

Wildlife

PROGRAM PLAN







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Cover

Photo courtesy of Jared Hobbs
Mountain Goat, *Oreamnos americanus*

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Photo courtesy of Jennifer Heron
Saffron-winged Meadowhawk, *Sympetrum costiferum*

Photos courtesy of Jared Hobbs

Rubber Boa, *Charina bottae*
Moose, *Alces alces*
Tiger Salamander, *Ambystoma tigrinum*
Burrowing Owl, *Athene cucularia*
Coyote, *Canis latrans*
Marbled Murrelet, *Brachyramphus marmoratus*
Mormon Metalmark, *Apodemia mormo*
Woodland Caribou, *Rangifer tarandus*



Photo courtesy of Jared Hobbs
Rocky Mountain Bighorn Sheep, *Ovis canadensis*,
in the East Kootenay

Message from the Assistant Deputy Minister

British Columbia is blessed with a rich wildlife heritage that has national and global significance. Wildlife contributes to the cultural and economic fabric of the province and plays a central role in First Nations' traditional way of life. Wildlife also provides a source of food and recreational activities that enhance the health and well-being of British Columbians and visitors. Increasing and cumulative effects from climate change, human activities, invasive alien species and other emerging issues, create significant challenges for current and future Wildlife Program staff.

One of the Five Great Goals of the Provincial Government is to "Lead the world in sustainable environmental management". Managing the province's wildlife heritage through shared stewardship is a key part of that goal. To help BC achieve this, we have developed a comprehensive Wildlife Program Plan. This Plan provides clear direction to meet current and emerging challenges over the coming years and helps guide our collective efforts in wildlife management. It builds understanding of the Wildlife Program and how our staff and partners will contribute to its delivery.

The vision for the Wildlife Program is to have **"Naturally diverse and sustainable wildlife supporting varied uses for current and future generations"**. To achieve this vision, the Wildlife Program will focus efforts on the adaptive, proactive and coordinated delivery of wildlife conservation, use and enjoyment opportunities. Climate change is also a powerful influence on wildlife and will require us to examine everything we do in light of it and make smart decisions about tough choices.

The people in the Wildlife Program are passionate about ensuring that the province's diverse wildlife can be enjoyed and appreciated by British Columbians and visitors for generations to come.

In reading this Plan, you will see the efforts made by the Program to grapple with the complexities and uncertainties of wildlife management in a changing world. Presented is a coherent Plan that outlines the vision, goals, objectives, and strategies that the Ministry, our partners, and other stakeholders will need to implement over the coming years. I thank all of those who invested their time, spirit and experience in creating this valuable Plan.

While this Plan was developed primarily to provide direction for staff in the Wildlife Program, many of our Ministry's partners, stakeholders, and members of the public are also interested in and concerned about British Columbia's wildlife and how it is managed. I encourage all who care about our wildlife, whether you are inside or outside government, to read this plan and do your part to take care of British Columbia's valuable wildlife heritage.

The Wildlife Program acknowledges the leadership and contribution of Nancy Wilkin, former Assistant Deputy Minister of the Environment Stewardship Division from July 2002 to September 30, 2008. Nancy oversaw the initiation and development of this program plan.



Ralph Archibald
Assistant Deputy Minister
Environmental Stewardship Division

Introduction

History of Wildlife Management in B.C.

Prior to the European settlement of North America, wildlife populations were abundant and diverse, and supported the many needs of the First Nations peoples. The Aboriginal peoples managed the resource through cultural controls and by using fire to modify habitat, which improved game abundance and opened up hunting grounds.

European explorers of western North America wrote extensively about the plentiful game that was present. They and European settlers took advantage of this abundance by establishing markets for fur, hides, and wildlife meat. However, these markets were largely uncontrolled. This led to dramatic changes in wildlife populations, including the extirpation of Roosevelt Elk on the Lower Mainland and Wood Bison in northern B.C. These losses led to increasing public concern about the state of the resource. It was apparent that the exploitation of wildlife without limits needed to be changed.

As a result, the public began to advocate for a different model that had two basic principles: wildlife belongs to everyone and should be managed so that populations are sustained forever. This formed the basis of the North American Wildlife Conservation Model, which to this day, is the wildlife policy that is applied throughout Canada and the United States.

In British Columbia, wildlife management became organized in 1905 with the establishment of the Department for the Protection of Game and Forests. Throughout much of the last century, the focus of wildlife management was on game species and the provision of hunting opportunities. The first *Wildlife Act* was passed in 1964. It later underwent a major rewrite in 1982. Amendments to the Act continue to be made as management issues change and government responds to those changes.

In the 1980s, the emergence of issues such as species at risk and biodiversity conservation led to a broadening of the scope of the Wildlife Program. In 2002, the federal *Species at Risk Act* was passed, and in 2004 the provincial *Wildlife Amendment Act* was passed. These acts brought increased attention to the Wildlife Program's role in the conservation and recovery of species at risk.

Today, the Wildlife Program is led from a policy perspective by the Ecosystems Branch and the Fish and Wildlife Branch within the Environmental Stewardship Division of the Ministry of Environment. The program is delivered in the field by the Division's Regional Operations Branch and regional offices.

Photo courtesy of Kristy Palmantier
Tsilhqot'in guide with Moose, *Alces alces*





Photo courtesy of Jared Hobbs
Vancouver Island Marmot, *Marmota vancouverensis*



Photo courtesy of Nathan Nankivell



Photo courtesy of Randy Dolighan
Hunting along the Fraser River

Ecological Significance

British Columbia is recognized internationally for its diverse wildlife populations and is increasingly becoming a globally important refuge for a variety of species and large mammal predator-prey systems. B.C. is home to several endemic species and sub-species (found nowhere else in the world) such as the Vancouver Island Marmot and the Queen Charlotte Island Ermine. It also has a high percentage of the world's population of a number of species, including the Marbled Murrelet, Golden Paintbrush, and Mountain Goat.

Cultural and Social Significance

Wildlife helps define the identity of British Columbia and inspires its citizens. In particular, wildlife has played a central role in First Nations peoples' spiritual, cultural, and trading heritage. For all British Columbians, the enjoyment and sustainable use of wildlife provides recreational pursuits, important educational opportunities, and aesthetic benefits.

Economic Significance

Wildlife provides important economic benefits to the province. Hunting, guide outfitting, trapping, and the commercial trade in fur annually generate \$120 million in direct consumer spending. Approximately 90,000 British Columbians and 6600 visitors purchase provincial hunting licenses annually. Direct non-hunting wildlife activities (trips or outings where the main purpose is to watch, feed, photograph, or study wildlife) and indirect non-hunting wildlife activities (activities around the home, cabin, or cottage or where the main purpose was not related to wildlife) have been estimated at \$737 million per year.

Purpose of the Wildlife Program Plan

The Wildlife Program has a long and proud history of managing British Columbia's wildlife. This plan identifies how government, First Nations, the public, and the private sector can work together to manage wildlife today and into the future. It provides a roadmap for all program staff and links the high-level goals and priorities of the Ministry and Environmental Stewardship Division to the planning of day-to-day operations. Its aim is to assist staff in prioritizing their efforts, making policy, developing programs, allocating resources, and co-ordinating the efforts of program partners who are involved in wildlife management. The plan is organized around our high-level vision and goals, and sets out what we will be doing and why over the next three to five years.

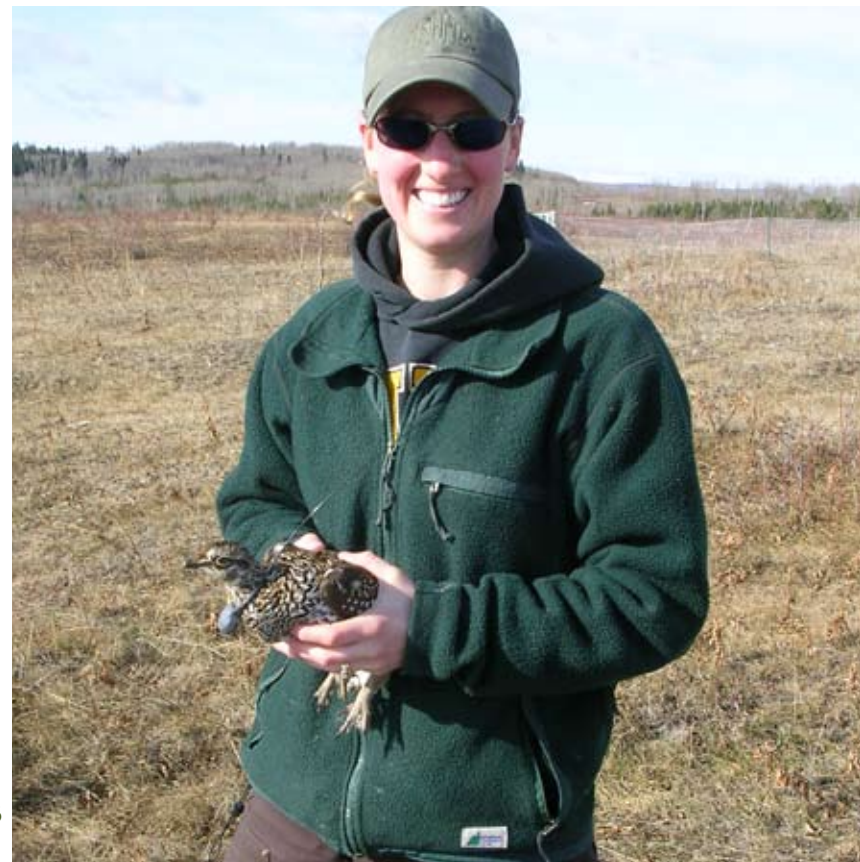
How this Plan Fits with the Ministry Planning Framework

The government of B.C. has set a goal to lead the world in sustainable environmental management. The Ministry of Environment has seven divisions that lead and/or contribute to programs and services related to the conservation of living resources and the protection of freshwater, air, ocean, and marine fisheries resources. It has recently unveiled three major action plans related to water, air, and climate change. In addition, the Ministry is leading the development and implementation of the Conservation Framework. The framework will prioritize species and ecosystems for conservation and management action and will be implemented across government and non-government sectors (see Appendix 3 for more information on the Conservation Framework).

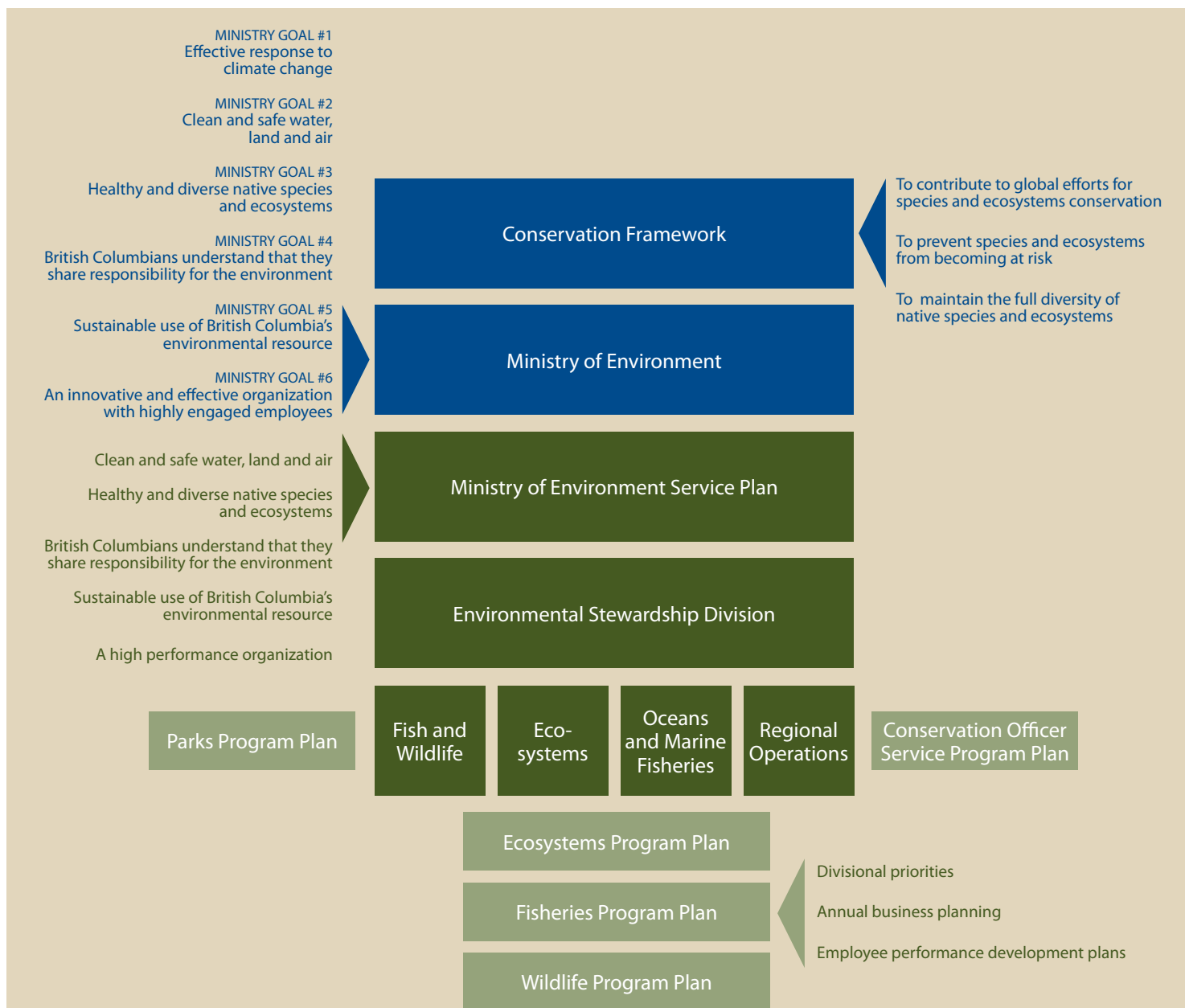
To guide our collective activities, the Ministry of Environment prepares three-year Service Plans, which inform the development of annual business plans for the Ministry's divisions, including our own Environmental Stewardship Division.

The Ministry has prepared or plans to prepare other program plans, including ones for freshwater fisheries, ecosystems, parks and protected areas, and the Conservation Officer Service. Each of these plans contain linkages that are necessary for the Wildlife Program Plan to be implemented successfully.

Photo courtesy of Nick Baccante
Radio-collaring Sharp-tailed Grouse, *Tympanuchus phasianellus*, near Fort St. John



The following diagram shows how the Wildlife Program Plan fits with the Ministry Planning Framework:



Delivering the Wildlife Program

The provincial government is responsible for managing wildlife across the province through the powers provided in the *Wildlife Act* and the *Wildlife Amendment Act*, and for managing wildlife habitat through the *Park Act*, *Ecological Reserve Act*, *Forest and Range Practices Act*, the *Land Act* and other legislative tools (see Appendix 2

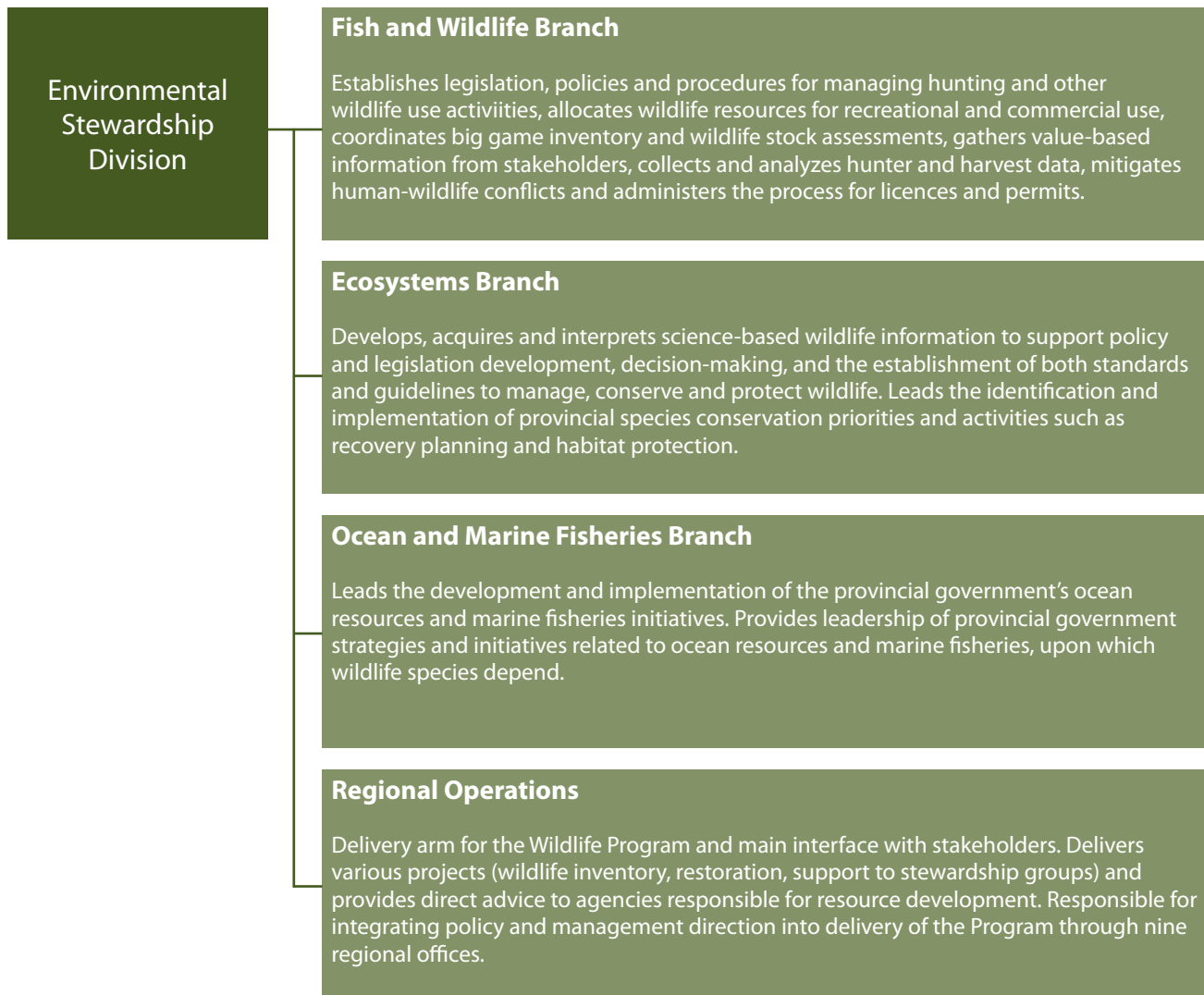
for more information). The Environmental Stewardship Division has the overall responsibility for the Wildlife Program.

The diagram below shows how the various divisions within the Ministry support the Wildlife Program:



Environmental Stewardship Division – Branch Overview

The diagram below provides an overview of the four branches within the Environmental Stewardship Division and their respective roles and responsibilities within the Wildlife Program:



Drivers of Wildlife Management in B.C.

British Columbia is undergoing rapid and extensive change, which has already affected the distribution and abundance of many wildlife species across the province. This presents new challenges for wildlife managers in addressing the drivers that are creating this change.



Wildlife Drivers

Human Population Growth

British Columbia's population is projected to increase by over 37% between 2001 and 2031. The Lower Mainland and Thompson-Okanagan regions are expected to experience around 40% growth. Population growth and the associated expansion of urban, agricultural, and recreational developments into previously undisturbed wildlife habitats will place additional pressure on the environment and the wildlife it supports, especially species that are already of conservation concern or are at risk. As human pressure on the landscape increases, conflicts between wildlife and humans will also increase. This will put additional pressure on many wildlife species.



Climate Change

The unpredictability of climate change effects presents a significant challenge in managing wildlife. Hotter and drier conditions, more frequent extreme weather events, reduced snow packs and glacial ice, and changes in water availability are just a few examples of climate changes that are forecasted to affect the province's wildlife. Species will either perish or be forced to adapt, evolve, or migrate. Some wildlife species are more resilient than others and will be able to thrive in new conditions. The most noticeable effects of climate change so far have been related to the mountain pine beetle, whose populations have dramatically increased due to warmer winters.

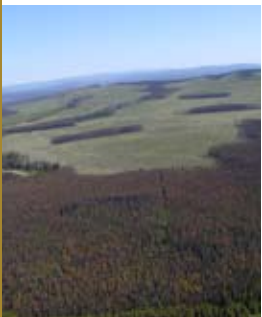


Wildlife Population Change

Wildlife populations fluctuate in size and distribution. Species interactions, such as competition and predation, can result in either reduced or increased population densities or range shifts. Wildlife managers need reliable information and analytical tools to manage in this state of perpetual population change.

Wildlife Habitat Change

Habitat change is a constant in wildlife management. Natural disturbance factors such as fire and wind can dramatically alter habitat conditions for a species. Anthropogenic effects, particularly ones that result in permanent loss or fragmentation of habitat, present especially important challenges for wildlife management. In some parts of the province, the number, extent, and interaction of adverse effects on the landscape are increasing to such an extent that wildlife managers are now grappling with ways to best assess their cumulative impact.





Alien Species

Wildlife managers stress the distinction between native species, which are the focus of conservation and management efforts, and alien species, which can cause considerable ecological and economic damage. Alien species are the second greatest threat to biodiversity after habitat loss and degradation. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) estimates that 25% of endangered species, 31% of threatened species, and 16% of special concern species are negatively affected by alien species.

First Nations and Public Interest Drivers

First Nations and Aboriginal Rights

The evolving state of First Nations rights has proven to be a challenging new area for the Wildlife Program. The Canadian Constitution of 1982 affirmed and recognized Aboriginal rights but did not provide terms for those rights. The courts have provided rulings that recognize First Nations' rights to hunt within their traditional territories, and have further described the Crown's obligations to consult on activities that may affect the land and resources that sustain First Nations' culture. Such rulings require Wildlife Program staff to broadly consult on species management and recovery plans. Treaties between the Crown and First Nations have further defined First Nations' explicit rights by legally defining their Traditional Territory and determining harvest levels. As more treaties are completed and court rulings are made, First Nations' rights will continue to evolve.



Hunting and Trapping

Hunters and trappers have played a leading role in the conservation of wildlife. Many wildlife success stories in B.C. and North America can be directly attributed to the commitment and ingenuity of hunters and trappers. The number of active hunters and trappers in British Columbia has been declining for the past 25 years. This should be a concern for all those involved in wildlife conservation in the province.

Wildlife Viewing

While the number of hunters and trappers in B.C. has declined, the number of people participating in wildlife viewing has increased dramatically. The establishment of birding clubs, wildlife festivals, and commercial bear viewing sites are a result of people wanting to interact with and enjoy wildlife. The increasing trend in wildlife viewing is expected to continue.



Changing Public Attitudes

The rapidly changing profile of British Columbia's population will have a significant effect on wildlife management. By 2020, one in three British Columbians will be an immigrant, many of whom will have come from countries with different values regarding wildlife. The province's aging population will also bring changes in patterns of recreational use.

Photos from left-hand page from top to bottom

Photo courtesy of Jared Hobbs: Cambie Bridge, Vancouver
Photo courtesy of Jared Hobbs: White tailed Ptarmigan, *Lagopus leucura*
Photo courtesy of Jared Hobbs: Lynx, *Lynx canadensis*
Photo courtesy of Chris Ritchie: Mountain Pine Beetle Forest

Photos from right-hand page top to bottom

Photo courtesy of Purnima Govindarajulu: Green Frog, *Rana clamitans*
Photo courtesy of Kristy Palmantier
Photo courtesy of Gord Hitchcock: Hunting waterfowl near Qualicum Beach
Photo courtesy of BC Parks: Wildlife viewing in Churn Creek

Federal Government

The Canadian Wildlife Service of Environment Canada and the Parks Canada Agency are important partners in wildlife management in British Columbia (see Appendix 1).

Federal legislation contributes significantly to wildlife conservation, and affects workloads and priorities of provincial Wildlife Program staff. The federal *Species at Risk Act*, which came into force in 2002, requires the province to develop and implement recovery plans for listed species. The *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA) is the legislative vehicle by which Canada meets its obligations under the Convention on International Trade in Endangered Species (CITES). It requires that the Province prepare management plans and Non Detriment Findings (NDFs). The *Migratory Birds Convention Act* is partially administered by the Province through a Memorandum of Understanding. Through the 2004 Canada-British Columbia Agreement on Environmental Assessment Cooperation, cooperative environmental assessments are conducted which consider wildlife requirements and meet the needs of both federal and provincial statutes.

Other Provincial Government Agencies

Other provincial agencies have legislation and mandates that contribute to successful wildlife management. The Ministries of Forests and Range; Agriculture and Lands; Transportation and Infrastructure; Energy, Mines and Petroleum Resources; Tourism, Culture, and the Arts; and Aboriginal Relations and Reconciliation all have wildlife management responsibilities and issues (see Appendix 1). Requests from these ministries for assistance with legislation, policy, issue analysis, data provision, or decision making often set priorities for Wildlife Program staff.

Local Governments

Local governments share responsibility for wildlife stewardship by managing land development. Their role is enabled by the *Local Government Act*, which is administered by the Ministry of Community Development. The Act provides broad tools, such as Official Community Plans, and specific tools, such as bylaws, for local government use. Although local governments do not manage

fish and wildlife directly, the tools provided by the Act can affect land development practices and their effect on riparian vegetation, watercourses, wetlands, and other environmentally sensitive areas. In addition, the Province often has to collaborate with local governments and private landowners to resolve wildlife-human pressures and conflicts.

Non-Government Organizations

Numerous non-government organizations (NGOs) have an interest in wildlife and how it is managed in the province. A wide variety of NGOs share in the stewardship of wildlife through informal and formal partnerships, advisory committees, independent assessments, fundraising, and joint projects (see Appendix 1). The Ministry of Environment has a unique relationship with the Habitat Conservation Trust Foundation, which has a specific, legislated role outlined in the *Wildlife Act*.

Habitat Conservation Trust Foundation (HCTF)

The Habitat Conservation Trust Foundation (HCTF) came into existence in 1981. Its main contributors—hunters, anglers, trappers, and guide-outfitters—were willing to pay for conservation work beyond that required by government for the basic management of wildlife and fish resources. License fees cover basic management costs, but conservation projects funded by HCTF surcharges should benefit contributors by enhancing their opportunities to use and enjoy wildlife and fish resources.

The Foundation's mission is to invest in projects that maintain and enhance the health and biological diversity of British Columbia's fish, wildlife, and habitats so that people can use, enjoy, and benefit from these resources. The HCTF funds a variety of conservation work including:

- projects that restore, maintain, or enhance native wildlife populations and habitats
- information, education, and stewardship projects that enhance users' enjoyment of wildlife and habitats or that foster favourable human attitudes and behaviours towards management and conservation
- projects that acquire land or interests in land to secure them for conservation purposes

Since 1981, the HCTF has directly invested over \$100 million into conservation projects across B.C. This investment has contributed to the maintenance of healthy and diverse populations of native species.

Organizations represented on the HCTF Board of Directors are the BC Wildlife Federation (BCWF), Guide Outfitters Association of British Columbia (GOABC), the BC Trappers Association (BCTA), and the B.C. Ministry of Environment.

Responding to these Drivers

The immediate and long-term effects of these drivers impact wildlife management in B.C. To address these effects, today and in the future, the Wildlife Program will:

- implement the Conservation Framework, British Columbia's new approach to managing species and ecosystems of conservation concern in the province

- improve natural science information about wildlife by:
 - increasing resource inventory, assessment and research capacity
 - applying new analytical techniques (e.g. computational tools for stock assessment and habitat supply modelling, structured approaches for eliciting expert judgment)
- incorporate human dimensions into wildlife management by:
 - acquiring social sciences research and economic analysis
 - increasing the understanding of and response to First Nations', stakeholder, and community values
 - increasing shared stewardship and partnership agreements
- integrate both the natural and human dimensions to inform wildlife management decisions

This approach is reflected in the goals, objectives, strategies, and activities in this plan.

Photo courtesy of Nick Baccante
Locating nest of Sharp-tailed Grouse, *Tympanuchus phasianellus*, Fort St. John



The Wildlife Program Plan

Structure

The vision is the overarching strategic intent of the Wildlife Program. Aligned with this vision are three goals, each of which is supported by objectives, strategies, and activities that will be taken forward over the coming years. It is through the delivery of the strategies and activities that the wildlife vision is achieved.



Our Vision and Goals

Vision:

Naturally diverse
and sustainable
wildlife supporting
varied uses for
current and future
generations

Goal: Deliver a coordinated and proactive Wildlife Program

The Wildlife Program framework needs to be transparent, adaptive, and informed by the various user interests, and must establish regulations that promote and facilitate compliance by those who enjoy and affect the province's wildlife. The framework must also foster productive relationships with First Nations, delivery partners, and stakeholders so that policy, scientific and cultural knowledge, and management efforts are effectively co-ordinated. Together, these will build the necessary capacity for achieving success in the remaining two goals.

Goal: Conserve species and maintain the health of wildlife populations in collaboration with our partners

The Wildlife Program has adopted the cross-government Conservation Framework, a goal-based set of methods and tools used to prioritize species and ecosystems for conservation action. The Conservation Framework has the following three goals:

1. to contribute to global efforts for species and ecosystems conservation
2. to prevent species and ecosystems from becoming at risk
3. to maintain the full diversity of native species and ecosystems

Healthy wildlife populations are fundamental to sustaining B.C.'s wildlife heritage. The Wildlife Program must work with other Ministry programs, agencies, First Nations, and stakeholders to design wildlife management actions that conserve, preserve, or maintain healthy species populations. Engaging others in becoming stewards of wildlife is critical to the success of the program.

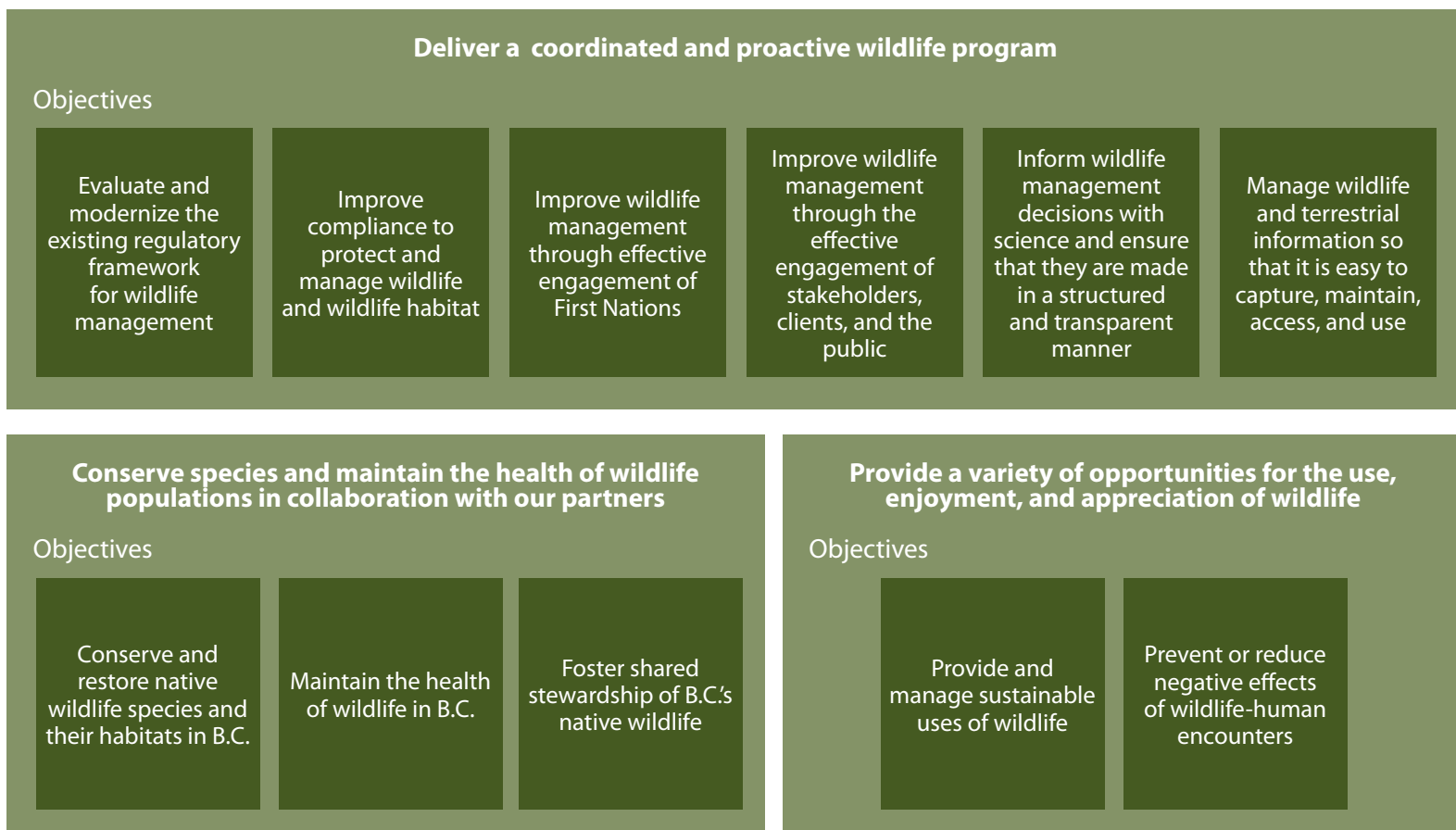
Goal: Provide a variety of opportunities for the use, enjoyment, and appreciation of wildlife

Meeting constitutional obligations for First Nations and creating sustainable and valued wildlife use opportunities that satisfy public and commercial interests are responsibilities of the Wildlife Program. Hunting and trapping are an important part of British Columbia's heritage and form an important fabric of present-day life for many British Columbians. Hunting and trapping are legitimate forms of recreation and are important resource management tools for managing wildlife and controlling selected species and populations that are not threatened or at risk. Changing demographics and competing opportunities for recreational time are affecting the numbers of people who actively participate in the use and enjoyment of wildlife. This, combined with the urbanization of the human population, has resulted in people becoming increasingly disconnected from nature, which makes it more challenging to engage the public in opportunities for using, enjoying, and appreciating wildlife.

Our Objectives

In order to achieve our 3 goals, 11 objectives have been identified. The objectives are aligned under the applicable goals and identify the set of strategies and activities that must be undertaken to address key drivers and effectively deliver the Wildlife Program. The objectives are not stand-alone areas; they are interdependent and must be delivered together in order to achieve our vision and goals.

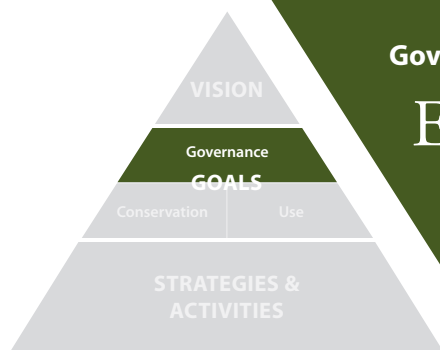
The following diagram shows the Wildlife Program framework:



In the following section, each objective is presented, by goal, and a rationale for its selection is given. The strategies and activities that will be used to achieve each objective are also listed. The activities will be used by Regional and HQ staff to design their annual business plans according to the unique circumstances that occur within their area of responsibility.



Photo courtesy of Jared Hobbs
Grizzly Bear, *Ursus arctos*



Governance objectives:

Evaluate and modernize the existing regulatory framework for wildlife management

A variety of legislation, regulations, policies, procedures, and best practices form the regulatory framework for managing wildlife and wildlife habitat in British Columbia. The Ministry is responsible for the *Wildlife Act*, which along with its associated 31 regulations, is the key piece of legislation that guides the Wildlife Program. The *Park Act*, *Ecological Reserve Act*, along with some designations made under both the *Forest and Range Practices Act* and the new *Oil and Gas Activities Act* (e.g. Wildlife Habitat Areas, Ungulate Winter Ranges, Wildlife Habitat Features) are also the responsibility of the Ministry. Decisions made under other pieces of legislation, such as the *Land Act*, federal *Species at Risk Act*, federal *Fisheries Act*, and those made by local governments, can have significant effects on wildlife. Having well designed, current, and efficient regulatory and policy tools will help the Ministry effectively influence those decisions.

As society shifts its values and government develops new ways of delivering programs and working with people, the Ministry will continually examine its legislation, regulations, policies, procedures, and practices to ensure it has the tools and information needed to effectively manage wildlife.

Our Strategies and Activities

Assess and improve the current regulatory framework for managing wildlife.

- Develop regulations that will implement 2008 changes to the *Wildlife Act* regarding dangerous and invasive alien species, increasing fines and penalties, streamlining the guide-outfitter industry, making Limited Entry Hunting more client-focused, and providing Park Rangers with Wildlife Officer authorities.
- Bring into force the *Wildlife Amendment Act* through regulation to protect species at risk and their residences.
- Review public comment and policy analysis on desired changes to the *Wildlife Act*. Identify, for Executive consideration, possible incremental changes to the Act.
- Review existing regulations under the *Wildlife Act* with the goal of streamlining, simplifying, and removing permits or reporting requirements.
- Confirm the policies, procedures, best practices, and guidelines for which the Ministry has primary responsibility (e.g., *Wildlife Act*, *Forest and Range Practices Act*, *Oil and Gas Activities Act*), and in conjunction with First Nations and partners, establish a priority list for review and modernization.
- Ensure policy and procedures are kept current and are available electronically to all staff.
- Monitor the effectiveness of legislation, regulations, and policy in achieving wildlife management objectives, and adjust accordingly.
- Support the development, maintenance, and improvement of appropriate legislation, regulations, and policies for protecting wildlife, habitat, and sustainable resource management as guided by the Conservation Framework.

Photo courtesy of Roger Packham
Badger, *Taxidea taxus*, 100 Mile House





Governance objectives:

Improve compliance to protect and manage wildlife and wildlife habitat

The Ministry’s ability to achieve its stated goals requires everyone who uses or can affect wildlife to comply with established legal (legislative, regulatory, or permitted) requirements. To help achieve a high level of voluntary compliance, the Ministry sets clear legal requirements, educates client groups about them, and monitors compliance with the requirements. Where voluntary compliance is not being achieved, the Ministry uses an array of enforcement tools.

Our Strategies and Activities

Deliver strategic and effective wildlife species/habitat compliance activities.

- Ensure compliance priority setting and work planning is guided by and consistent with the Conservation Framework and includes appropriate linkages to trend and effectiveness monitoring.
- Ensure appropriate training is available to staff so that compliance and enforcement actions (e.g., investigative techniques, expert witness) are effective and meet the necessary standards.
- Ensure compliance verification activities (e.g., inspections & audits) and strategies are developed for legal requirements that regulate human activities which adversely affect wildlife and wildlife habitat (e.g. unauthorized access in designated wildlife areas).

Deliver strategic and effective wildlife use compliance activities.

- Establish an audit function for wildlife permits. Categories to be audited in the next 3–5 years are—CITES, Export/Import, Wildlife in Captivity, Commercial Licences.
- Perform a compliance review on the new humane trapping standards.

Align wildlife compliance work with ongoing, Ministry-wide compliance efforts.

- Ensure regional compliance work planning is aligned among all compliance program partners (including the Conservation Officer Service and other Ministry divisions, other provincial ministries, and federal agencies, e.g. Environment Canada).
- Maximize the use of the Conservation Officer Service On-Line Reporting System (COORS) to provide historical enforcement data that can be used to guide compliance actions and decisions.
- Promote the use of the Conservation Officer Service Report All Poachers and Polluters (RAPP) Line and actively engage stakeholders, partners, and the general public in monitoring activities.



Photo courtesy of
Conservation Officer Service



Governance objectives:

Improve wildlife management through effective engagement of First Nations

The sustainability of British Columbia’s wildlife depends on effective collaboration between the provincial government and First Nations. First Nations have a unique and evolving role in wildlife management in B.C. stemming from their historical, cultural, and economic link to wildlife. Evolving case law continues to redefine First Nations’ wildlife use and management rights. In addition, the B.C. Treaty Process is advancing new constitutionally protected commitments to First Nations regarding wildlife management. Finally, the New Relationship affirmed that changes will occur in how the B.C. government and First Nations collaborate on wildlife management.

The Wildlife Program Plan aims to improve our capacity to address First Nations’ interests in a timely manner and ensure that consultation obligations and legal mandates are respected. Legislation governing aboriginal hunting and trapping rights must be regularly updated to reflect current legal status and facilitate a consistent application of laws and practices across the province.

Our Strategies and Activities

Provide direction and information to staff on how to effectively and efficiently engage First Nations in order to address rights and improve wildlife management outcomes.

- Ensure wildlife management and recovery plans are developed, implemented, and communicated within the Interagency Approach on First Nations engagement and consultation.
- Develop policy and procedure to guide staff in working with First Nations to meet consultation obligations.
- Improve internal communication of Ministry policy regarding First Nations.

Integrate First Nations’ interests in wildlife management into the operations of the Wildlife Program.

- Use the Conservation Corps and Intern Program to encourage recruitment of First Nations into the Wildlife Program.
- Develop wildlife enforcement protocols with First Nations.
- Establish a process to engage First Nations in wildlife conservation and harvest management, for example: 1) objective setting for population and habitat management and recovery; 2) harvest monitoring and inventory data collection; 3) sharing and integrating traditional and local knowledge; and 4) developing regulations.
- Provide training opportunities on differences in cultures, values, and governance structures for both First Nations and Wildlife Program staff to improve relationships and establish common guidelines for interaction.
- Establish a working group of First Nations representatives from around the province to help develop and review provincial wildlife policy and resolve management issues.

Photo courtesy of Mark Williams
Traditional Ecological Knowledge Workshop, Teslin





Governance objectives:

Improve wildlife management through the effective engagement of stakeholders, clients, and the public

Since engagement and communication are critical to the work of the Wildlife Program, they are addressed in a number of areas within the plan. However, this section focuses more on mechanisms and tools for consultation rather than on communication.

“Consultation” is not comprised of a single completed action. Rather, it is a continuum of actions and tools that can be used depending on the decision that must be made, who is required to make it, who it affects, and how they are affected.

There are many different interests and values that need to be incorporated into decision making. First Nations in British Columbia may have treaty rights, aboriginal rights, or aboriginal title, which need to be addressed. Guide outfitters, trappers, and resident hunters are likely to have opinions about population objectives and regulations that may affect their opportunity. Industry, private landowners, and other parties potentially affected by conservation decisions may have conflicting or complementary management objectives.

Capacity to engage is a significant challenge for both Wildlife Program staff and our partners. Greater integration across the program and more strategic approaches to consultation and engagement will be required to prevent “consultation burnout” and to ensure that the right parties are given the right information at the right time.

Our Strategies and Activities

Develop and implement a strategic and effective consultation approach for wildlife management and conservation.

- Identify appropriate methods and processes for consultation or engagement on legislation and regulations, statutory decisions, policies, and specific projects.
- Develop web-based and other innovative techniques to simplify communication and understanding of Wildlife Program projects and decisions.
- Add a strategy that deals with our policy approach to recovery planning and the need to consult with affected parties before legally identifying critical habitat.
- Develop a multi-pronged approach to consultation on wildlife conservation and management, which may include engaging an advisory group of key stakeholders, hosting public discussions, conducting opinion polls and surveys, and implementing outreach and extension programs.
- Work with the federal members of the Bilateral Agreement on Species at Risk to develop a process for identifying critical habitat that uses the best scientific advice from recovery teams and results of socio-economic analysis, and incorporates consultation with affected stakeholders.

Develop and implement a strategic and effective consultation approach for wildlife use.

- Review current approaches and methods of developing and communicating hunting and trapping regulations, and document all consultation approaches, tools, and processes.
- Work with stakeholders and First Nations to examine alternative methods of developing regulations that are more strategic and inclusive of First Nations' values and rights, stakeholder interests, and client needs.
- Maintain the Provincial Hunting Regulations and Allocations Advisory Committee (PHRAAC) and clarify and rationalize its role with respect to local and regional consultation methods on hunting and trapping regulations.
- Provide a consistent Terms of Reference for regional wildlife advisory committees.



Photo courtesy of Jenny Feick
Wildlife Program meeting, Victoria



Governance objectives:

Inform wildlife management decisions with science and ensure that they are made in a structured and transparent manner

Management of the province's wildlife involves consideration of many complex, inter-related factors, including scientific information. Development of an internal research agenda and program is a key priority of the Wildlife Program and will help build its credibility.

Wildlife management decisions are made by government decision makers in consultation with stakeholder groups. Decisions can directly affect First Nations, stakeholder groups, industry, and the public; thus, there is great interest in how decisions are made. Finding the appropriate balance between short- and long-term environmental, social, and economic benefits can be challenging.

The Wildlife Program adopts a structured and transparent decision-making process that utilizes ecological, social, and economic knowledge. Key to this process is the availability of credible, objective, and relevant information. The process by which decisions are made must be repeatable, transparent, and sensitive to traditional and cultural practices and knowledge. This approach will enhance the credibility of Wildlife Program decisions now and into the future.

Our Strategies and Activities

Develop and deliver a provincial research agenda and program that supports implementation of the Ministry's wildlife mandate (Knowledge Production).

- Develop and extend to partners a provincial wildlife research agenda that places priority on producing and acquiring scientific knowledge that serves the Wildlife Program needs at provincial and regional levels.
- Produce or acquire wildlife-related scientific information through monitoring, research, synthesizing existing information, and eliciting expert knowledge.
- Provide leadership, increase capacity, and encourage innovation in wildlife research in B.C. through partnerships with academic institutions, industry, and other NGOs.
- Increase capacity to produce or acquire economic and social science information.
- Identify and implement research priorities regarding the effects of climate change on wildlife as a means of improving our ability to forecast impacts and adapt management actions.

Use scientific knowledge to inform policy and operational decisions in Regions and Headquarters (Knowledge Utilization).

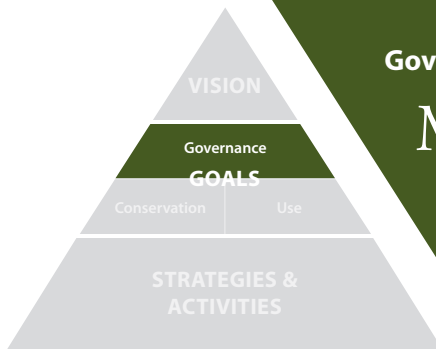
- Apply rigour to wildlife management decision making by developing and using, where appropriate, structured decision processes that are objective, transparent, and repeatable.
- Use structured decision-making techniques to incorporate ecological, social, and economic science-based information into wildlife management decisions.
- Fully document trade-offs and rationale for key decisions to promote their consistent application, maintain corporate memory, and facilitate learning from past experience.

Extend scientific knowledge in a timely manner to decision makers, stakeholders, and the scientific community (Knowledge Extension).

- Communicate scientific information, rationale, and analyses to stakeholders and decision makers (internal and external).
- Tailor the extension of scientific information so that it is effectively communicated to target audiences.
- Publish research in peer reviewed publications, when appropriate.

Photo courtesy of Dian Culling
Radio-collaring Caribou, *Rangifer tarandus*, Fort St. John





Governance objectives:

Manage wildlife and terrestrial information so that it is easy to capture, maintain, access, and use

Wildlife managers require timely access to information so that relevant, credible, and objective decisions can be made with confidence and in full consideration of all trade-offs. Given the dispersed geographic distribution of the program, the number of species involved, the requirement to search historical data sets, and the regular contributions from third parties, the task of collecting, capturing, assessing, and managing wildlife information is challenging.

Photo courtesy of Rich Weir
Conducting Fisher habitat assessments using real-time GPS to ArcView, South Thompson

To support the information requirements of the Wildlife Program, robust information management systems need to be in place and accompanied by sound data collection standards. These play a key role in enabling staff to effectively retrieve and add to extensive inventory data, research, and other information that the program maintains. Uniform and formalized data collection standards enhance the compatibility and quality of new data. Together, this will facilitate access to and use of information among staff, researchers, partners, and others, which is critical to the success of the program.



Our Strategies and Activities

Capture wildlife status, natural history, and human use information in provincial systems.

- Facilitate the collection of quality data by helping design sound inventory methods; providing clear direction to staff, contractors, and partners on core information requirements; and developing or updating provincial standards for inventory and data collection and management (e.g. Resource Information Standards Committee (RISC) manuals and documents).
- Develop on-line tools and make them available to staff, consultants, and the public as a way of streamlining the capture of new inventory and wildlife information.
- Continue to conduct hunter and trapper use surveys on an annual basis.
- Support and develop data sharing partnerships that will contribute new information to our data holdings and make our information available for our partners.

Develop, maintain, and manage wildlife and terrestrial data systems to support the program's information management requirements.

- Maintain existing key wildlife and terrestrial information systems, e.g. the Wildlife Species Inventory Database (SPI) and Biotics.
- Develop a Conservation Framework information management system that will integrate with existing systems, support ongoing species assessments, and track conservation actions and outcomes.
- Develop new wildlife information systems to replace out-dated legacy applications.
- Develop a web-based system for producing Hunter Number Cards and tracking the sales and purchases of all hunting licences (resident and non-resident) and Limited Entry Authorizations.

Support the access, use, and analysis of wildlife and terrestrial information.

- Maintain and update existing data and spatial information housed in the Land Resource Data Warehouse (LRDW).
- Maintain and update data extraction and viewing tools that use the LRDW, and allow our clients to view information over the internet and access information that they can use in their own GIS environment.
- Develop new analytical and modelling tools or data views (e.g., habitat supply modelling or converting data to raster products) that can be used in other tools such as HectaresBC or modelling software.
- Develop new data products that meet emerging client needs and address changing technologies. This includes conducting client surveys to determine the types of data products needed and providing products that can be used with new web-mapping technologies.

Promote information management and data custodianship in the Wildlife Program.

- Promote a cooperative, integrative, and strong information management ethic among provincial staff, and demonstrate leadership in data custodianship and information management to our clients and partners.
- Maintain client service orientation in information management. This includes setting information management goals and performance indicators and evaluating our progress.
- Improve communication with clients to ensure information is captured in provincial systems and is fully utilized.
- Provide training and education about information management and its systems, products, and available tools.



Conservation objectives:

Conserve and restore native wildlife species and their habitats in B.C.

British Columbia’s wildlife is a public resource that holds intrinsic, environmental, economic, and social value. It also contributes significantly to ecological diversity at a provincial, national, and global level. By conserving and restoring native wildlife species and their habitats, we help ensure the sustainability of the province’s wildlife resource and all of its associated benefits.

The Wildlife Program will use the Conservation Framework as its primary conservation planning, priority-setting, and management tool. This will ensure that our actions are aligned and co-ordinated across the province. This new approach will also guide internal business planning and allow wildlife managers to allocate resources and build business cases based on the framework’s priorities.

Our Strategies and Activities

Implement a co-ordinated and structured approach to managing species of conservation concern in B.C.

- Identify priority species for conservation management.
- Identify and implement appropriate management actions for priority species, including species assessments, inventory, planning, listing, habitat protection/restoration, and alien species control.
- Seek alignment of species conservation priorities and management actions across government and with partners and stakeholders.
- Track and report on conservation activities, by species and management action group, and on changes to status assessments of species and their habitats on an annual basis.



Conduct ongoing inventory and monitoring of wildlife to support conservation actions.

- Develop and implement co-ordinated approach for high priority inventory.
- Develop a monitoring action plan to track priority wildlife species and population trends, and effectiveness of conservation actions.
- Develop population and habitat supply modelling capability.

Develop and implement a strategy for managing non-native and invasive species.

- Implement or align with the existing Invasive Alien Species Framework (see Appendix 3 for more information).
- Work with other government agencies and partners to ensure that existing programs and new alien species initiatives are aligned.
- Use the Conservation Framework to identify priorities for action.
- Control and manage non-native and invasive wildlife species.

Develop and apply tools for conserving and managing wildlife species and their habitats, including predator-prey systems.

- Lead and support the development and implementation of legislation, regulations, standards, and guidelines for species conservation.
- Conduct a gap analysis of available tools and their effectiveness and build new tools or modify existing ones, as needed.
- Ensure wildlife values are considered in access management strategies and plans.

Develop and apply an adaptive approach to address broad-scale emerging threats such as climate change and cumulative impacts.

- Identify, develop, implement, and assess adaptive responses to climate change effects.
- Develop a robust monitoring and adaptive management program to respond to the uncertainties of climate change and species responses to those changes.
- Promote the concept that B.C.'s best response to climate change is to maintain biodiversity by conserving species and habitat.
- Promote the concept that conserving biodiversity and wildlife movement corridors will provide benefits in terms of carbon stewardship and climate change mitigation and adaptation.
- Work with the Parks and Protected Areas Program to identify priority wildlife conservation management actions on protected lands that will support climate change adaptation objectives.
- Work with other divisions, government agencies, and partners to ensure that adaptation strategies and actions for wildlife are developed, aligned, and implemented.
- Develop science, planning, and regulatory tools to assess and address cumulative impacts.

Photos courtesy of Jared Hobbs

From left to right: Pallid Bat (*Antrozous pallidus*), Great Basin Spadefoot Toad (*Spea intermontana*), Gillette's Checkerspot (*Euphydryas gillettii*), Spotted Owl (*Strix occidentalis*), Lyall's Mariposa Lily (*Calochortus lyallii*)





Conservation objectives:

Maintain the health of wildlife in B.C.

Wildlife health is defined as more than the absence of disease. It includes the capacity of individuals or populations to respond to or control challenges from their environment, such as human-related disturbances and changes in climate, habitat quality and quantity.

Disease can occur naturally in wildlife populations (endemic disease) with the effects ranging from the unapparent to the dramatic. Wildlife are increasingly important as sentinels of ecosystem, agricultural, and human health. Many newly introduced and re-emerging diseases that are being recognized globally in domestic animals and humans also occur in wildlife. The transmission of disease among wildlife, domestic animals, and humans can have significant effects on human health, wildlife conservation, and agriculture

Our Strategies and Activities

Identify, assess, and mitigate the risks of endemic, re-emerging, and introduced diseases to wildlife.

- Employ appropriate risk assessment and risk management activities.
- Facilitate research that produces credible, objective, and relevant scientific findings that can be used to identify and monitor disease occurrences.
- Conduct strategic surveillance and monitoring of high priority diseases (e.g. Chronic Wasting Disease), and develop response and control capability if diseases are recognized.
- Develop and implement response capability for mortalities, disease outbreaks, and wildlife health issues as they arise.

Identify, assess, and mitigate the risks of endemic, re-emerging, and introduced diseases to wildlife.

- Develop new *Wildlife Act* regulations that restrict the possession, breeding, transportation, and ownership of alien exotics that could introduce new diseases to wildlife in B.C.

Identify, assess, and respond to the effects of environmental and human-related factors (non-disease) on wildlife health.

- Establish baseline data on changes and trends in wildlife population health.
- Maintain a comprehensive and efficient wildlife health monitoring program that has linkages to other appropriate monitoring programs.
- Identify and assess environmental and human-related factors that could threaten the health of wildlife populations.
- Collaborate on wildlife health research activities that support the Wildlife Program, inform decisions, and enhance wildlife management.

Develop and use specific management tools to minimize or mitigate health risks to species at risk or species of conservation concern.

- Perform risk assessments and health screening for high priority populations.
- Provide expertise and participate in management programs such as captive breeding, population control activities, and translocation of individuals.

Identify, assess, and minimize risk of disease transmission among humans, domestic animals, and wildlife.

- Identify and assess the risks to humans from zoonotic disease transmission based on the results of collaborative research.
- Provide expertise to mitigate the risk of disease transmission between domestic animals and wildlife.
- Use proactive outreach programs to inform staff, the public, First Nations, and stakeholders about issues related to wildlife disease and the human-animal interface.

Ensure professional and humane animal care and handling methods are used for operational and research activities involving wildlife.

- Develop and provide support and training for B.C. professionals who handle wildlife during management or research activities.
- Co-ordinate the animal care review of the Ministry's wildlife permit applications and programs.

Photo courtesy of Ian Gazeley
Roosevelt Elk, *Cervus canadensis roosevelti*, Elk transplant, Sunshine Coast





Conservation objectives:

Foster shared stewardship of B.C.’s native wildlife

While government has a mandate to protect and sustain the province’s wildlife, it cannot achieve this alone. The diversity and distribution of wildlife throughout the province, combined with the cumulative effects of human-related impacts on wildlife and/or their habitats, requires a shared stewardship approach to be taken in managing wildlife.

Caring for the environment is the responsibility of all sectors of society. The conservation of wildlife and their habitats depends on the collective knowledge, commitment, and actions of individuals, organizations, communities, industries, and all levels of government. A successful shared stewardship model involves information and knowledge sharing, consultation, sustained support, and the development of partnerships.

Certain outreach approaches (e.g., Community-Based Social Marketing, education) for fostering shared stewardship will be used strategically in programs that support wildlife conservation. The approaches used will depend on the characteristics of the target audience, any identified barriers to behavioural change, the effectiveness of different outreach techniques, and the availability of resources (see Appendix 2 for more information on the ESD Stewardship Outreach Strategy).

Our Strategies and Activities

Collaborate and partner with stakeholders to attain mutual wildlife conservation goals and build positive working relationships over the long term.

- Foster sustainable wildlife management through collaborative management approaches.
- Ensure partners, clients, and stakeholders are well-informed about Ministry wildlife management policies, Division business plans, and conservation priorities.
- Ensure that Wildlife Program staff learn about, understand, respect, and consider the values, needs, and capacities of partners, clients, and stakeholders in wildlife conservation.
- Ensure wildlife management programs meet client service standards.
- Continue to partner with and support the wildlife stewardship efforts of organizations such as the Habitat Conservation Trust Foundation (HCTF), British Columbia Conservation Foundation (BCCF), and the Stewardship Centre for British Columbia (SCBC).
- Foster a shared stewardship approach with other government agencies that affect wildlife and habitats through the use of informal partnerships, formal written commitments, and effective means of communication. Establish stewardship management and partnership agreements with specific organizations that align with Conservation Framework priorities, and seek resources to support these partnerships.

Outreach will be used strategically in programs that support wildlife conservation priorities.

- Identify and prioritize issues that have a negative effect on wildlife and their habitats, and develop clear outcomes and measures of success that will foster a stewardship ethic and influence specific practices of target audiences.
- Use signs and other outreach materials in a strategic manner to inform target audiences that need to change certain behaviours.
- Develop standards and guidelines that support stewardship activities.
- Engage client groups in wildlife stewardship projects that reflect mutual priorities.
- Support programs that provide incentives for stewardship actions by landowners—e.g. tax incentives for covenants to protect species at risk on private land.
- Support stewardship groups in conserving wildlife by providing access to information, and where possible, providing staff expertise and logistical support.



Photo courtesy of Judy Argent
Community volunteers assisting in
Bighorn Sheep transplant, Kamloops



Use objectives:

Provide and manage sustainable uses of wildlife

British Columbia is blessed with a diversity of wildlife. The province has a long hunting and trapping heritage, and opportunities for wildlife viewing and appreciation are unequalled anywhere in Canada. All of these uses can be enjoyed by current and future generations, providing sustainable use practices are maintained.

To support the sustainable use of wildlife, the Wildlife Program will continue to inventory wildlife populations, monitor wildlife use, assess harvest strategies, and develop harvest management plans for priority hunted and trapped species. The Wildlife Program will also work with First Nations and stakeholders (e.g., BCWF, GOABC, and BCTA) to explore opportunities for recruiting and retaining hunters and trappers, and ensuring harvest opportunities are sustainable.

Wildlife viewing, both for recreational and commercial purposes, is likely to increase in popularity over the next decade and will require more intensive management to ensure it remains safe and sustainable. The growing trend in wildlife viewing presents an opportunity for a broader cross-section of the population to interact with wildlife and become more engaged in environmental stewardship. To support this trend, the Wildlife Program will work with partners such as the scientific and tourism communities to explore innovative opportunities for wildlife appreciation and to ensure that new initiatives are sensitive to the needs of wildlife populations.

While the Wildlife Program is committed to providing a variety of opportunities for the use of wildlife, conservation limits dictate levels of acceptable use, and opportunities for use are bounded by scientifically supported management principles.

Photo courtesy of Ian Hatter
Elk viewing



Our Strategies and Activities

Conduct ongoing inventory, monitoring and assessment of wildlife populations to ensure sustainable use

- Maintain and expand the big game inventory program to include other harvested wildlife species through integration and alignment with conservation framework inventory priorities.
- Develop a big game stock assessment improvement plan for priority harvested species.
- Enhance research and develop assessment tools for determining annual allowable harvest levels.
- Implement policies that enable regional biologists to set harvest allocations among user groups (e.g. harvest allocation policy)
- Develop a long-term funding strategy and identify resources for big game stock assessment (e.g. inventory, harvest, population modelling).

Maintain other traditional uses of wildlife

- Continue to support trapping and falconry as other traditional uses of wildlife providing their use is regulated within the constraints of conservation.
- Respond to the demand by the public and commercial interests (e.g. taxidermists) to possess dead wildlife or parts of legally obtained wildlife by issuing permits (e.g. under \$200 value) or allowing for their purchase through public auction (e.g. > \$200 value), as deemed appropriate.

Develop management strategies, plans and policies for priority harvested species

- Establish process for setting population and harvest objectives that integrates information from the biological, social, and economic sciences.
- Conduct stakeholder surveys and consultations to assess management options and regulatory preferences.
- Increase public and stakeholder understanding of harvest management principles and hunting/trapping programs through education and other outreach initiatives.
- Fulfill international obligations to CITES (Convention on International Trade in Endangered Species) by developing non-detriment findings (NDFs) and species management plans where required.

Photo courtesy of BC Parks
Bobcat, *Lynx rufus*



Photo courtesy of Jared Hobbs
Elk, *Cervus canadensis*





Continued...

Provide and manage sustainable uses of wildlife

Maintain or expand hunter opportunity and satisfaction after meeting conservation objectives and satisfying the food, social and ceremonial needs of First Nations

- Manage wildlife populations to provide for a variety of hunting opportunities (this initiative includes, but is not limited to reviewing opportunities for moving current Limited Entry Hunts to General Open Seasons, and applying appropriately managed access restrictions).
- Develop harvest strategies to enhance hunter opportunity where demand exists.
- Provide an economic update every three years on the values associated with hunting, and incorporate this information into decision analyses for enhancing recreational/commercial harvest opportunities.

Photo courtesy of James Hatter
Stretching pelts by local trapper, Vancouver Island



- Promote programs (e.g. Provincial Agriculture Zone Wildlife Program) that increase hunting opportunities on private lands, decrease agricultural impacts, and promote private land stewardship (see Appendix 4 for more information).
- Promote hunting to new and existing users by implementing the "top 6" recommendations from the Hunter Recruitment and Retention Strategy document (see Appendix 4 for more information).
- In conjunction with the BCWF, expand and market the Conservation and Outdoor Education (CORE) hunter safety and ethics training program to other recreational users.

Photo courtesy of Jeff Morgan
Hunting Mule Deer in the agricultural zone, near Kamloops



Promote additional opportunities for wildlife use, including both commercial and non-commercial recreational activities and support implementation of a provincial wildlife viewing strategy

- Explore funding models similar to those used to support hunting and trapping activities (e.g. Habitat Conservation Trust Foundation) to provide a secure source of project funding for improving the science and management of wildlife viewing activities.
- Provide advice and assistance to government agencies responsible for administering wildlife viewing tenures

- Support research to inform the development of best management practices to manage wildlife viewing.
- Expand Wildlife Watch Program and integrate with other tourism related initiatives.
- Explore mechanisms for regulating users who do not have formal tenures.
- Work with partners in and outside of government to ensure alignment between policies and programs in this area.

Photo courtesy of Rob Woods
Duck hunting along the Peace River, near Fort St. John





Use objectives:

Prevent or reduce negative effects of wildlife-human encounters

British Columbia, with its far-ranging network of roads, widely dispersed communities, and innumerable tracts of wilderness, offers a multitude of opportunities for human and wildlife interactions. While this is a wonderful opportunity for learning to appreciate the natural world and its inhabitants, not all encounters are mutually beneficial.

Wildlife-human conflicts occur in both urban and rural areas, and range from nuisance encounters to attacks on humans, pets, and livestock. Past practices to manage these conflicts have focused primarily on reactionary measures, frequently relying on the destruction of animals to eliminate wildlife conflict behaviour. Focusing on reactionary measures to these situations has proved to be, at best, a short-term solution and often results in needless destruction of the province's wildlife. In addition, reactionary measures have been costly in terms of government resources that have been dedicated to managing this problem.

To achieve the objective of preventing or reducing negative effects of wildlife-human encounters, the Wildlife Program will work in partnership with stakeholders and communities to reduce conflicts through preventative measures and by encouraging shared stewardship of wildlife in B.C. Reducing wildlife-human conflicts will be achieved in a manner that is consistent with the Ministry's priorities of biodiversity conservation and protection of human health and safety.

Our Strategies and Activities

Minimize the negative effects of wildlife-human conflicts through continued implementation of the Wildlife-Human Conflict Strategy.

- Reduce public safety risks that are associated with dangerous native and exotic wildlife.
- Reduce risks to public safety, property, and wildlife due to wildlife-vehicle collisions.
- Participate in initiatives to mitigate damage to property and agriculture.
- Review and update the strategy to reflect changes in legislation, emerging issues, best practices, and lessons learned.

Promote Shared Stewardship.

- Strengthen accountability and responsibility for prevention of wildlife-human conflicts among stakeholder groups.
- Use outreach to increase public and stakeholder understanding of all types of wildlife-human conflicts and solutions.
- Build partnerships within the Ministry and with other government agencies, local governments, First Nations, industry, businesses, and individuals.

Promote hunting on agricultural lands as an effective and beneficial wildlife management tool for both hunters and the agriculture industry.

- Use the Provincial Agricultural Zone Wildlife Program as a mechanism for increasing hunting opportunities while decreasing agricultural impacts from wildlife.

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Photo courtesy of Jared Hobbs
Nass River Valley, Skeena

Conclusion

The Wildlife Program Plan is the result of tremendous effort on the part of many individuals from across the province, Division, and Ministry. The plan illustrates the depth and breadth of issues facing wildlife and the Wildlife Program and establishes a clear vision, goals, and objectives that can be acted upon immediately. We are committed to its successful delivery and see it as a vital tool to help us realize our vision.

There are many components involved in the delivery of an effective Wildlife Program. Not only do issues span regional and provincial boundaries, but the delivery of the plan relies extensively on external funding, shared stewardship, and resource availability within the Division. Therefore, success in program delivery will require commitment, cooperation, and co-ordination from a wide range of stakeholders and partners.

Our vision, “Naturally diverse and sustainable wildlife supporting varied uses for current and future generations” is a commitment to taking a leadership role in managing wildlife and wildlife habitat for the benefit of many. Thank you to those who played an important role in the development of this plan. We look forward to engaging even more people in its delivery.

Appendix 1 - Linkages to Other Provincial, Federal, and External Agencies

Provincial

B.C.'s resource sectors include hydroelectric, oil and gas, forestry, and agriculture, plus the transportation network required to support them. Each of the four resource ministries responsible for these sectors (Environment; Energy, Mines, and Petroleum Resources; Forests and Range, and Agriculture and Lands) has an interest in how British Columbia's wildlife is managed. The Ministry of Aboriginal Relations and Reconciliation is also involved due to

the important role First Nations play in wildlife management. In addition, the Ministry of Tourism, Culture, and the Arts supports the development and promotion of B.C.'s great wildlife-based recreational opportunities. As a result, a coordinated and integrated wildlife management strategy is required to ensure that wildlife and habitats are managed in a sustainable way.

Ministry of Aboriginal Relations and Reconciliation (MARR)	<ul style="list-style-type: none"> MARR has a mandate to negotiate the wildlife chapter of treaties with First Nations.
Ministry of Agriculture and Lands (MAL)	<ul style="list-style-type: none"> The MAL provides support to the Wildlife Program through its Animal Health Centre (wildlife health diagnostic service). The Sustainable Agriculture Management Branch supports development and delivery of a number of environmental programs and initiatives, that influence policy related to wildlife: Canada-British Columbia Environmental Farm Plan Program, Agriculture Environment Initiatives (which supports pilot compensation and mitigation programs), Partnership Committee on Agriculture and the Environment, and its sub-committee, the BC Wildlife Advisory Committee (which deals with wildlife conflict issues).
Ministry of Community Development (MCD)	<ul style="list-style-type: none"> The Ministry of Community Development (MCD) administers the <i>Local Governmental Act</i> that enables local government to play a role in environmental stewardship through their traditional role in managing land development. The <i>Local Governmental Act</i> provides broad tools (e.g. Official Community Plans) and specific tools (e.g. bylaws) for local government use. Although local governments do not manage fish and wildlife directly, the design of these local government tools can have an impact - positive or negative - on land use development practices and their effect on riparian vegetation, watercourses, wetlands and other environmentally sensitive areas. MCD assists the Wildlife Program by facilitating consultation with local governments on wildlife issues, regulations and policy. MCD can also play a role in engaging local governments in regional growth strategies and other planning processes that can affect wildlife and wildlife habitat.

Ministry of Energy, Mines and Petroleum Resources (EMPR)	<ul style="list-style-type: none"> • Wildlife and wildlife habitat values are identified through the proposals for mine development. • Requirements to deal with impacts or to establish the standards which must be achieved during various stages of mining activity (exploration, development and reclamation) are established under the Health, Safety and Reclamation Code for Mines in British Columbia under the <i>Mines Act</i>. • Wildlife and wildlife habitat values affected by the development of energy corridors or alternative energy projects are protected and addressed in accordance with legislation which targets the harvest of forests on Crown land.
Ministry of Forests and Range (MoFR)	<ul style="list-style-type: none"> • Through the <i>Forest and Range Practices Act</i> (FRPA) the MoFR strives to conserve sufficient wildlife habitat to ensure the survival of species at risk, regionally important wildlife and the winter survival of ungulates. • To inform strategic and operational decisions, including the execution of the FRPA, the MoFR's Wildlife Habitat research program focuses on studying species that are particularly sensitive to forest management activities. It specifically studies aspects such as habitat selection and use, behaviour, population dynamics, and mortality factors. • Researchers seek to develop land use management options and silvicultural systems that can accommodate timber harvesting, maintain wildlife habitat, and protect biodiversity.
Oil and Gas Commission (OGC)	<ul style="list-style-type: none"> • Requirements to protect wildlife and wildlife habitat values are imposed through regulations specific to the oil and gas industry. The Oil and Gas Commission, as the regulator of the oil and gas industry, is responsible with the Ministry of Environment for the enforcement of wildlife and wildlife protection measures. • Wildlife and wildlife habitat values are identified through the tenure referrals conducted prior to the monthly oil and gas land sales.
Ministry of Transportation and Infrastructure (MoT)	<ul style="list-style-type: none"> • Environmental Management Section develops standards and policies and implements programs to prevent and mitigate adverse environmental effects, e.g. 2006 Design Build Standards for Highway Construction requires Environmental Management Plans that address how projects and associated facilities and activities will avoid negative effects on wildlife. • Administers the Wildlife Accident Reporting Systems. • Supports Wildlife Collision Prevention Program. • Distributes Wildlife Road Kill Identification Guide and Guides to the Highway Environmental Assessment Process.
Ministry of Tourism, Culture, and the Arts (MoTCA)	<ul style="list-style-type: none"> • Promotes fish and wildlife based recreation opportunities in B.C. • Commercial recreation management program requires existing and new recreation operators to acquire tenures for the provincial Crown lands they needed or were already using for commercial activities, including nature viewing and other guided outdoor recreational pursuits.

Environmental Assessment Office (EAO)

- Operates independently and coordinates the assessment of proposed major projects in B.C. as required under the *Environmental Assessment Act*.
- Works with First Nations, government agencies, and the public to ensure major projects are developed in a sustainable manner.
- Examines major projects for potentially adverse environmental, economic, social, health, and heritage effects that may occur during the lifecycle of these projects.
- Considers the potential effects of proposed projects on wildlife and other values, and ways to minimize or avoid adverse effects.

Federal

Federally, the Canadian Wildlife Service manages legislation that affects wildlife, including migratory birds, nationally important wildlife habitat, endangered species, and some associated research. Parks Canada is responsible for managing wildlife and recreational

activities within National Park boundaries. These responsibilities create key jurisdictional overlaps in some areas; therefore, co-ordination between federal and provincial agencies is needed in managing wildlife and wildlife habitat in B.C.

Canadian Wildlife Service (CWS)

- The CWS is Canada's national wildlife agency that handles federal wildlife matters, including: the protection and management of migratory birds, nationally important wildlife habitat, endangered species, research on nationally important wildlife issues and control of international trade in endangered species, and international treaties.

Parks Canada Agency (PCA)

- Parks Canada Agency has responsibility and authority through the *National Parks Act* for managing wildlife and associated recreational activities located within National Park boundaries.
- Parks provide essential habitat and refuge for wildlife species, as well as wildlife research, inventory and monitoring functions for many trans-boundary species.

External

External organizations play an important role in the management and conservation of wildlife by providing investments in species, habitat, and conservation. Our principle funding partners include the Habitat Conservation Trust Fund and BC Hydro Compensation Program. We also work with many NGOs, industries, and communities, which have a variety of expertise and interests, in developing and delivering programs.

Because wildlife migration and many current management challenges span international boundaries, some of our partners are located outside of B.C. We are working with them to improve, coordinate, and align our policies, regulations, enforcement regimes, and working practices.

Habitat Conservation Trust Foundation (HCTF)	<ul style="list-style-type: none"> The HCTF invests in projects that maintain and enhance the health and biological diversity of British Columbia's fish, wildlife, and habitats so that people can use, enjoy, and benefit from these resources.
BC Hydro	<ul style="list-style-type: none"> BC Hydro and the Ministry of Environment cooperatively established and operate compensation and restoration programs in the Columbia Basin, Peace-Williston and Bridge River Coastal areas (19% of the province) to conserve and enhance fish and wildlife populations affected by the development of BC Hydro dams. These programs deliver a range of fish and wildlife-related projects each year, working in partnership with local communities, governments and environmental groups. In addition, BC Hydro in partnership with Ministry of Environment and the federal Department of Fisheries and Oceans, develops and implements Water Use Plans (WUPs), which address the effects of BC Hydro operations of wildlife issues.
Forest Practices Board (FPB)	<ul style="list-style-type: none"> Operates as B.C.'s independent watchdog for sound forest practices Provides British Columbians with objective and independent assessments of the state of forest planning and practices in the province, compliance with the <i>Forest and Range Practices Act</i> and regulations, and the achievement of its intent Audits forest practices, undertakes investigations in response to public complaints, undertakes special investigations of forestry issues, including wildlife, participates in administrative reviews and appeals, and provides reports on Board activities, findings and recommendations Encourages Government to implement provisions that ensure that B.C. forest practices also manage and conserve important non-timber forest resources including wildlife
Alberta, NWT, Yukon, Washington, Idaho and Montana	<ul style="list-style-type: none"> Wildlife management agencies in adjacent jurisdictions are partners in wildlife management, as wildlife cross administrative boundaries.

Appendix 2 - Wildlife Governance

Laws and Regulations Relevant to Wildlife Management in B.C.

Ministry of Environment legislation:

Wildlife Act and regulations, including the Habitat Conservation

Trust Fund Regulation, Wildlife Amendment Act, 2004, and the

Environmental Statutes Amendment Act, 2008

Creston Valley Wildlife Act and regulations

Parks Act and regulations

Environmental Assessment Act and regulations

Environmental Management Act and regulations

Fish Protection Act, Riparian Areas Regulation

Water Act (British Columbia Dam Safety Regulation and Water Regulation)

Muskwa-Kechika Management Area Act and regulations

Nisga'a Final Agreement Act

Staff wishing to see a summary of legislation for the Ministry of Environment can view the following:

http://iwww.env.gov.bc.ca/spd/toolbox/cabinet/leg_summary%20.doc

Other provincial legislation:

Forest and Range Practices Act and regulations

Private Managed Forest Land Act and regulations

Oil and Gas Activities Act (not in effect; regulations to be developed)
Range Act

Land Act and regulations

Game Farm Act

Fur Farm Act and Fur Farm Regulation

Motor Vehicle (All Terrain) Act (prohibition regulations)

Local Government Act, Community Charter Act, and Vancouver Charter Offence Act (Violation Ticket Administration and Fines Regulation and Investigation and Prosecution Costs Regulation)

Firearm Act

For general information on provincial legislation, please see the following website:

<http://www.qp.gov.bc.ca/statreg/>

Federal legislation:

Canadian Environmental Protection Act

Canadian Environmental Assessment Act

Canada National Parks Act

Fisheries Act

Migratory Birds Convention Act

Species at Risk Act

Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act

Recent Changes to the Wildlife Act

Work on potential changes to the *Wildlife Act* has been ongoing since 2004. Public consultation and focused discussions with stakeholders, clients, and First Nations occurred during summer 2007. A broad set of potential changes were developed, although only a targeted subset was considered by the legislature. There are six categories of changes:

1. protecting British Columbians by regulating harmful alien animals
2. substantially increasing penalties for *Wildlife Act* violators
3. increasing the number of officers protecting wildlife and wildlife habitats

4. encouraging hunters and the recruitment of new hunters in British Columbia
5. increasing control over the feeding of nuisance wildlife
6. providing more flexibility and certainty to the guide outfitting industry

Compliance Management Framework

This framework describes the Ministry of Environment's vision for compliance.

For more information, please visit

http://www.env.gov.bc.ca/compliance/mgmt_framework.pdf

The New Relationship and First Nations Consultation Guidelines

The New Relationship with First Nations and Aboriginal People is explained on the Ministry of Aboriginal Relations and Reconciliation website:

<http://www.gov.bc.ca/arr/newrelationship/default.html>

The Ministry of Aboriginal Relations and Reconciliation website contains First Nations Consultation Guidelines and other useful information and tools to help staff collaborate with First Nations.

<http://iwww.env.gov.bc.ca/abrel/>

Fostering Stewardship Behaviour: An Outreach Strategy for the Environmental Stewardship Division (2006)

Outreach comprises the broad range of activities that are undertaken by ESD staff to promote voluntary compliance with environmental requirements and foster shared stewardship of the environment. The ESD Outreach Strategy provides strategic direction to staff on the use of outreach. Printed copies of the strategy can be obtained from the Ministry of Environment. Outreach resources for staff can be found at http://iwww.env.gov.bc.ca/esd/esd_outreach/index.html.

Stewardship Centre for BC (SCBC)

The Stewardship Centre for BC is a non-profit society comprised of

non-government and government interests. Its mission supports and advances stewardship activities in British Columbia by providing a centre for information exchange, communications, and outreach, and by fostering partnerships and collaboration among those participating in stewardship.

By supporting stewardship in British Columbia, the SCBC supports the efforts of hundreds of organizations that are working to preserve wildlife habitat in the province. In addition, the SCBC has recently launched a website that highlights species at risk in BC and general management strategies for species groups. The website is located at <http://www.speciesatrisk.bc.ca/>.

British Columbia Conservation Foundation (BCCF)

The British Columbia Conservation Foundation was founded and incorporated under the *Society Act of British Columbia* in 1969 by the Directors of the BC Wildlife Federation. Its mission is to contribute significantly to the perpetuation and expansion of fish and wildlife populations through the efficient implementation of projects in the field. It is a federally registered charity dedicated to the conservation and stewardship of British Columbia's ecosystems and species.

BCCF works closely both with partners and independently to undertake species and habitat inventories, research, enhancement, restoration, resource stewardship, and environmental education. It has successfully implemented over 3000 conservation projects since 1986. The BCCF supports several programs related to stewardship of wildlife in B.C., including Bear Aware, the Wildlife Collision Prevention Program, the Land for Wildlife Fund, Eco-education BC, and the BC Parks Robert Bateman Commemorative Print Series. In addition, the BCCF administers the British Columbia Conservation Corps (BCCC) for the Ministry of Environment. The BCCC provides work opportunities for students and recent graduates who are considering a career in the environmental sector. Many BCCC projects provide Corps members with valuable, first-hand experiences that contribute to conserving and enhancing B.C.'s wildlife.

Appendix 3 – Wildlife Conservation

Conservation Framework

The Conservation Framework is British Columbia's new approach to maintaining the rich biodiversity of the province. This will allow us to *act sooner* for species in decline, *act smarter* by selecting appropriate conservation actions, and *act together* with our partners to achieve the best conservation outcomes for species and ecosystems. The species component of the Conservation Framework forms the foundation for delivering the conservation objectives of the Wildlife Program Plan.

The Conservation Framework is designed to promote a proactive approach to conservation efforts and will help British Columbia become a world leader in sustainable environmental management, one of British Columbia's "Great Goals". The three goals of the Conservation Framework are:

1. to contribute to global efforts for species and ecosystems conservation
2. to prevent species and ecosystems from becoming at risk
3. to maintain the full diversity of native species and ecosystems

The Conservation Framework is intended to address the conservation requirements of species in a comprehensive and logical manner. It is based on a set of tools that use clearly defined scientific criteria to determine conservation priorities and the most appropriate management actions for all species of conservation concern. The Conservation Framework promotes the co-ordination and alignment of conservation efforts across government and non-government sectors, and will more effectively focus the allocation of resources toward maximizing conservation benefits in the province.

Species at Risk Recovery Planning

In 1996, British Columbia, along with most Canadian jurisdictions, signed the *Accord for the Protection of Species at Risk*, which committed the province to effectively address species at risk issues. B.C. fulfills its commitments to the Accord and the Canada–BC Agreement on Species at Risk (the bilateral agreement) by preparing recovery strategies for species at risk under provincial management authority and making these available for adoption under the federal *Species at Risk Act*.

B.C. is currently leading or co-leading 32 recovery teams that are preparing strategies and identifying actions to protect and recover over 100 species at risk. More information on recovery planning, including a list of recovery teams and completed recovery strategies can be found at <http://www.env.gov.bc.ca/wld/recoveryplans/rcvry1.htm>.

Species Management Planning

The mandate to prepare species management plans come from the federal *Species at Risk Act* (SARA) and CITES. Under SARA, management plans are required for species of special concern, whereas CITES requires management plans for species listed as Schedule A. In addition, the Wildlife Program prepares management plans for a number of harvested species, such as the mountain goat. These plans document current scientific knowledge, conservation threats, and harvest management criteria, and provide species-specific activities and priorities for achieving management goals and objectives. Such plans are adaptive and require updating as additional inventory and research become available. For information on B.C.'s grizzly bear NDF (CITES), please visit <http://www.env.gov.bc.ca/wld/grzz/index.htm>.

Invasive Alien Species Framework

The Ministry of Environment has developed the Invasive Alien Species Framework, a background document on invasive alien species issues that affect biodiversity in British Columbia. It is a framework for using science and the co-ordinated involvement of partners to address the threats to B.C.'s environment and economy posed by invasive alien species. The Ecosystems Branch of the Ministry also contributed to a provincial Invasive Plant Strategy led by the Fraser Basin Council, in conjunction with stakeholders and other government agencies.

For more information on these initiatives, please refer to the following websites: http://wlapwww.gov.bc.ca/wld/documents/alien_species_framework_BC_0205.pdf and <http://www.invasiveplantcouncilbc.ca/publications/invasive-plant-strategy.pdf>.

Forest and Range Practices Act – Identified Wildlife Management Strategy

The *Forest and Range Practices Act* (FRPA) governs forest and range practices on Crown land in British Columbia. One of the primary objectives of FRPA is to maintain and protect environmental values, including wildlife and wildlife habitat. The Act and associated regulations provide statutory authority for the Minister of Environment to take a number of actions to ensure the maintenance and protection of wildlife and wildlife habitat. These actions include:

- establishing categories of species (species at risk, ungulates, and regionally important wildlife)
- designating ungulate winter ranges and associated management direction (objectives or general wildlife measures)
- designating wildlife habitat areas and associated management direction (objectives or general wildlife measures) under the identified Wildlife Management Strategy
- designating fisheries-sensitive watersheds and associated objectives
- identifying wildlife habitat features
- designating temperature-sensitive streams
- designating community watersheds

- providing notices to trigger the objectives set by government for wildlife

For more information please visit <http://www.env.gov.bc.ca/wld/frpa/index.html>.

Forests and Range Evaluation Program

The Forest and Range Evaluation Program (FREP) was established in 2003 to determine if the *Forests and Range Practices Act* management practices are effective at meeting its objectives for its set of resource values, including wildlife, and to determine if these practices and their enabling legislation meet government's broader intent for the sustainable use of resource values. FREP is a multi-agency program led by the Ministry of Forests and Range in partnership with the Ministry of Environment, Ministry of Agriculture and Lands and Ministry of Tourism, Sports and Arts.

The Wildlife Resource Value Framework is in development and provides an approach for monitoring and evaluating the wildlife resource value on Crown land in B.C. The framework is intended to evaluate the effectiveness of species-specific (fine filter) habitat management practices enabled under FRPA. These practices include ungulate winter range, wildlife habitat areas, specified areas, general wildlife measures, and wildlife habitat features. The legislative authority under FRPA for these practices is within the Government Actions Regulations sections 9–12.

For more about the Wildlife Value Framework under FREP, visit <http://www.for.gov.bc.ca/hfp/frep/values/wildlife.html>.

Appendix 4 – Wildlife Use

Provincial Agriculture Zone Wildlife Program

A Provincial Agricultural Zone Wildlife Program (PAZWP) has recently been approved by the Ministry of Environment to increase hunting opportunities, decrease agricultural impacts, and promote private land stewardship. Through this initiative, the Ministry has signalled that it recognizes the Agricultural Land Reserve (ALR) as a special zone with specific objectives and opportunities for wildlife management.

The Ministry's authority to manage wildlife will be coordinated through PAZWP and balanced with the Ministry of Agriculture and Land's authority and ability to assess crop damage and provide compensation to producers. Wildlife managers will establish population targets and develop harvest strategies for agricultural settings based on the objectives of all sectors.

Hunter Recruitment and Retention

The number of annually active resident hunters in British Columbia has been declining for the past 25 years. In 2007, the Ministry of Environment released a document entitled "A Strategy for Resident Hunter Recruitment and Retention in British Columbia." The top six recommendations from the strategy are:

1. seek a reciprocal agreement on firearms training with the federal government
2. extend the time range of the junior hunting licence from 10 years of age to less than 18 years of age
3. develop special "time-limited" licences for new hunters 18 years of age or older to encourage more participation

4. develop and implement an electronic licensing system as soon as possible
5. conduct a marketing survey to determine new types of hunting licences that would be of interest to hunters
6. wherever possible, provide general open seasons for mule deer and white-tailed deer does for hunters under the age of 18 and hunters participating in their first season.

The complete document can be downloaded from the following website: http://www.env.gov.bc.ca/fw/ds/docs/070607_HunterRecruitment-RetentionStrategy.pdf.

Wildlife Use Permits and Licences

The Permit and Authorization Service Bureau (PASB) is responsible for the administration of fish and wildlife permits, commercial licenses, and BC Parks' park use permits. Permits and licenses administered by PASB include park use permits, transporter licenses, CITES permits, export permits, wildlife sundry permits, accompany to hunt permits, guide outfitter and assistant guide licenses, transporter licenses, fur trader licenses, and trapping licenses.

Permits and commercial licenses remain a legal requirement, ensuring that environmental standards are not compromised. Through PASB, the Wildlife Program strives to provide fair, consistent, and timely services to clients who require licensing or permits to use wildlife.

Big Game Inventory and Assessment

The Ministry of Environment initiated a big game inventory program in 2005 to *optimize the allocation of a provincial inventory budget in a way that best balanced the values of conservation versus socio-economic interests, especially hunting values*. To date, over \$2 million has been allocated to 52 separate inventories on high priority big game species. In many cases, these surveys have identified additional opportunities for hunting.

The big game inventory program will be expanded to include big game stock assessments to ensure maximum utilization of the big game inventories. Stock assessments will enable further identification of hunting opportunities, and will provide a means of incorporating “ecosystem considerations” into big game harvest management.

Hunting Regulation Simplification

Complex regulations are a barrier to both hunter recruitment and hunter retention. As with all North American jurisdictions, regulations are designed to allow the harvest of game within conservation constraints and are based on wildlife management principles. However, many regulations tend to be complicated and sometimes result in confusion or misunderstanding, which can discourage hunter participation.

Simplification of hunting regulations has been a recurrent request from the BCWF and other hunting groups for many years. In response to these concerns, the Wildlife Program will initiate a “Hunting Regulations Simplification Review” to simplify and standardize hunting seasons and regulations, as much as possible, throughout the province.

Wildlife Harvest Strategy

In 1996, the Wildlife Program developed a Wildlife Harvest Strategy (WHS) to improve B.C. wildlife harvest regulations. The intent of the strategy was to improve recreational opportunities and establish a consensus among wildlife managers and the public about harvest management principles, species management standards, harvest management tools, and guidelines for prescribing hunting seasons. The WHS was designed to provide direction from 1996 to 2000. Updates to the WHS will be accomplished by creating or updating species harvest management policies and procedures.

The complete WHS document can be downloaded from http://www.env.gov.bc.ca/wld/documents/wildlife_harvest_strategy99.pdf.

Provincial Hunting Regulations and Allocations Advisory Committee

The Provincial Hunting Regulations and Allocations Advisory Committee (PHRAAC) is a committee that allows for discussion among the BCWF, GOABC, BCTA, Conservation Officer Service, and Fish & Wildlife Branch on matters related to hunting in B.C. It is a forum for reviewing and developing proposals about hunting in B.C. and a means for the Fish & Wildlife Branch to notify or consult BCWF, GOABC, and BCTA on proposed changes to the *Wildlife Act*, regulations, policies, procedures, or other standards related to hunting.

Appendix 5 - Glossary

Activity: a routine action that moves one toward a goal and satisfies an objective.

Animals: a major group of organisms, classified as the kingdom Animalia. In general, they are multi-cellular, responsive to their environment, and feed by consuming other organisms or parts of them.

Anthropogenic: include effects, processes, objects, or materials that impact wildlife or wildlife habitats as a result of human activities as opposed to those occurring in natural environments without human influences.

Big Game Stock Assessment: the process of collecting, analyzing, and reporting demographic information for the purpose of determining the effects of harvesting on big game populations.

Climate Change Adaptation: Climate change has profound effects on wildlife and their habitats. Wildlife species either perish or adapt physiologically, behaviourally, or by migrating to more suitable areas. In the wildlife management context, climate change adaptation means managing wildlife and their habitats in a way that ensures species are healthy and resilient and thus better able to adapt to potential climate changes.

Community-based Social Marketing (CBSM): an approach that community partners can use to influence the behaviour of individuals or groups. It goes beyond traditional communication campaigns by identifying the specific barriers that inhibit people from engaging in a behaviour as well as the benefits associated with that specific behaviour. An effective strategy to address those barriers and benefits is then designed.

Compliance: conformity with regulatory requirements established by government to protect the environment, and human health and safety.

Conservation: management of B.C.'s wildlife so that it may yield the greatest sustainable benefit to present and future generations while protecting natural biodiversity.

Ecosystem: a dynamic complex of plant, animal, and micro-organism communities and their abiotic environment, all interacting as a functional unit.

Endemic Species: a species exclusively native to, characteristic of, or prevalent in a particular geography, area, or environment. For example, the Vancouver Island marmot is endemic to B.C.

Environmental Stewardship: the careful and responsible management of our natural resources and the environment as something held in trust for future generations. It recognizes the value of the natural world in providing the necessities of life. Environmental stewardship is grounded in an understanding and appreciation of the importance to our communities of a healthy environment and the effects of human actions on the environment.

Extension: the activities of analysing the needs and preferences of a target audience, teaching, and facilitating activities (as well as using other methods) to impart awareness, knowledge, and skills (and sometimes to affect aspirations and attitudes) so that new practices or beliefs are spread to new regions and players.

Goal: a statement of intended direction in the broadest terms. It is not related to a time period and is not quantified (so no direct performance measures). A goal serves two purposes: to communicate management's aims and relative priorities, and to draw rough boundaries around areas within which an organization will operate (scope).

Human Dimension: is the study and application of a social consideration in wildlife management. It is concerned with how people's values affect and are affected by decisions about the management of the environment and people's use of these resources.

Incentive: something that encourages an individual or company to voluntarily act in a particular way, to follow a particular course of action, or to change current practices.

Invasive Species: a species that does not naturally occur in a specific area and whose introduction does or is likely to cause economic, environmental, or ecological harm, or harm to human health.

Native Species: species indigenous to B.C. or that have extended their range into B.C. from another part of North America, unless species introduction or range extension was aided by human intervention.

Objective: a specific result that is to be achieved within a specific time, usually one year or a few years. Objectives are derived from goals. This is the level at which one can undertake monitoring and reporting to track the efficiency and effectiveness of a program.

Outreach: comprises the broad range of activities undertaken to increase awareness, educate, motivate, engage, and/or change behaviour.

Priority Species: a species of management concern, either related to conservation or use.

Species: a group of actually or potentially interbreeding populations that are reproductively isolated from other such groups. Commonly used names for plant and animal taxa often correspond to species, e.g. “moose,” “Steller’s Jay”.

Shared Environmental Stewardship: Caring for the environment is a responsibility shared by all sectors of society. Environmental sustainability depends on the collective knowledge, joint commitment, and collaborative actions of individuals, organizations, communities, industries, and all levels of government.

Stakeholder: an individual, private sector, non-governmental organization, or other group (generally more specific than the general public) with an interest or stake in a particular aspect of the Ministry’s work.

Stakeholder Engagement: is based on three core components: information provision (one-way sharing of information with stakeholders), consultation (two-way exchange of information as part of a decision making process, to inform policy, regulation change), and collaboration (working together with partners in a shared decision making capacity).

Strategies: includes a set of actions required to achieve a particular objective.

Structured Decision-making: the process by which decisions are made in a repeatable and transparent manner, and sensitive to traditional and cultural practices and knowledge. Key to this process is the integration of values with credible, objective, and relevant information from the biological, social, and economic sciences.

Sustainable Use: the use of wildlife resources at a rate that will meet the needs of the present without impairing the ability of future generations to meet their needs.

Viable Population: populations that are able to withstand demographic and environmental stochasticity and fluctuate within a range of natural variation.

Wildlife: for the purposes of this plan, wildlife includes native terrestrial and aquatic animal species (vertebrates and invertebrates), and native terrestrial and aquatic plant species. Also includes captive bred and hybrid forms of wildlife.

Wildlife Habitat: the air, soil, water, food, and cover components of the environment on which wildlife depend directly or indirectly in order to carry out their life processes.

Wildlife Health: Wildlife health is defined as more than the absence of disease. It is the capacity to adapt to, respond to, or control challenges and changes. It can be used to describe individuals but more commonly is applied to groups of animals.

Wildlife-Human Conflict: a wildlife-human interaction that threatens public safety, public property, and/or animal welfare. It includes disease transmission between wild and domestic animals, zoonotic diseases, and wildlife encounters that threaten injury (to humans or animals) or damage to property.

Wildlife Management: the management of wildlife populations and their habitats. It includes the conservation of species and subspecies and their habitats, mitigation of human-wildlife conflicts, and management of game species for sustainable use. Wildlife management embraces the human dimensions of wildlife and implies stewardship.

Wildlife Protection: maintenance of the diversity of native wildlife populations and their habitats by minimizing negative effects associated with human activities.

Wildlife Use: includes hunting, trapping, guide outfitting, First Nations uses, aviculture, falconry, viewing, and human recreation disturbance. Some forms of wildlife use, such as hunting and trapping, can be used to manage wildlife-human conflict (e.g., liberal deer hunting seasons to reduce grazing pressure on agricultural lands). Wildlife use includes commercial and non-commercial use.

Zoonotic Disease: a disease that is transmissible from animals (wild or domestic) to humans.

