



PROSPECTORS &
DEVELOPERS
ASSOCIATION
OF CANADA

July 2023

July 14, 2023

Tara Shannon
Assistant Deputy Minister
Canadian Wildlife Service
Environment and Climate Change Canada

Re: Toward a 2030 Biodiversity Strategy for Canada Discussion Paper

The Prospectors and Developers Association of Canada (PDAC) is the voice of Canada's mineral exploration and development industry. On behalf of over 7,000 corporate and individual members, we appreciate the opportunity to participate in the construction of the National Biodiversity Strategy. Following conversations with our strategic committees, our colleagues at the Mining Association of Canada, ECCC, NRCan, and the virtual natural resources sectors engagement session, PDAC is submitting this brief in response to the Toward a 2030 Biodiversity Strategy for Canada Discussion Paper.

Canada is globally recognized for its rich biodiversity, diverse ecosystems, and natural resources. To give credit to those claims, Canada has an estimated 80,000 species; lands that cover almost 10,000,000 km²; and is home to over 40% of the world's minerals and metals companies, which produce over 60 minerals and metals. As stakeholders engaged in the responsible management of these resources, we commend the Canadian Government's initiative to prioritize the conservation of biodiversity and the sustainable use of our natural resources. PDAC advocates for a pragmatic approach that strikes a balance between conservation efforts and responsible utilization of natural resources to ensure long-term environmental, social, and economic benefits.

Herein we provide a perspective on biodiversity in Canada from the point of view of mineral exploration, which encompasses a wide array of activities from remote surveying and early-stage, low-impact fieldwork by individuals, up to large camps and pre-mine development. Early engagement with Indigenous communities to develop a common understanding, and drafting and ratifying agreements are also central to the mineral industry and at the core of best practice. It is important to note that the environmental and biodiversity impact of exploration is significantly different and lower than operational mining.

Mineral exploration companies are often junior to mid-sized teams that operate on a tight supply of capital, materials, staff, and other assets, as their activities are non-revenue generating. With these limited resources, companies are expected to access remote environments that often contain rugged terrain and minimal infrastructure for transportation, energy, and accommodation. Clearly, mineral exploration companies face many challenges, and the reality is only 1 in 10,000 prospective mineral showings will become an operating mine. Exploration is the first step in the discovery of the minerals and metals that will, a decade down the line, become the battery inside the electric vehicle or the core component of solar panels. Mineral exploration plays a vital role in the green transition and in achieving our climate change goals by supporting the development and supply of minerals and metals necessary for renewable energy technologies, energy storage, and sustainable infrastructure.

PDAC recommends the following considerations must be made in formulating the Biodiversity Strategy:

Balance strategic priorities to bolster conservation and limit the loss of biodiversity

In developing Canada's 2030 Biodiversity Strategy a primary consideration must be the other significant and overarching federal strategies and commitments like our Canadian Minerals and Metals Plan, 2030 Emissions Reduction Plan, net-zero electricity by 2035, net-zero carbon emissions by 2050, and the critical minerals strategy. These efforts are essential to conserve Canadian biodiversity, as the greatest threat to species in Canada is climate change and the prospect of a rise in global average temperature.

For mineral explorers in Canada, access to land is paramount in order for new discoveries to happen and to provide domestic sources of critical minerals into the future. Without new discoveries and new mines, Canada will remain reliant on other regions around the world to deliver the materials and technologies needed to build sustainable energy infrastructure. Canada is also the second largest nation on earth and host to nearly every type of prospective geological terrain for new mineral discoveries that can drive a global energy transition. This reality requires Canada to apply a holistic view on developing new mineral deposits and electrifying the country while conserving our natural ecosystems and biodiversity.

Recognizing the interconnectedness of Natural Resources and Biodiversity

Minerals, metals, and biodiversity are intrinsically linked as they occupy the same land spaces. While mineral exploration and biodiversity conservation may seem like conflicting interests, responsible mineral exploration practices can minimize negative impacts on biodiversity and even contribute to its preservation. PDAC's [e3 Plus: A Framework for Responsible Exploration](#) is a resource for mineral exploration companies to improve their social, environmental, and health and safety performance, with components specifically on environmental stewardship practices that respect the local community.

Sustainable resource development practices should consider the impacts on biodiversity and integrate biodiversity considerations into management frameworks in order to ensure the long-term viability of both ecosystems and the industries reliant on these resources. Governmental actions to enact legal, administrative, or policy measures within biodiversity targets should not aim to hinder progress on critical mineral projects and vice versa, true success is achievable via positive milestones in both domains.

Industry's role in strengthening Indigenous collaboration and partnerships

Indigenous partnerships in mineral exploration are an essential component of responsible and sustainable practices by promoting respect for indigenous rights and minimizing impacts on biodiversity. By integrating traditional ecological knowledge, fostering capacity building, and ensuring fair benefit sharing, mineral exploration can contribute to the sustainable development of both Indigenous communities and the broader society. The biodiversity strategy should look to facilitate these multi-lateral partnerships as companies' access to the land, access to capital, and access to people will result in stronger more resilient ecosystems and economies.



Leveraging industrial activities for target acquisition

There is good work being done by the mineral exploration and mining industry. In order to access mineral resources, companies must consider environmental and social impacts. Environmental impact assessments provide scope and mitigate potential environmental risks associated with activities, this includes habitat and biodiversity considerations. Once mineral extraction is complete responsible mining practices include land reclamation and rehabilitation efforts to restore the land to a functional and sustainable state. Social considerations include community engagement, consultation, and benefit-sharing agreements.

Habitat banking, environmental and species monitoring, and wildlife protection planning are proactive steps mineral exploration companies can take to play a vital role in mitigating the environmental impact of exploration activities and promoting biodiversity target acquisition. Mutual support from conservation organizations, local communities, and experts can further enhance wildlife protection efforts and ensure that industry practices align with the best available science.

Effective stakeholder engagement and conflict resolution mechanisms address conflicting land uses and ensure a balance between mineral extraction and other land-related activities. All these industrial activities can lead back to the biodiversity strategy.

By working collaboratively, we can ensure a sustainable and prosperous future for Canada, its ecosystems, and its people. For further discussion, we encourage the government of Canada to refer to *PDAC Comments on Key Conservation Questions from the Canadian Wildlife Service's Protected Areas Directorate*. Please see below for detailed answers to the discussion paper questions. PDAC looks forward to the release of the 2030 Biodiversity Strategy and any related collaboration.

APPENDIX A: DETAILED ANSWERS TO DISCUSSION PAPER QUESTIONS

1. What are the key features of a successful 2030 Biodiversity Strategy?

PDAC Response: Canada should prioritize its efforts on targets within the Kunming-Montreal Global Biodiversity Framework that:

- a) apply science and evidence-based approaches to protected and conserved areas
- b) balance biodiversity-inclusive spatial planning with Canada's environmental, economic, and strategic priorities
- c) foster cooperation between the private sector, Indigenous communities, and all levels of government
- d) promote mobilizing financial resources that support junior companies undertaking leading sustainability practices

2. What are the most significant challenges and opportunities to achieving the KMGBF 2030 targets in Canada? What successful initiatives could we build upon?

PDAC Response: Implementing a biodiversity strategy presents several challenges that need to be overcome for effective conservation and sustainable management of biodiversity. For one, biodiversity is a multifaceted issue that spans different ecosystems, provinces and territories, Indigenous nations, and levels of government. Different jurisdictions have mandates and priorities that may vary based on local realities; integrating biodiversity considerations into existing policies and coordinating efforts across sectors will be challenging. Involving local communities, industries, and other stakeholders in decision-making to address concerns about livelihoods and economic development that ensure equitable benefit sharing is an essential but complex task requiring collaboration and consideration.

The biodiversity strategy needs to outline proactive steps to ensure any new or amended policies, regulations, or legal requirements comport with those defined by provinces and territories.

We must strike a balance between Canada's priorities and commitments. This strategy should support Canada's Critical Minerals Strategy, the 2030 Emissions Reduction Plan, Canadian Net-Zero Emissions Accountability Act, the Canadian Target 1 Challenge, and the Canadian Minerals and Metals Plan. We caution against targets within the biodiversity strategy that have the potential to extend beyond the scope of biodiversity. By setting too lofty a target without proper means to address it, the biodiversity strategy could cause unintentional impediments that block these other Canadian priorities.

Climate change and other global pressures such as habitat loss, pollution, and invasive species significantly impact biodiversity. The biodiversity strategy needs to consider and address these global challenges which will require international cooperation and concerted efforts.

3. Are there targets where Canada is already making good progress and others where Canada should focus more attention?

PDAC Response: Habitats are essential for the survival of biodiversity. Responsible mineral exploration companies are already making good progress in their commitment to minimizing their footprint, rehabilitating damage, and coordinating offsets to support healthy habitats. While mineral exploration activities do not typically involve extraction or development, they can have some environmental impacts. For example, it may be necessary to clear vegetation and create access roads. These impacts, although generally temporary and localized compared to mining operations, may still require mitigation and rehabilitation efforts.

Prospectors and developers have a responsibility to minimize harm to wildlife and take proactive measures to mitigate impacts on vulnerable species. This includes implementing procedures to avoid or minimize direct disturbance. The use of technological advancements such as wildlife-friendly infrastructure and deterrent measures can help reduce wildlife mortality or habitat fragmentation. Habitat banking is a proactive approach where companies set aside or restore habitats that are equivalent or better in ecological value than those impacted by their operations. By creating or repairing habitats companies can help to conserve biodiversity and enhance ecosystem functions.

The biodiversity strategy should look to establish clear frameworks that relate to activities such as habitat banking, offset obligations, and reclamation, ensuring there is consistency across jurisdictions. Developing strategic guidance and resources for organizations and individuals on actions that support biodiversity conservation should be done with first-order consideration for established tools such as PDAC's e3 Plus: A Framework for Responsible Exploration.

4. What measures should be prioritized and implemented as soon as possible to ensure we meet the 2030 targets and are on track to reach the longer-term 2050 goals?

PDAC Response: Sustainable Resource Development plays a pivotal role in Canada's economic growth, providing numerous benefits including job creation and infrastructure development within remote regions and communities, as well as technological innovation that often disseminates to other sectors. In the global energy transition, critical minerals are needed to continue driving the development and implementation of clean technologies. Many of the initiatives needed to lower emissions are dependent on critical minerals.

Mineral exploration fosters technological innovation by driving research and development efforts to discover new deposits, improve extraction techniques, and enhance processing methods. This innovation is crucial for unlocking previously untapped mineral resources while also working to minimize the environmental footprint of mineral exploration and extraction. By continuously advancing mineral exploration technologies and practices, the industry contributes to the sustainability and resource efficiency of our green transition.

To accelerate progress toward the 2050 goals, it is imperative that we bolster available public geoscience and develop open-source mineral potential models to identify viable deposit areas. This information can be used as a lens along with other evidence bases such as species at risk,

energy availability, and sensitivity of biodiversity to minimize the impacts of industry on the environment and communities.

It is important to note that the creation and utilization of such a layered map requires the active involvement of Indigenous communities, industrial stakeholders, and academic research institutions throughout the process. It should be an iterative and participatory exercise incorporating feedback, local knowledge, and ongoing monitoring to ensure the map remains up-to-date and reflective of evolving circumstances. The ultimate goal will be to identify the strongest potential areas for mineral exploration while balancing the preservation of ecological integrity and cultural heritage.

Identifying critical development within Canada through this concerted, evidence-based approach will put Canada ahead of the global curve while ensuring our mineral industry remains competitive and generating economic opportunities for Canadians while also providing the necessary resources and infrastructure we need to transition toward a carbon-neutral future.

5. No target is an island: What overarching tools and solutions hold the most potential for making progress across multiple targets?

PDAC Response: The biodiversity strategy should leverage industrial activities for biodiversity data. Members of PDAC operate in remote Canadian terrains. There are a number of ways that mineral exploration can support a federal biodiversity strategy.

Species management relies heavily on data and tracking where species are moving. Both mineral exploration and certain species are seasonally linked. Often boots on the ground are needed to understand the biodiversity state in any given place at any given time. Being able to gather that intelligence from more remote parts of the country that may not be accessible otherwise, is one place where the mineral exploration industry could support the biodiversity strategy.

Mineral exploration can provide an opportunity to identify and protect critical habitats. During the exploration phase, environmental baseline sampling, monitoring, surveys, and assessments are conducted, which may lead to the discovery of ecologically important areas or habitats of endangered species. These discoveries can prompt the establishment of protected areas or conservation measures to preserve these habitats, increasing the security of our biodiversity over the long term.

It may be necessary to provide fiscal incentives to junior exploration companies to support increased extracurricular opportunities for data acquisition and monitoring. Supporting applications for companies and the general public to undertake voluntary identification of species can generate a database to measure progress across targets. However, these activities will add costs and require additional resources that may not be within the capacity of many small exploration companies. Canada's mineral exploration sector has long benefited from regimes like the flow-through share mechanism and the Mineral Exploration Tax Credit (METC) to offset the significant risks and high cost of exploring in remote areas that have little to no infrastructure support. In this same vein, providing small companies with expanded incentives to take on more data acquisition and monitoring activities would not only be more cost-effective than expanding government activities but also provide a more expansive reach for data collection.

6. What additional knowledge and enabling mechanisms (e.g., networks, policies) are critical to inform implementation decision-making at all levels?

PDAC Response: It is essential, not only for the government to initiate consultation with stakeholders, but to actively participate in established streams of knowledge sharing. For example, the annual PDAC convention is a centre point for activity in the mineral industry and can be a catalyst for positive change each year, with attendees exceeding 20,000 individuals from more than 120 countries around the world, and from all disciplines that support the mineral industry. Venues such as the Technical, Indigenous, Capital Markets, and Sustainability Programs provide platforms for dialogue on topical subjects in order to direct and inform implementation decision-making at all levels. Sessions led by expert panels disseminate responsible practices via multiple avenues, such as presenting case studies of successful partnerships or tangible steps to operationalize components of ESG.

PDAC relies on industry volunteers to curate sessions that will provide depth on a larger breadth of topics. These sessions support evidence-based decision-making, foster collaboration, and can enhance the understanding of biodiversity considerations in policies, plans, and projects. PDAC encourages all levels of government to engage in this process and to seek out similar opportunities within other industries.

7. In drafting the 2030 Biodiversity Strategy what individuals', communities', or organizations' perspectives, knowledge, and skills should be meaningfully amplified to make progress on reducing threats to biodiversity?

PDAC Response: Mineral exploration often takes place in regions inhabited by Indigenous Peoples and communities who have a deep understanding of their surrounding ecosystems and biodiversity through Indigenous Traditional Knowledge (ITK). Engaging in meaningful consultation and collaboration with these communities can lead to the integration of ITK into exploration plans. Indigenous communities can contribute valuable insights regarding biodiversity hotspots, wildlife corridors, and sensitive areas. By working together mineral exploration companies can incorporate Indigenous perspectives and priorities for the protection of biodiversity. There are over 400 active agreements between Indigenous Peoples and mineral industry companies in Canada and these typically incorporate ITK and conservation practices. Many companies and communities in the field are already creating agreements that include joint environment monitoring through environmental committees. These processes naturally draw on traditional knowledge, scientific data, and legal requirements. This should be a model for governmental action.

PDAC recommends the biodiversity strategy conducts regular and meaningful consultation with industry and Indigenous communities to ensure diverse perspectives weigh in on target progress. Meaningful participation will require accessible and available engagement platforms and participatory mechanisms.

8. What are the key human needs and values to be addressed to make biodiversity loss a mainstream concern?

PDAC Response: Public engagement and education are crucial for fostering a collective understanding of the importance of biodiversity conservation, the driving factors behind biodiversity loss, and how these factors relate to responsible resource management. By raising awareness about the value of critical minerals and their relationship to climate change, net-zero, and biodiversity we can encourage informed and evidence-based decision-making, as well as improve sustainable consumption practices. Educating the public about the positive contributions of resource industries to biodiversity conservation efforts can foster appreciation and support for sustainable development initiatives and avoid creating an adversarial environment between the public and industry.

It would be beneficial to recognize and applaud junior companies that prioritize sustainability despite their limited resources. Exploration companies that have built a trusting relationship with their local communities also tend to have strong precautionary environmental policies. By acknowledging and celebrating their commitment to sustainability we can encourage larger companies and even individuals to follow suit, fostering a culture of responsible practices throughout the industry. Recognizing these efforts also sends a message to investors, stakeholders, and the global community that sustainability is a fundamental consideration from the very start of the value chain.

9. What does success look like?

PDAC Response: Proactive engagement with stakeholders to enhance awareness and strengthen transparency, cooperative reclamation of ecosystems and habitats, and engraining sustainable best practices characterizes successful links between mineral exploration and biodiversity conservation. For a modern mineral exploration program to be wholly successful, it must incorporate these hallmarks throughout its operations.

To encourage and foster this dynamic, mineral exploration companies require regular and predictable support from the government. This can be via maintaining and implementing fiscal incentives that recognize mineral exploration in the clean future as the starting point of the critical mineral value chain. Additionally, cooperating with PDAC and other industry associations to generate guidance and resource documents can drive activity that enhances the health and resiliency of ecosystems. Proactive consultation and engagement between the federal government, industry, the provinces, territories, and Indigenous Peoples will inspire active participation by individuals in conservation efforts. Achieving these outcomes allows us to realize a Canada where biodiversity advances hand-in-hand with progress and secures a sustainable legacy for generations to come.



**APPENDIX B: PDAC SUBMISSION TO CANADIAN WILDLIFE SERVICES CONSULTATION ON
PROTECTED AREAS (SEPTEMBER, 2022)**

BY ELECTRONIC MAIL

October 3, 2022

Nicole Coté
Director General, Protected Areas Directorate
Canadian Wildlife Service
Environment and Climate Change Canada
Gatineau, Quebec K1A 0H3

**RE: PDAC Comments on Key Conservation Questions from the Canadian Wildlife Service's Protected
Areas Directorate**

Dear Ms. Coté,

As the voice of Canada's mineral exploration community, the Prospectors and Developers Association of Canada (PDAC) takes an active interest in regulatory and policy initiatives that shape the landscape of our industry, on behalf of our more than 6,000 corporate and individual members.

Canada's vast geographic footprint and mineral exploration potential are virtually unparalleled around the world and are foundational to our future economic growth potential. These traits give Canada the opportunity to reduce carbon emissions by meeting our net-zero goals, and provide the world with the mineral building blocks needed for green technology and renewable energy. Under this backdrop, PDAC aims to foster mutually beneficial relationships between industry and Indigenous peoples, and enshrine transparent and evidence-based regimes, which are essential for Canada to compete on a global stage. PDAC has long advocated for inclusive, data-driven approaches to land management that incorporate mineral resource assessments, which effectively balance economic development and ecological conservation.

PDAC appreciates the work of the Canadian Wildlife Service (CWS), and welcomes collaborative engagement with Environment and Climate Change Canada (ECCC), provincial governments, industry and Indigenous communities. PDAC is advocating for government to apply an evidenced-based approach in working to meet Canada's Target 1 Challenge and conserving 30% of Canada's land and oceans by 2030. To accomplish this, governments must establish protected areas and Indigenous Protected and Conserved Areas (IPCAs) that balance other forms of land withdrawals and overarching federal priorities, such as expanding Canada's capacity to supply critical minerals and achieving net-zero carbon emissions by 2050. A transparent and collaborative process in establishing these areas is paramount to ensure that objectives are achievable and there is consistency in applied methodologies across Canada.

As a federal organization, PDAC supports and endorses the submission made by the Mining Association of Canada to this consultation. While decisions around land management are of great interest to the mining industry as a whole, they are of particular importance to the mineral exploration sector given the nature of work at the earliest stages of the exploration process.



Mineral resources in Canada predominantly lay within rock formations under the surface of the earth and are not readily identifiable through traditional prospecting in the majority of cases. As such, a multifaceted approach to exploration is necessary to make mineral discoveries, quantify value, and make strategic decisions about the commercial viability and economic potential of establishing a producing mine.

Canada has the great benefit of being the second largest country in the world with nearly every type of geological terrain and mineral deposit type present under the surface. Mineral exploration across the country has been far from exhaustive and there is vast potential for new critical mineral discoveries to be made in nearly every region. That said, mineral exploration is an investment-intensive and high-risk business with slim a probability of successfully establishing a mine. History has shown that for every 10,000 prospective mineral showings, only 10% will advance to the detailed exploration stage and only one is likely to result in a new mine. On top of these challenging odds, even a lucrative mineral discovery may have decades elapse between initial exploration and establishing a mine. Given these 1 in 10,000 odds and the potential to generate innumerable social and economic benefits, predesignating proposed protected areas prior to evidence-based process would be a major and unfortunate overstep.

Failing to consider all pertinent information before making major land management decisions will pose significant risks and sequester future opportunities. In this context, due to a lack of available public geoscience data and limited prior exploration activity, the mineral resource potential beneath a particular area could remain undiscovered and the social and economic benefits unrealized.

The report published by the Indigenous Circle of Experts (ICE), [We Rise Together](#), raises concerns that Indigenous knowledge systems have been inadequately considered in conservation decisions.¹ Many also express concern about the importance of special places for personal and community ceremonies and that culturally significant species are important to the ongoing survival of the people, their ability to be on the land, and their interactions with the land.² Our members understand the importance and value of continuous engagement with Indigenous peoples and that establishing and maintaining respectful relationships is integral to the mineral exploration process. Notably, there are over [400 active agreements](#) between Indigenous Peoples and mineral industry companies in Canada that incorporate Indigenous traditional knowledge and conservation practices. PDAC will continue to foster collaboration between industry and First Nations to ensure acceptable land management decisions can be achieved. There have been countless industry examples in this regard, such as Skeena Resources Limited returning mineral claim tenures in 2022 in support of the Tahltan Central Government partnership to establish a new 3,500-hectare conservancy to protect the Ice Mountain Lands, adjoining Mount Edziza Provincial Park.³

The mineral industry welcomes protected area decision-making that aligns with Indigenous viewpoints, is considerate of culturally significant areas and balances land protection and conservation with natural resource development. Prioritizing the analysis of mineral potential in land management planning is necessary for Canada to be a world leader in achieving its net-zero commitments and social and economic development for the benefit of all Canadians. With this in mind, PDAC would like to highlight the following high-level recommendations for consideration:

¹ [PA234-ICE Report 2018 Mar 22 web.pdf \(squarespace.com\)](#)

² [PA234-ICE Report 2018 Mar 22 web.pdf \(squarespace.com\)](#)

³ <https://news.gov.bc.ca/releases/2021ENV0025-000657>

Prioritize Mineral Development Potential in Land Management Decisions

As Canada is striving to meet its environmental commitments to lower carbon emissions, consideration of known mineral resources and the potential for new discoveries based on public geoscience data and industry activity should be a priority consideration, in any land management decision-making.

The following image, produced by NRCan as a part of mapping Canada's green economic pathways for battery minerals, is an example piece of evidence that should be incorporated in a multi-layered assessment process. The CWS should adopt a similar mapping process that considers conservation, species at risk, alternative energy and mineral development priorities to make informed land management decisions.

Predict hotspots for land-use planning

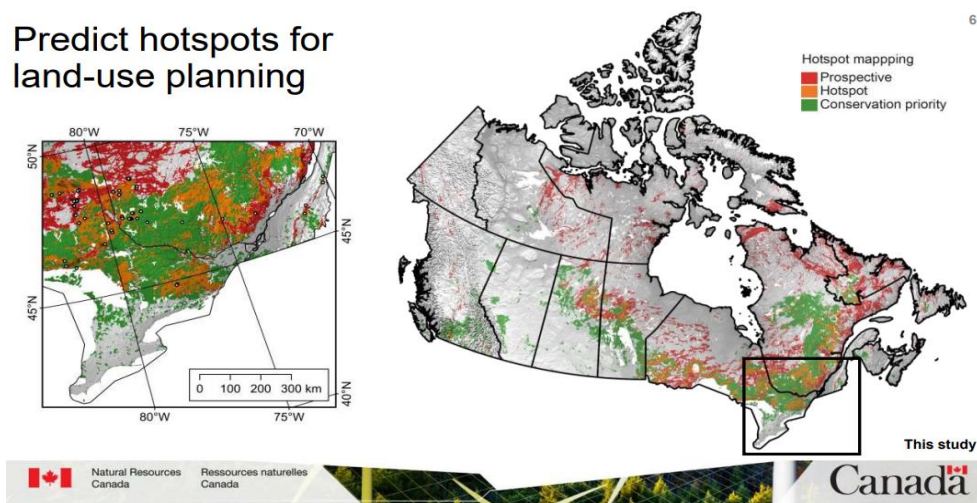


Figure 1: Mapping Canada's Green Economic Pathways for Battery Minerals Presentation to Natural Resources Canada by Christopher Lawley

Designation of protected areas must first include a mineral potential assessment of the land, operate within clear and transparent processes and prioritize coordination between jurisdictions. Ensuring there is a transparent process will help Canada strategically assess how to maximize protected area designations and secure the critical mineral wealth needed to help Canada reach its net-zero goals well into the future.

Ensure Fair and Transparent Coordination with Provinces

Over the last three years, there have been a number of IPCA funding announcements, however there has been little to no direct consultation with provinces and territories around selection criteria and timelines. In 2020, PDAC wrote a letter to ECCC, about the apparent lack of approval and coordination from the province of Manitoba in the announcement to designate the Seal River Watershed as an IPCA. Stating such commitments in the public domain, without pre-consultation or notification is contrary to a holistic and inclusive approach, potentially creating an adversarial environment between governments at the earliest stages of the process. Taking such an approach is likely counterproductive to achieving the stated goals of Canada's Nature Legacy initiative to protect and recover species at risk, advance reconciliation with Indigenous Peoples and ensure sustainability of natural resources.



Ensure Consistency with Other Federal Initiatives such as Canada's Critical Minerals Strategy

With overlapping areas of focus, ECCC and NRCan should collaborate to ensure alignment of individual ministerial initiatives. Coordination between environment and natural resources ministries will be essential to implementing the [Canadian Minerals and Metals Plan](#) and in achieving the goals of the [Critical Minerals Strategy](#).

Facilitate Ongoing Industry Input

PDAC highly recommends that industry consultation must occur prior to establishing new protected areas to ensure plans are balanced, minimize potential land use conflicts, and fully address the identified priorities. As Canada works towards these protection goals, there should be open dialogue and ongoing consideration of industry perspectives. Land management decision-making processes should be ever evolving and include consultation with all stakeholders.

Learn from Industry Success Stories

Industry is committed to collaborative land management decisions that protect areas of ecological and cultural significance and many successful examples exist, such as ATAC⁴ relinquishing Claims in the Peel Watershed Wilderness Area. Additional industry engagement could facilitate new collaborative and dynamic agreements that increase the total area of land protected for long-term environmental stewardship.

Consider the Cumulative Assessment of Ecological and Economic Impacts

Just as cumulative impact assessments are being required for industrial development projects in ever-increasing areas of consideration, cumulative impact assessments that take into account ecological and socio-economic impacts of establishing a particular protected space or IPCA, should be undertaken before any land protection decisions are made.

⁴ [ATAC Relinquishes Claims in Peel Watershed Wilderness Area - Yukon - Bloomberg](#)

PDAC would like to reflect on the Key Conservation Questions established by the CWS:

1. **Nature Based Climate Solutions (NBCS):** Seeking protected area co-benefits from climate programming
 - *How can we best link biodiversity conservation with climate adaptation (e.g., riparian buffer zones) and/ or mitigation (e.g., carbon offsets) for optimal conservation gains?*

There are many ways we can best link biodiversity conservation with climate mitigation for optional conservation gains as we have seen through various government pilot programs. PDAC suggests that we consider the following:

- **Expand Conservation Exchange Program:** PDAC supports expansion of the Conservation Exchange Pilot that would work with resource development companies to support ENGO conservation projects to develop conservation carbon offset programs for future benefit. While early exploration poses fewer opportunities to become involved in offset programs, as companies are still at the very early stages of development, opportunities may exist for companies that are nearing or in operation. An indirect example of this is Snowline Gold ⁵ in the Yukon, who put solar panels in to replace diesel in partnership with the Tr'ondëk Hwëch'in First Nation. Exploration companies would be interested in avenues to reduce their carbon footprint as much as possible and this program could be useful, over the long-term life of the mine.
 - **Assess Proposed IPCAs Against Mineral Resource Maps:** As the size and scale of conservation projects is expansive and given the significant expansion of protected areas being planned, PDAC recommends that the level of mineral exploration and development activity within a region, as well as the potential for mineral discovery and economic development must be integrated into IPCA pre-assessment processes. This may be accomplished by referencing available public geoscience data, and through coordination with federal and regional geological surveys, government ministries and mineral exploration companies working within a given region. Without doing so, governments and communities cannot effectively balance environmental and socio-economic considerations, and there is risk of sequestration or abandonment of viable mineral projects that could have an overall positive impact on the environment and regional economy.
2. **Co-Benefits:** Seeking broader societal co-benefits from protected areas programming
 - *What other economic, socio-cultural, health and environmental challenges could nature conservation be a solution for?*
 - *What are the current limiting factors and what are potential innovative approaches to mitigating concerns around Indigenous Protected and Conserved Areas (IPCAs)?*

Nature conservation could be a solution for many different economic, socio-cultural, health and environmental challenges. PDAC is comprised of geologists, environmental engineers and sustainability experts, whose appreciation of our natural environment, passion and curiosity have resulted in a career in mineral exploration. Conservation goals are our priority when evidence based and informed by science.

⁵ <https://im-mining.com/2022/08/05/snowline-gold-brings-in-solar-generation-system-to-power-yukon-exploration-camp/>

In the context of the mineral exploration industry, challenges lay in the consistency, transparency and coordination of establishing IPCAs. To mitigate these challenges, we recommend the following:

- **Prioritize Mineral Potential Consideration in Land Management Decisions:** As Canada is striving to meet its environmental commitments to lower carbon emissions, consideration of known critical mineral resources and the potential for new discoveries based on geoscience data, should be prioritized to create an evidence-based mineral overlay.
- **Establish Definition of Future use of a Protected Area:** There are varying definitions for protected lands and how they apply to different industries. In BC, conservancies allow a wider range of low-impact, compatible economic opportunities than Class A parks, however, commercial logging, mining and hydroelectric power generation are prohibited.⁶ Parks and protected areas are dedicated to preserving the natural environment and providing outstanding outdoor recreation opportunities. Places of special ecological importance are designated as ecological reserves for scientific research and educational purposes.⁷ The federal establishment of IPCA's must ensure they align with provincial definitions of protection. In the case of mineral exploration when mineral claims are relinquished for the establishment of a protected area, the parameters of economic development must be clearly understood (ex. further mining on the land, or establishing a contract on the land).
- **Ensure Consistency in Rules for Protected Areas Across Industries:** There are inconsistent rules for how certain industries interact with a protected area. Inconsistent definitions of protected lands can have a negative impact on future investments. For example, an exploration company may have an agreement with a First Nation community and the government to protect an area of cultural significance, excluding it from mineral exploration. While no further exploration is allowed on the land, forestry has not been exempt and these activities are allowed to continue. The definition of protected areas and their application in various industries should be clarified.
- **Ensure Consistent Integration with Other Established Processes:** In comparison to laws of general application across provincial territorial jurisdictions, and policies that are built into land-use planning, we need to consider how protected lands integrate with other established processes. For instance, in the Northwest Territories at the start of an exploration program, companies must first go through a conformity check with the established First Nation land-use plan, or you cannot proceed. The federal government needs to ensure these additional protections fall under established land-use plans. There must be clear integration of existing processes that identify areas to ensure industry has legal certainty and knows what they can and cannot do.
- **Provide Clarity on Protected Area Parameters:** ECCC must clearly outline what the establishment of a protected area would mean for land outside of those boundaries. There is a theory that the establishment of protected areas should make it easier to develop projects outside of those protected areas. Clarity is required for industry to understand the benefits of new projects outside these areas and how development changes once an area is protected.

3. **Biodiversity Conservation:** Achieving both Quality & Quantity

⁶ <https://news.gov.bc.ca/releases/2021ENV0025-000657>

⁷ <https://news.gov.bc.ca/releases/2021ENV0025-000657>

- *Canada has a TransCanada Trail, a TransCanada Railroad, a TransCanada Highway. How can we create a TransCanada NatureWay, based on Biodiversity Conservation “1st Principles”?*

PDAC is not familiar with the intention to create a TransCanada NatureWay and would be interested in learning more. We ask that the development of such an initiative consider the following:

- **Establish non-linear, transparent criteria for protected areas based on species use, mineral potential and socio-economic opportunities:** As we look to create a network of protected areas for Canadians to enjoy across the country, PDAC believes that there should be no intention to establish a linear NatureWay. Rather protection should be primarily based on species use, access to land for species at risk, protections for animal of concern and areas of cultural significance in coordination with provinces and territories. Finally, we must prioritize the consideration of known critical mineral resources and the potential for new discoveries based on geoscience data.
- **Develop transparent criteria for selecting protected spaces that are connected and effectively managed:** PDAC supports MAC’s feedback to this question, asking that emphasis be placed on outcomes to maintain and restore functioning ecosystems that support species mobility and climate change adaptation. We support their recommendation to develop transparent criteria for selecting protected spaces, considering multiple environmental, social and economic factors, aligning with Target 3’s intention to focus on areas of particular importance for biodiversity. In addition, there should be a consideration of innovative ways to enhance connectivity and ensure areas are effectively managed long term.

4. **Innovative Financing:** Using 21st century financial tools for Nature Conservation

- *How can biodiversity conservation economic benefits be converted to financial flows to generate bankable conservation investment opportunities? (Ex. Creation of new protected areas)?*
- *What would be the benefits of Canada piloting a Payment for Results system for new protected areas?*

Biodiversity conservation’s economic benefits can be converted to financial flows to generate bankable conservation investment opportunities by collaborating with cross-ministerial initiatives. For example:

- **Cross-ministerial support for the expansion of programs with common biodiversity goals:** In 2022, Transport Canada launched the Medium- and Heavy-Duty Zero-Emission Vehicles Program, a 4 year ~\$550 million program, to help businesses and communities across the country make the switch to zero-emission vehicles.⁸ Additionally the \$155 million Clean Growth Program, led by NRCan, seeks to fund clean technology research and development and demonstration projects in the energy, mining, and forestry

⁸ <https://www.canada.ca/en/transport-canada/news/2022/07/minister-of-transport-announces-new-incentives-for-medium--and-heavy-duty-zero-emission-vehicles-program.html>

sectors over 4 years.⁹ Supporting the expansion of programs like these to include electric haul trucks and heavy machinery, would increase funding for similar initiatives with the goal to reduce emissions and increase biodiversity at a mineral exploration or mining project.

PDAC would need more clarity on a Payment for Results system before being able to offer substantial feedback. We would be interested in learning more about how the government sees a program like this working in practice. There would be minimal if any benefits to redirecting tax revenue to offset the potential economic development benefits that could be realized from sequestering land, as this essentially saddles the country's taxpayers with providing compensation for the elimination of economic development prospects at a regional level.

5. **Stakeholder Engagement:** Expanding the conservation tent

- *How do more traditional conservation stakeholders best engage new/ non-traditional ones (Canadian extractive sector members etc.)?*
- *What is the role for large philanthropic conservation Foundations (e.g. Bezos' Earth Fund), in Canadian conservation? What is the role of the public sector?*

Both traditional and non-traditional conservation stakeholders must keep an open mind to achieve common goals. For stakeholder engagement, we recommend:

- **Dynamic and Ongoing Engagement with Industry:** PDAC requires transparency in how land protection decisions are made, including how sites will be selected, implemented and administered. The exploration and development sector prides itself on successful relationship building with Indigenous and local communities in proximity to mining projects. Establishing relationships for mutual social and economic development is the foundation of the sector. The same is true with ensuring project partners are well informed, and in support of our projects. We welcome feedback, want to find common ground and ask to be engaged at all stages.
- **Build Greater Ministerial Understanding of Mineral Exploration Claims and Environmental Disturbance:** There continues to be a lack of public awareness around the mineral exploration process in relation to environmental disturbance. The total area of all a company's mineral claims does not equal total surface disturbance. Staking a mineral exploration claim gives a company the right to explore the area within the claim for potential mineral resources. For as long as the company holds a claim block, other companies may not conduct exploration within that block. Companies may stake dozens or even hundreds of square kilometers of claims in a single block, particularly in early exploration when there is a high degree of uncertainty about the potential presence of a mineral deposit(s), and the size and extent of such deposits. Despite staking such large claim blocks, the exploration may be focused in a relatively small portion of the block, with no activity in other portions of the block, or activity limited to airborne surveys or geological mapping. A mining claim allows exploration but does not allow the extraction and sale of mineral resources from the area claimed.

⁹ <https://www.nrcan.gc.ca/climate-change-adapting-impacts-and-reducing-emissions/canadas-green-future/clean-growth-programs/20254>

- **Build Greater Public Awareness Around Industry’s “Environmental Footprint”:** Ongoing concerns regarding impacts of mineral exploration and mining projects on the environment continue to shape perceptions of the industry, and is a primary point of discussion by governments, Indigenous communities, NGOs and the public. PDAC outreach has demonstrated that there is often a lack of awareness about the activities and potential impacts or “environmental footprint” of mineral exploration. This lack of understanding has been the impetus for legislative amendments to environmental assessment processes, and contributed to challenges such as a lack of community acceptance of mineral projects and negative perceptions of the minerals industry. Appendix A below provides detail around the steps within the mineral development sequence, illustrates the disturbance along a project lifecycle (Figure 2) and analyzes mineral exploration claims compared to a disturbed area.
- **Invest in Research and Tools that Monitor Disturbance:** PDAC and the Mining Association of Canada, launched a project to develop a methodology to measure the physical disturbance that occurs as a result of mineral exploration and mining operations, by surveying a variety of projects in different biogeographic regions across Canada. Findings will be used to more accurately inform regulatory frameworks decision-makers, and the public about mineral industry activities and government or future researchers can adopt and apply the methodology to additional projects. We look forward to sharing the result of the study with the CWS and stakeholders across government. We invite government or the private sector to adopt the methodology to study additional case studies, to help inform land management decisions.

Philanthropic conservation foundations and the public sector can both play a big role in Canadian conservation. We recommend:

- **Focus Funding on Capacity Building Initiatives:** Private and public funding should be targeted to capacity building funding for Indigenous communities to be able to participate in land management decision-making, in the way that serves them best. In many cases, companies have covered the consultation service fees for First nations to reduce this cost barrier.

6. **Landscapes and Sustainable Natural Resource Use:** IUCN Category V and VI

- *How can Canada better recognize landscapes and natural resource use that protect biodiversity?*

Canada can better recognize landscapes and natural resource use that protect biodiversity in the following ways:

- **Consider Adoption of all IUCN Categories of Protected Areas:** PDAC suggest government must consider adoption of all 7 International Union for Conservation of Nature’s (IUCN) conservation categories to help establish protected areas and meet biodiversity goals. These areas are described as “A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”¹⁰ Our current approach to conservation can be broadened to include all 7 categories, provided they align with Canada’s broader economic, ecological and conservation priorities.

¹⁰ <https://leap.unep.org/knowledge/glossary/protected-area>



PROSPECTORS &
DEVELOPERS
ASSOCIATION
OF CANADA

July 2023

- **Conduct Further Assessment in the Application of all IUCN Categories:** There have been inferences that if we were to reclassify conservation areas and provincial parks that may not fall within existing protected areas definitions; we would already be at approximately 25-30% protection. CWS should consider the assessment of the application of all IUCN categories to propel achievable land management targets.

We appreciate the Canadian Wildlife Services collaborative efforts to improve and inform decision-making to achieve effective biodiversity protection goals and look forward to ongoing coordination. If you would like to discuss the issue further or would like additional information, please contact Jeff Killeen, PDAC's Director of Policy and Programs at jkilleen@pdac.ca.

Sincerely,

Lisa McDonald
Executive Director
Prospectors & Developers Association of Canada (PDAC)

Appendix A:

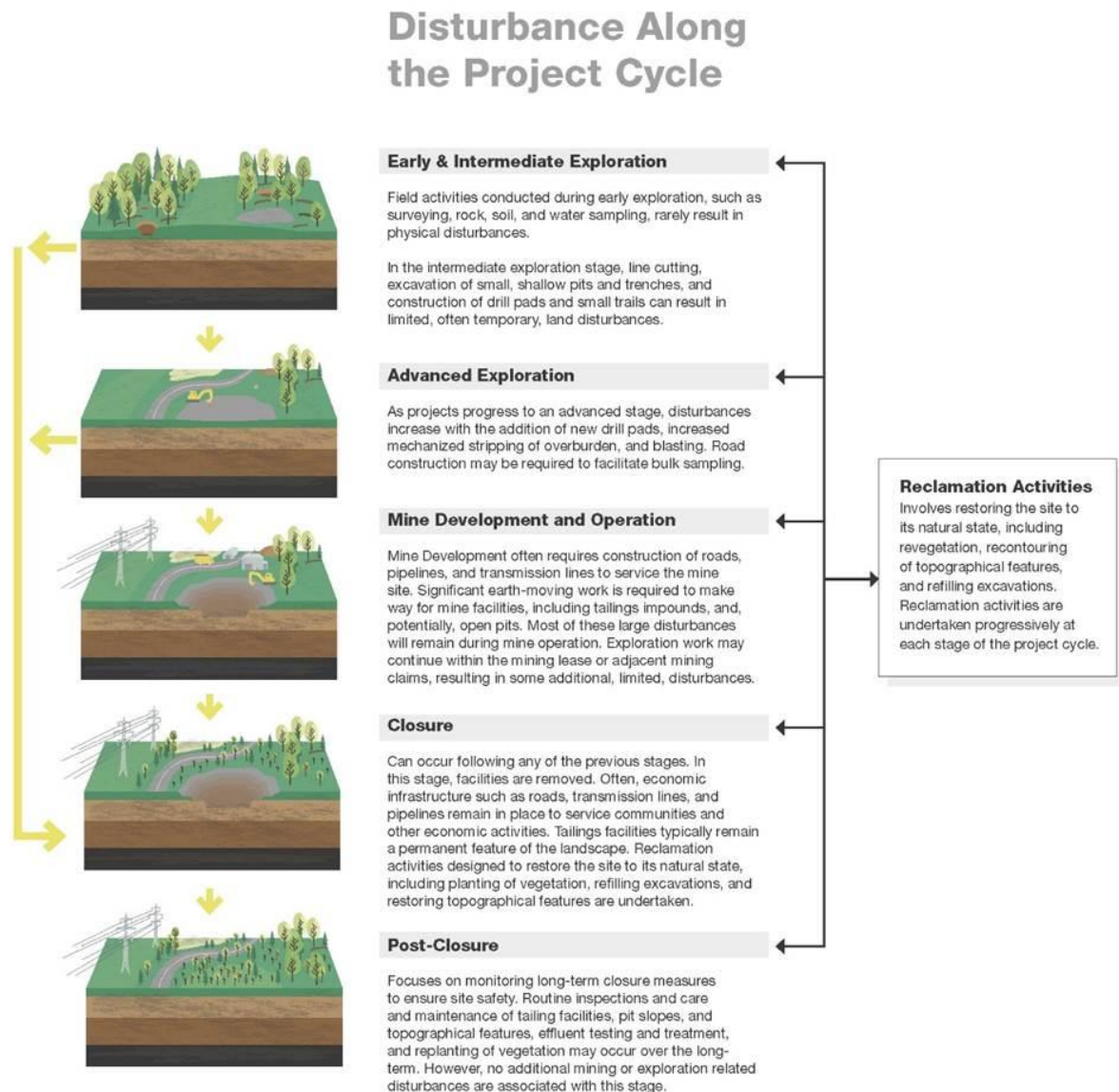


Figure 2: Disturbance along the Project Cycle

Typical activities that may lead to physical disturbances at each phase of the lifecycle are summarized below, together with closure and reclamation activities.

Early and Intermediate Exploration: Activities during early and intermediate exploration may include:

- Building gravel access roads or short airstrips, as well as gravel landing pads for helicopters
- Establishing a small camp to house personnel, office space, and storage (typically tents)
- Clearing narrow (e.g., 2-3m wide) lines through the forest to conduct ground-based geophysical surveys – referred to as cut lines
- Clearing small (e.g., 5-10m square) areas to install diamond drills, potentially including the use of local materials (e.g., cut trees and soil) to level the pads
- Clearing narrow (e.g., 5-10m wide) trails to move diamond drills and other equipment and supplies
- Clearing small areas of bedrock or digging small trenches

Advanced Exploration: For exploration projects that proceed to advanced exploration, activities may include those associated with early and intermediate exploration, as well as:

- Establishment of larger camps with semi-permanent structures (e.g., trailers instead of tents)
- Establishment of on-site power generation or connection to the existing electrical grid
- Improvement to access roads or enlargement of airstrips
- Establishment of small-scale open pit or underground mine workings to collect large samples, referred to as bulk samples
- Establishment of facilities for water management

Mine Development and Operation: For advanced exploration projects that proceed to mine development and operation, a wide range of infrastructure is established for the operation of the mine:

- Improvement to access roads or airstrips
- Construction of permanent buildings for accommodations, ore processing, storage, vehicle maintenance, etc.
- Construction of underground or open pit mine workings
- Establishment of facilities for the management of mine waste (waste rock and tailings) and water (e.g., settling ponds for water treatment)

Reclamation and Closure: Reclamation can occur during any life cycle phase and is a key activity during closure. Closure takes place following the end of activities – exploration or mine operation. Reclamation and closure activities typically include:

- Demolition of buildings – removed from site or safely disposed of on-site
- Removal of power transmission lines, pipelines, etc.
- Removal or safe on-site disposal of fuel and other supplies and hazardous materials
- Flooding of open pits
- Removal of vehicles and other equipment
- Securing mine openings to protect public safety
- Recontouring and revegetation of disturbed areas, such as where buildings or roads were located

- Revegetation of waste rock piles, which may include recontouring and adding cover material
- Securing tailings facilities to ensure that they continue to function as designed, which may include revegetation
- Some infrastructure may be retained to support closure and post-closure activities, such as access roads and power supply needed for ongoing water treatment or the continued operation, maintenance, and surveillance of tailings facilities

Mineral Exploration Claims Compared to Disturbed Area

Staking a mineral exploration claim gives a company the right to explore the area within the claim for potential mineral resources. Individual claims are small areas (varies by jurisdiction) and claims are typically staked in blocks of multiple claims (properties). For as long as the company holds a claim block, other companies may not conduct exploration within that block. For a company to retain their claims, they need to spend a certain amount on exploration and development activities (again the amount varies by jurisdiction), but as long as the claim block is contiguous, the exploration and development work can be focused in just a portion of claims within the block.

Companies may stake dozens or even hundreds of square kilometers of claims in a single block, particularly in early exploration when there is a high degree of uncertainty about the potential presence of a mineral deposit(s), and the size and extent of such deposits. Despite staking such large claim blocks, the exploration may be focused in a relatively small portion of the block, with no activity in other portions of the block, or activity limited to airborne surveys or geological mapping.

If exploration proceeds, companies may retain these large claim blocks for further exploration or allow a portion of their claims to lapse. Once a claim has lapsed, that company can no longer explore in the claim area, but another company may stake that claim. A claim can also be sold to another company.

Particularly for projects that proceed to advanced exploration or into mine development and operation, it is typical for other companies to stake adjacent claims. Thus, the claim block of the company conducting advanced exploration or with a project in mine development and operation may be surrounded by claims held by other companies.

A mining claim allows exploration but does not allow the extraction and sale of mineral resources from the area claimed. Thus, before mine development can begin, the claims within the footprint of the proposed mine site (typically including associated infrastructure such as mine waste management facilities), need to be converted to a mining lease. Within the lease area, the company has ownership of the land (claims apply only to subsurface rights) and is able to develop and operate the mine.

The company may retain claims outside the lease area for further exploration or allow some or all of those claims to lapse. Companies typically retain at least some of these claims well into the mine development and operations phase, as exploration typically continues throughout much of this phase.

As exploration winds down and the end of the operations phase nears, companies will typically release more and more of the claims outside of their mining lease.