted in some. 12 WHAs.
Lewis's Woodpecker <i>Melanerpes lewis</i>	Special Concern SARA THREATENED COSEWIC	Drier parts of s. interior. Breeds in open ponderosa pine forests and old cottonwood stands.	Loss of habitat – U, A, L & fire suppression (densifying of stands)	Management plan was due June 08; produced in 2011. Reassessed as Threatened by COSEWIC in April 2010. Many known breeding sites are in WHAs; 51 WHAs total, 0 ha known to be mature THLB. Several breeding populations have been extirpated. Much of remaining habitat is on private land or IR.
Long-billed Curlew <i>Numenius americanus</i>	Special Concern COSEWIC & SARA	Breeds at lower elevations in open grasslands	Loss of habitat – U, A, G, forest encroachment	Management plan was due Jan 2010; not yet produced. Some nesting sites are in conservation lands. Much of remaining habitat is on private land or IR. 11 WHAs.
Mountain Beaver <i>Aplodontia rufa</i>	Special Concern COSEWIC & SARA	Inhabits the Cascade Mtns. of s. BC, also found south of Fraser River from Langley to Hope. Habitat – riparian areas of moist coniferous forests from near sea level to timberline.	Loss of habitat – L, U, A	Management plan was due June 08; not yet produced. 1 WHA, 0 ha mature THLB.
Painted Turtle, Intermount.–Rocky Mt. pop. <i>Chrysemys picta bellii</i> pop. 2	Special Concern COSEWIC & SARA	Southern interior valleys and lowlands.	Loss of habitat – U, A Vulnerable to roads bisecting movement routes	Management plan due Dec 2010; not yet produced. Occurrence in protected area. Much habitat is on private land.
Spotted Bat <i>Euderma maculatum</i>	Special Concern COSEWIC & SARA	Sc. interior in lower-elevation grasslands and open ponderosa pine - Douglas-fir forests. Roosts in large cliffs.	Loss of foraging habitat in the s. valleys – U, A Very sensitive to human disturbance	Management plan was due July 08; not yet produced. Several roost sites are in conservation lands.
Brewer's Sparrow <i>Spizella breweri breweri</i>	RED LIST	Nests in sagebrush shrub-steppe. Mainly s. Okanagan & lower Similkameen.	Loss of habitat – U, A, G	Probably declining. About 60% of its habitat in s. Okanagan is on private land or IR.

Grasshopper Sparrow <i>Ammodramus savannarum</i>	RED LIST	Typically breeds in dry lower-elevation shrub-grasslands in sc. interior.	Loss of habitat – U, A, G	A couple of breeding sites are in conservation lands, most sites are unprotected. Likely declining. Over 70% of habitat in the Okanagan and lower Similkameen is on private land or IR.
Prairie Falcon <i>Falco mexicanus</i>	COSEWIC – Not at Risk RED LIST	Nests in rugged terrain on rocky cliffs or escarpments near expansive sagebrush steppes for hunting. Breeds mainly sc. interior at lower elevations.	Pesticide poisoning Loss of foraging habitat – A, & forest encroachment due to fire suppression	A couple of aeries are in conservation lands. Populations have declined markedly over the past several decades.
Swainson's Hawk <i>Buteo swainsoni</i>	RED LIST	Thompson-Okanagan plateau; breeds in lower-elevation open woodlands adjacent to grasslands, farmlands and wetlands	Loss of habitat – U, A	Most remaining breeding habitat is on private land.
Western Grebe <i>Aechmophorus occidentalis</i>	RED LIST	Nests in vegetation along margin of lakes	Loss of habitat Vulnerable to human disturbance	Breeding populations and sites are declining; now occurs only in Salmon Arm, north arm Okanagan Lake, & Duck Lake within Creston Valley WMA. The first two sites are in areas of high recreational activity and development pressures.
American Bittern <i>Botaurus lentiginosus</i>	BLUE LIST	Breeds in lowland wetlands in s. and c. interior and lower Fraser River valley.	Loss of habitat – U, A	Some, mainly coastal, sites are in protected areas. Population declines have occurred, including lower Fraser River and Okanagan River valleys.
Sharp-tailed Grouse <i>Tympanuchus phasianellus columbianus</i>	BLUE LIST	S. and c. interior, shrub-steppe habitat	Loss of habitat – U, A, G	Several occurrences are partially protected in provincial parks. This species has declined by at least 70%, and is now extirpated from many areas in s. part of range.
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	BLUE LIST	Lowlands of s. BC in a variety of habitats. Uses caves or old mines for roosts and hibernacula.	Loss of foraging habitat – U, A Extremely sensitive to human disturbance	No hibernacula and only one maternity colony are protected from human activity. Some maternity colonies have been lost. About 50% of habitat in s. Okanagan is on private land or IR.

Northeast Plains

The northeast plains, east of the Rocky Mountains, cover 10% of the area of BC. Less than 2% of the northeast plains is in protected areas.

Nelson's Sharp-tailed Sparrow <i>Ammodramus nelsoni</i>	COSEWIC – Not at Risk RED LIST	Breeds along margins of lakes and marshes in Peace Lowland	Loss of wetland habitat – U, A	Some breeding sites are in protected areas, most are not.
Bay-breasted Warbler <i>Dendroica castanea</i>	RED LIST	Breeds in mature and old-growth white spruce stands, valley bottom to mid-slope	Loss of habitat – L Budworm outbreaks being fought with pesticides.	Some occurrences are in protected areas.
Cape May Warbler <i>Dendroica tigrina</i>	RED LIST	Breeds in mature and old-growth white spruce forests, generally on river terraces at lower elevations.	Loss of habitat – L	One known occurrence is in a protected area.
Connecticut Warbler <i>Oporornis agilis</i>	RED LIST	Breeds usually in mature and old-growth forests	Loss of habitat – L	Several WHAs, 0 ha known to be in THLB.
Black-throated Green Warbler <i>Dendroica virens</i>	BLUE LIST	Breeds mainly in lower-elevation riparian forests.	Loss of habitat – L	Several WHAs, 0 ha known to be in THLB. Much of its habitat is privately owned.

Remainder of BC or Widespread BC

Passenger Pigeon <i>Ectopistes migratorius</i>	EXTINCT COSEWIC	Records from the Fraser valley and Peace River. Existed in huge numbers across North America.	Shooting, North America-wide	
Wood Bison <i>Bison bison athabascaae</i>	THREATENED COSEWIC & SARA	Meadows, and mixed-wood forests in rutting season	Shooting	Recovery strategy was due June 07; not yet produced. Nearly extinct by the late 1800s due to shooting. Once ranged throughout ne. BC; the last Wood Bison in BC was shot in 1906. Re-introduced in 1995. There are now four small herds in isolated areas of ne. BC. Only limited suitable habitat remains
Plains Bison <i>Bison bison bison</i>	THREATENED COSEWIC	Primarily inhabited open plains	Shooting	Only limited suitable habitat remains. Formerly widespread in w. Canada (including eastern BC) through the US into n. Mexico, currently occurs as wild, free-ranging populations in isolated fragments of its former range. Nearly eliminated from Canada by the late 1800s by shooting. Introduced to Pink Mtn area of ne. BC (outside the historic range of this subspecies) in 1971.
Woodland Caribou, Boreal pop. <i>Rangifer tarandus caribou</i>	THREATENED COSEWIC & SARA	Inhabits the peatlands and to a lesser extent boreal forests east of the Rocky Mountains in ne. BC	Loss of habitat – L, O	Recovery strategy was due June 07; posted Aug 2011; wording amended Sept 2011 re critical habitat; consultation period extended to Feb 2012; critical habitat identified. See page 17 of this document.
Woodland Caribou, Southern Mountain pop. (including Mountain Caribou) <i>Rangifer tarandus caribou</i>	THREATENED COSEWIC & SARA	Inhabits w. central, s. central and e. central interior. Requires old-growth forests seasonally.	Loss of habitat – L, U, R	Recovery strategy was due June 07; not yet produced. The southern 80% of the eastern populations are mountain caribou ecotype, much of whose habitat has been highly degraded or lost. A BC Mountain Caribou Recovery Implementation Plan was signed off by several sectors including govt and selected environmental groups in Feb 09. WHAs and UWRs have been established.
Woodland Caribou, Northern Mountain pop. <i>Rangifer tarandus caribou</i>	Special Concern COSEWIC & SARA	Inhabits the northern interior	Loss of habitat – L, road access	Management plan was due Jan 08; proposed plan was posted for consultation in July 2011. Some habitat is in parks. WHAs and UWRs have been established.
Grizzly Bear <i>Ursos arctos horribilis</i>	Special Concern COSEWIC	Valley bottom to alpine.	Loss of habitat – L, U	Recovery Strategy for Grizzly Bear in the North Cascades, 2004 – it is unlikely that any modifications to business-as-usual have occurred since 2004; scheduled monitoring reports have not been posted and may not have been produced. No recovery strategies have been prepared for any of the other threatened populations. Has been extirpated from much of the s. and c. interior, Peace River lowlands, and south coast; several of the remaining populations are designated as 'threatened' with extirpation. Estimated population in BC 16,000 individuals.

Wolverine <i>Gulo gulo</i>	Special Concern COSEWIC	Wide-ranging and wilderness-dependent. Range from valley bottom to alpine, making predominant use of old and mature forests; rare on the coast	Loss of habitat – L, U, A, R	Occurs throughout much of BC; may be extirpated from Vancouver Is., lower Fraser valley, Okanagan-Thompson. Declining in southern half of BC. Has been extirpated from most of its range in the lower 48 US states and much of eastern and southern Canada.
Fisher <i>Martes pennanti</i>	BLUE LIST	Dense lower and mid-elevation old forest stands provide the best-quality habitat. Avoids open areas.	Loss of habitat – L, U, A, hydroelectric development, trapping	Estimated that fewer than 3,800 remain in the province. Found mainly in c. and n. BC; rare on the coast and believed to be extirpated from the lower mainland, southeast, and portions of the Thompson & Okanagan valleys. Extirpated from much of its former range in the U.S. West.

Non-anadromous Freshwater Fish

SPECIES	STATUS	MISC. INFORMATION
Dragon Lake Whitefish <i>Coregonus sp.1</i>	EXTINCT	Inhabited Dragon Lake near Quesnel. Eradicated in 1956 when the lake was poisoned to remove unwanted fish prior to introducing trout for sport fishing.
Hadley Lake Limnetic Stickleback Hadley Lake Benthic Stickleback <i>Gasterosteus spp.</i>	EXTINCT COSEWIC	These species inhabited Hadley Lake on Lasqueti Island. They were lost in the 1990s following introduction of Brown Bullhead.
Enos Lake Limnetic Stickleback Enos Lake Benthic Stickleback <i>Gasterosteus spp.</i>	ENDANGERED COSEWIC & SARA	Listed as extinct by CDC. Were found only in Enos Lake near Nanaimo. These species were lost following introduction of Signal Crayfish.
Nooksack Dace <i>Rhinichthys cataractae ssp.</i>	ENDANGERED COSEWIC & SARA	Habitat loss – U,A. Now restricted to portions of 4 small tributaries of the Nooksack River in the lower Fraser valley. Recovery strategy produced June 08; no action plan; critical habitat was identified and legally protected in 2010. See page 16 of this document.
Salish Sucker <i>Catostomus catostomus ssp.</i>	ENDANGERED COSEWIC & SARA	Habitat loss – U,A. Now restricted to a few small headwater streams in lower Fraser valley. Recovery strategy due Jan 06; not yet produced. Rec. strategy for Nooksack Dace states action plan for Salish Sucker to be produced by June 2010 – not yet produced.
Speckled Dace <i>Rhinichthys osculus</i>	ENDANGERED COSEWIC & SARA	Restricted to sections of Kettle River and tributary Granby River. Recovery strategy due Mar 2010; not yet produced.
White Sturgeon – Kootenay River & Upper Columbia River pops. <i>Acipenser transmontanus</i>	ENDANGERED COSEWIC & SARA	Decline due mainly to hydrological effects of hydroelectric facilities, also loss of habitat due to dyking, drainage and filling of sloughs and wetlands in Kootenay River. There is minimal natural recruitment of juveniles. Recovery strategies due Aug 07; not yet produced.
White Sturgeon – Nechako River pop. <i>Acipenser transmontanus</i>	ENDANGERED COSEWIC & SARA	Numbers much reduced due to historical overfishing. There is a lack of young sturgeon due to spawning failures or high mortality rates for juveniles, possibly due to hydrological alterations due to hydroelectric facilities; lack of recruitment since the late 1960s. Recovery strategy due Aug 07; not yet produced.
White Sturgeon – Lower Fraser River pop. <i>Acipenser transmontanus</i>	ENDANGERED COSEWIC	The lower Fraser River numbers are fairly large, but have not regained their historic numbers. Numbers reduced due to historical overfishing, loss of habitat to dyking, draining and filling of sloughs and wetlands.

Shorthead Sculpin <i>Cottus confusus</i>	THREATENED SARA Special Concern COSEWIC	Columbia River basin; Beaver & Norns Creeks, Kettle & Slocan Rivers. No recovery strategy.
Columbia Sculpin <i>Cottus hubbsi</i>	Special Concern COSEWIC & SARA	Columbia River system; has been impacted by hydroelectric facilities, also agriculture, mining, logging, pollution, and lake poisoning programs in the past. Proposed management plan posted October 2011.
Westslope Cutthroat Trout <i>Onchorhynchus clarkii lewisi</i>	Special Concern COSEWIC & SARA	Columbia River system. Its range has been greatly reduced – competition from non-native fish species; hybridization with introduced rainbow trout; over-fishing; habitat damage. Management plan due March 2013.
Umatilla Dace <i>Rhinichthys umatilla</i>	THREATENED COSEWIC RED LIST	Occurs in the Columbia River drainage. Prefers larger riverine habitat. Extensive habitat loss due to hydroelectric facilities.
Bull Trout <i>Salvelinus confluentus</i>	BLUE LIST	Interior species, reaching the coast only in the Fraser & Squamish systems. Major declines in the Columbia & lower Fraser systems and others. Highly susceptible to habitat degradation and displacement by introduced salmonids, especially lake trout and brook trout.
Coastal Cutthroat Trout <i>Onchorhynchus clarkii clarkii</i>	BLUE LIST	Coastal streams and lakes, usually less than 150 km from the coast. Many populations are not anadromous. Several populations, particularly in the Georgia Strait/Lower Fraser River area, are in serious decline or are extinct. Major threats or causes of decline include U, A, L, hydropower development.
Dolly Varden <i>Salvelinus malma</i>	BLUE LIST	Typically anadromous, however there are many landlocked populations. Many populations have declined due to urbanization, hydroelectric facilities or over-fishing.

3 LEGAL

International

United Nations *Convention on Biological Diversity*, 1992 (ratified by Canada)

Objectives: Conservation of biological diversity, sustainable use of its components, fair and equitable sharing of the benefits of genetic resources.

Definition: *Sustainable use* means use of components of biological diversity so as not to lead to long-term decline of biological diversity, maintaining their potential to meet the needs of present and future generations.

***Canadian Biodiversity Strategy*, 1995**

Guide to the implementation of the *Convention*; signed by all provinces & territories.

Federal

***National Accord for the Protection of Species at Risk*, 1996**

Commitment by federal, provincial & territorial ministers to a national approach for protection of species at risk.

Goal: Prevent species in Canada from becoming extinct as consequence of human activity.

The ministers agree to:

- recognize COSEWIC as a source of advice
- legally designate species as threatened or endangered
- immediately establish legal protection for species at risk
- protect the habitat of threatened and endangered species
- develop recovery plans within 1 year for endangered species and 2 years for threatened species
- implement recovery plans in a timely fashion

***Species at Risk Act (SARA)*, 2003**

Applies to federal land in Canada (except for 'safety net' provisions for provincial land). 'Federal land' means land that belongs to the Crown in right of Canada, the internal waters of Canada and the territorial sea of Canada, and Indian Reserves.

Establishes COSEWIC (Committee on the Status of Endangered Wildlife in Canada) for assessing and identifying species at risk. A species at risk is one that is extirpated, endangered, threatened or of special concern. Species are selected for listing (Schedule 1 of the Act) by Cabinet.

Cabinet, upon receiving an assessment report of a species from COSEWIC, within 9 months may review the assessment and may accept the assessment and add the species to the SARA List, or decide not to, or refer the matter back to COSEWIC for further information or consideration.

For all species included on the List when SARA was passed on June 5, 2003, a recovery strategy must be prepared within 3 years for endangered species and within 4 years for threatened or extirpated species, and a management plan must be prepared within 5 years for a special concern species. For all species added to the List after June 5, 2003, a recovery strategy must

be prepared within 1 year for endangered species and within 2 years for threatened or extirpated species, and a management plan must be prepared within 3 years for a special concern species.

The recovery strategy must include the broad strategy to address the threats identified by COSEWIC, identify the species critical habitat to the extent possible, a schedule of studies for identifying critical habitat where available information is inadequate, and a statement of when action plan(s) will be completed. Within 90 days the recovery strategy must be finalized. Critical habitat must be identified in the action plan to the extent possible.

Recovery strategies and the action plans implementing them may take an ecosystem or multi-species approach when appropriate.

Within 180 days after the recovery strategy or action plans have identified critical habitat, all of the critical habitat must be protected.

The Act can apply to a listed endangered or threatened species in a province or territory that is not federal land, if the laws of the province or territory do not effectively protect the species.

A management plan for a special concern species sets out measures for the conservation of a species and its habitat

The Act provides for stewardship plans or conservation agreements with governments or persons, e.g. for private land.

The minister must, with respect to fish (as defined in the *Fisheries Act*) or *Migratory Birds Convention Act* birds, regardless of where they are located, or with respect to any other wildlife species on federal lands, make any regulations necessary for implementing measures included in an action plan.

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Rulings resulting from lawsuits won by Ecojustice

Killer Whale

In 2008 Fisheries & Oceans Canada (DFO) issued a Protection Statement for Resident Killer Whales' critical habitat that sought to legally protect critical habitat using voluntary guidelines and non-binding laws and policies. In 2009 Ottawa issued a Protection Order for Resident Killer Whales' critical habitat that ignored the biological aspects of critical habitat, including water quality, noise pollution from marine traffic, and food supply. An Ecojustice lawsuit challenged the Protection Statement and Order. In December 2010 the federal court ruled that DFO failed to protect Killer Whale critical habitat. The court ruled that the government must legally protect all aspects of critical habitat, e.g., availability of salmon and quality of the marine environment, including pollution and physical and acoustic disturbance. The ruling applies to all of Canada's endangered marine species. The government is appealing the judgment.

Nooksack Dace

The Species at Risk Act requires the federal government to identify the critical habitat of endangered and threatened species in recovery strategies. Ecojustice filed a lawsuit in 2007 after DFO unlawfully deleted habitat maps from the Nooksack Dace recovery strategy. This lawsuit forced DFO to openly acknowledge the location of Nooksack Dace's critical habitat in its recovery strategy. But the government provoked a new lawsuit by deciding that no concrete action would be taken to protect the species's habitat.

Ecojustice launched a second lawsuit in January 2009, alleging DFO shirked its legal duties in failing to issue an Order protecting the dace's habitat. Instead, it was relying on existing provisions of the Fisheries Act, which had failed to protect the species so far. In a September 2009 ruling, the federal court admonished DFO. The federal government has issued an Order that will provide legal protection for the endangered species' habitat

Boreal Woodland Caribou

The Pembina Institute and Alberta Wilderness Association asked Environment Minister Peter Kent to recommend an emergency order protecting threatened woodland caribou (*Rangifer tarandus caribou*) in northeastern Alberta. The Minister responded by stating that there were no imminent threats to the recovery of the Boreal Caribou. Ecojustice, on behalf of Pembina and AWA, then asked the Federal Court to compel Mr. Kent to recommend the emergency order. In July 2011, the court overturned the Minister's decision, calling for the Minister to reconsider the government's position on emergency protection. The Court also acknowledged that a Recovery Strategy for the Woodland Caribou was 4 years overdue, and gave the Minister until September 1, 2011 to release a draft strategy.

On 30 August, 2011, the draft Recovery Strategy was released.

4 OTHER LISTED SPECIES

This list includes species of rare or localized occurrence in the province but not in decline, those for which insufficient data are available to determine if declines have occurred, or those for which possible recovery measures in BC are limited.

Mammals	
Bighorn Sheep	Blue List
Blue Whale (Pacific pop.)	COSEWIC & SARA - Endangered
Collared Pike	Blue List
Dall's Sheep	Blue List
Ermine anguinae ssp	Blue List
Ermine haidarum ssp	COSEWIC & SARA - Threatened
Fin Whale (Pacific pop.)	COSEWIC & SARA - Threatened
Fringed Myotis	Blue List COSEWIC – Data Deficient
Great Basin Pocket Mouse	Red List
Grey Whale	COSEWIC & SARA – Special Concern
Harbour Porpoise (Pacific Ocean pop.)	COSEWIC & SARA – Special Concern
Humpback Whale (North Pacific pop.)	COSEWIC & SARA - Threatened
Least Chipmunk oreocetes ssp	Blue List
Least Chipmunk selkirki ssp	Red List
Least Weasel	Blue List
Meadow Jumping Mouse alascensis ssp	Blue List
Merriam's Shrew	Red List
North Pacific Right Whale	COSEWIC & SARA - Endangered
Northern Bog Lemming, artemisiae ssp	Blue List
Northern Fur Seal	COSEWIC - Threatened
Northern Myotis	Blue List
Northern Pocket Gopher segregatus ssp	Red List
Nuttall's Cottontail	COSEWIC & SARA – Special Concern
Olympic Shrew	Red List
Preble's Shrew	Red List
Red-tailed Chipmunk ruficaudus ssp	Red List
Red-tailed Chipmunk simulans ssp	Blue List
Roosevelt Elk	Blue List
Sei Whale (Pacific pop.)	COSEWIC & SARA - Endangered
Snowshoe Hare washingtonii ssp	Red List
Southern Red-backed Vole galei ssp	Blue List
Southern Red-backed Vole occidentalis ssp	Red List
Sperm Whale	COSEWIC – Not at Risk Blue List
Steller Sea Lion	COSEWIC & SARA – Special Concern
Townsend's Mole	COSEWIC & SARA - Endangered
Townsend's Vole cowani ssp	Red List
Trowbridge's Shrew	Blue List
Tundra Shrew	Red List
Western Harvest Mouse	COSEWIC & SARA – Special Concern
Western Small-footed Myotis	Blue List
Birds	
American Avocet	Red List
American Golden-Plover	Blue List
American White Pelican	COSEWIC – Not at Risk Red List
Band-tailed Pigeon	COSEWIC – Special Concern
Barn Owl	COSEWIC & SARA – Special Concern
Barn Swallow	Blue List
Black-crowned Night-heron	Red List
Black-footed Albatross	COSEWIC & SARA – Special Concern
Bobolink	Blue List
Brant	Blue List
Brandt's Cormorant	Red List
Broad-winged Hawk	Blue List

Cackling Goose	Blue List
California Gull	Blue List
Canada Goose occidentalis ssp	Red List
Canada Warbler	COSEWIC & SARA - Threatened
Canyon Wren	COSEWIC – Not at Risk Blue List
Caspian Tern	COSEWIC – Not at Risk Blue List
Clark's Grebe	Red List
Common Murre	Red List
Common Nighthawk	COSEWIC & SARA – Threatened
Forster's Tern	COSEWIC – Data Deficient Red List
Gray Flycatcher	COSEWIC – Not at Risk Blue List
Great Blue Heron fannini ssp	COSEWIC & SARA – Special Concern
Great Blue Heron herodias ssp	Blue List
Green Heron	Blue List
Gyrfalcon	COSEWIC – Not at Risk Blue List
Hairy Woodpecker picoideus ssp	Blue List
Horned Lark merrilli ssp	Blue List
Horned Puffin	Red List
Hudsonian Godwit	Red List
Le Conte's Sparrow	Blue List
Northern Fulmar	Red List
Northern Pygmy-Owl swarathi ssp	Blue List
Olive-sided Flycatcher	COSEWIC & SARA – Threatened
Peregrine Falcon pealei ssp	COSEWIC & SARA – Special Concern
Pine Grosbeak carlottae ssp	Blue List
Pink-footed Shearwater	COSEWIC & SARA - Threatened
Red Knot rufa ssp	COSEWIC – Endangered
Red Knot roselaari type	COSEWIC & SARA – Threatened
Red-necked Phalarope	Blue List
Rough-legged Hawk	COSEWIC – Not at Risk Blue List
Rusty Blackbird	COSEWIC & SARA – Special Concern
Short-billed Dowitcher	Blue List
Short-tailed Albatross	COSEWIC & SARA - Threatened
Smith's Longspur	Blue List
Snowy Owl	COSEWIC – Not at Risk Blue List
Sooty Grouse	Blue List
Steller's Jay carlottae ssp	Blue List
Surf Scoter	Blue List
Thick-billed Murre	Red List
Tufted Puffin	Blue List
Tundra Swan	Blue List
Upland Sandpiper	Red List
Wandering Tattler	Blue List
Western Screech-Owl kennicottii ssp	COSEWIC & SARA – Special Concern
White-tailed Ptarmigan saxatilis ssp	Blue List
Williamson's Sapsucker nataliae ssp	COSEWIC – Endangered
Williamson's Sapsucker thyroideus ssp	COSEWIC & SARA – Endangered
Yellow-billed Loon	COSEWIC – Not at Risk Blue List
Yellow Rail	COSEWIC & SARA – Special Concern Red List
Reptiles	
Leatherback	COSEWIC & SARA - Endangered
Racer	COSEWIC – Special Concern
Rubber Boa	COSEWIC & SARA – Special Concern
Sharp-tailed Snake	COSEWIC & SARA - Endangered
Western Skink	COSEWIC & SARA – Special Concern
Amphibians	
Western Toad	COSEWIC & SARA – Special Concern
Fish	
Arctic Cisco	Red List
Broad Whitefish	Red List
Burbot, Lower Kootenay pop.	Red List
Charlotte Unarmoured Stickleback	COSEWIC – Special Concern Red List

Chiselmouth	COSEWIC – Not at Risk Blue List
Cisco	Red List
Cultus Pygmy Sculpin	COSEWIC & SARA - Threatened
Emerald Shiner	Red List
Giant Black Stickleback	COSEWIC – Special Concern Red List
Goldeye	Blue List
Green Sturgeon	COSEWIC & SARA – Special Concern Red List
Inconnu	Blue List
Least Cisco	Blue List
Misty Lake “Lake” Stickleback Misty Lake “Stream” Stickleback	COSEWIC & SARA - Endangered
Morrison Creek Lamprey	COSEWIC & SARA - Endangered
Mottled Sculpin	Blue List
Mountain Sucker	COSEWIC – Not at Risk Blue List
Ninespine Stickleback	Red List
Paxton Lake Limnetic Stickleback Paxton Lake Benthic Stickleback	COSEWIC & SARA - Endangered
Pearl Dace	Blue List
Pygmy Longfin Smelt	COSEWIC – Data Deficient Red List
Spottail Shiner	Red List
Threespine Stickleback	COSEWIC – Special Concern
Vananda Creek Limnetic Stickleback Vananda Creek Benthic Stickleback	COSEWIC & SARA - Endangered
Vancouver Lamprey	COSEWIC & SARA - Threatened
White Sturgeon Middle Fraser River pop.	COSEWIC - Endangered
White Sturgeon Upper Fraser River pop.	COSEWIC & SARA - Endangered

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<i>Progne subis</i>	6
<i>Ptychoramphus aleuticus</i>	8
Purple Martin	6
Pygmy Short-horned Lizard	6
<i>Rana aurora</i>	8
<i>Rana pretiosa</i>	5
<i>Rangifer tarandus dawsoni</i>	7
<i>Rangifer tarandus caribou</i> pops.	12
Red-legged Frog	8
<i>Rhinichthys cataractae</i> ssp.	13
<i>Rhinichthys osculus</i>	13
<i>Rhinichthys umatilla</i>	14
Rocky Mountain Tailed Frog	9
Sage Thrasher	6
Salish Sucker	13
<i>Salvelinus confluentus</i>	14
<i>Salvelinus malma</i>	14
Sea Otter	8
Sharp-tailed Grouse	11
Short-eared Owl	6
Shorthead Sculpin	14
<i>Sorex bendirii</i>	5
<i>Sorex palustris brooksi</i>	8
<i>Spea intermontana</i>	10

Speckled Dace	13
<i>Spizella breweri breweri</i>	10
Spotted Bat	10
Spotted Owl	5
<i>Strix occidentalis caurina</i>	5
Swainson's Hawk	11
<i>Synthliboramphus antiquus</i>	8
<i>Taxidea taxus jeffersonii</i>	9
Tiger Salamander	9
Townsend's Big-eared Bat	11
<i>Tympanuchus phasianellus columbianus</i>	11
Umatilla Dace	14
<i>Ursos arctos horribilis</i>	12
Vancouver Island Marmot	7
Vesper Sparrow	5
Western Grebe	11
Western Rattlesnake	10
Western Screech-Owl	9
Westslope Cutthroat Trout	14
White Sturgeon pops.	13
White-headed Woodpecker	6
White-tailed Jackrabbit	6
Wolverine	13
Wood Bison	12
Woodland Caribou pops.	12
Yellow-billed Cuckoo	4
Yellow-breasted Chat	6