



May 28, 2020

Yukon Mineral Development Strategy  
PO Box 372  
108 Elliott Street  
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To: Math'ieya Alatini, Doug Eaton, Angus Robertson (YMDS Panel)  
Re: CPAWS Yukon Comments, Yukon Mineral Development Strategy

Dear YMDS Panel,

The Yukon Chapter of the Canadian Parks and Wilderness Society (CPAWS Yukon) advocates for the territory's most valuable and priceless resource: our abundant wilderness. Our mission is to conserve the land, water and wildlife of the Yukon for current and future generations.

We are pleased to provide comments to the Panel for the Yukon Mineral Development Strategy. Our submission is organized into seven recommendations that we believe are needed to make mineral development truly sustainable in the Yukon.

This document supplements the virtual presentation we made to the Panel on May 22, 2020, a copy of which is also provided in PDF.

**Recommendation 1: Develop successor legislation to update the Quartz Mining Act and the Placer Mining Act.**

Yukon's mining legislation must be modernized to align with the context and challenges of the 21st century.

CPAWS Yukon believes that developing successor mining legislation is the most important recommendation for the strategy to include. Yukon's mining legislation dates back to the early 20th century and, while each act has had some amendments, the Quartz and Placer acts have not kept pace with modern times<sup>1</sup>. Since this legislation was crafted, the scale and intensity of mining has soared, as have its environmental, social, and cultural impacts.

Developing successor legislation, rather than continuing to apply minor updates, is necessary to modernize the acts and align them with Yukon's commitments, including the final agreements,

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<sup>1</sup> <https://dev.arlaw.ca/yukon-placer-regime-changes/>

the rights of unsettled First Nations, land use planning processes, and modern territorial legislation and policies.

The forthcoming Resource Road Regulations are one example where existing legislation has made it difficult to develop effective regulations. Due to legislative constraints, these regulations will apply to off-claim mining roads but not on-claim roads, making it difficult for the regulations to provide a clear regulatory framework. Legislative changes could allow these regulations to apply to both on- and off-claim roads, leading to improved effectiveness and clarity of the regulations.

CPAWS Yukon recognizes that development of successor legislation will include a comprehensive engagement process and, as such, we have not included specific recommendations in this document. In general, developing successor legislation for the Quartz Mining Act and the Placer Mining Act will provide the opportunity to:

- Provide legislative frameworks to enact recommendations within the Yukon Mineral Development Strategy.
- Clarify legislative paramountcy (e.g. with final agreements, Official Community Plans under the Municipal Act).
- Review royalty and security frameworks.
- Shift sections of legislation to regulations, where appropriate.

### **Recommendation 2: Complete land use planning before making decisions about transformative mining projects.**

Transformative mining projects are mining projects that cause irreversible environmental change, such as habitat loss or wildlife declines at a landscape scale. While policy guidance is needed to define what constitutes a “transformative project”, they could generally include hardrock mines, major mining roads, and additional placer mines in placer mining hotspots, such as the Indian River Watershed.

CPAWS Yukon recommends that transformative mining projects should not be reviewed by an assessment board or approved until a land use plan is in place for the project area.

Land use planning is designed to lay out a broad vision for the land, and can settle the big questions around development. The decision to approve a project that could permanently transform a landscape, and to determine if a project and its consequences are acceptable to Yukoners and First Nations, is a question of values. Project assessment is not designed to answer these types of questions.

In addition, without the framework of a land use plan, project assessment is not well-equipped to evaluate or manage cumulative effects. The Yukon Environmental and Socio-economic Review Board (YESAB) notes that, “Project assessment, alone, cannot fully account for cumulative effects, nor was it designed to.”<sup>2</sup>

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<sup>2</sup> YESAB. (2019). Information Bulletin. Consideration of Cumulative Effects in YESAB Assessments. Page 5. <https://www.yesab.ca/wp/wp-content/uploads/2019/07/Cumulative-Effects-Info-Bulletin-2019.pdf>

The limitations of project assessment are well-documented and include:<sup>3</sup>

- The omission of individually insignificant but cumulatively important effects, leading to “death by a thousand cuts”.
- Lack of adequate baseline information and analysis, making it impossible to make informed decisions.
- Difficulty establishing criteria to determine the significance of cumulative effects.
- Difficulty considering likely future activities or development (e.g. spur roads, increased human access, induced development).

The Wernecke Winter Road project starkly illustrates the different outcomes that individual project assessment and regional land use planning can lead to. Proposed in 2007 to support uranium exploration, the 178-kilometer Wernecke Winter Road was intended to run alongside the Peel Watershed’s Wind River. Regional land use planning in the Peel was in the beginning stages at this time. The Planning Commission and the public were concerned that the road would be reviewed by YESAB without the guidance of a land use plan.

Despite this concern, the project was reviewed and approved before the plan was complete. The project was ultimately not viable and was never developed. The Wind River is now designated for protection under the Peel Watershed Regional Plan and industrial projects are not permitted. The conclusion reached through individual project review clearly did not align with the conclusion reached through a comprehensive planning process.

CPAWS Yukon recognizes that it will take time to complete regional land use plans across the territory. In the interim, two other options could be considered. These options do not provide the same clarity as a regional land use plan, can take considerable time, capacity and resources to complete, and should be left to the discretion of First Nations with traditional territory encompassing proposed project areas:

1. **Subregional planning, completed under Chapter 11 of the final agreements.** It is important to conduct subregional planning under Chapter 11, as planning outside of it reduces management clarity and legal certainty. The Yukon Land Use Planning Council has a guidance document for grounding subregional planning within the final agreements.<sup>4</sup>
2. **Regional cumulative environmental impact assessments, coupled with cautious thresholds on development.** Regional assessments provide broader context than current project-based review processes, and can incorporate modelling to determine the effects of different development scenarios on the environment (e.g. wildlife habitat and populations)<sup>5</sup>. CPAWS Yukon notes that setting appropriate development thresholds is difficult without the guidance of a land use plan and, as such, they should be set with a precautionary approach.

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<sup>3</sup> Kennett, S.A. (1999). Towards a New Paradigm for Cumulative Effects Management. <https://prism.ucalgary.ca/handle/1880/47201>

<sup>4</sup> Yukon Land Use Planning Council. (2018). Sub-Regional Planning in Yukon. <https://www.planyukon.ca/index.php/documents-and-downloads/yukon-land-use-planning-council/discussion-papers/clupreview/860-sub-regional-planning-in-yukon/file>

<sup>5</sup> Canadian Council of Ministers of the Environment. (2009). Regional Strategic Environmental Assessment in Canada. [https://www.ccme.ca/files/Resources/enviro\\_assessment/rsea\\_principles\\_guidance\\_e.pdf](https://www.ccme.ca/files/Resources/enviro_assessment/rsea_principles_guidance_e.pdf)

### **Recommendation 3: Pause mineral staking in areas where land use planning is taking place.**

Land use planning, embedded in the Umbrella Final Agreement, is a chance for people to come together and create a vision for Yukon's land and communities. The policies and maps in a land use plan provide tools to get there.

Placing a temporary withdrawal on staking allows all values and land uses to be equally considered during land use planning, reduces the costs of adopting non-development land designations, and leads to plans that are right for the land and communities. CPAWS Yukon believes that placing a temporary pause on development provides the time and space needed to develop strong land use plans, not only for the people of today but future generations.

If mineral staking proceeds during planning, it can lead to ecologically and culturally important areas being staked and disturbed before these areas are potentially protected through a land use plan. In addition, the territory's current legislative framework results in the grandfathering of mining claims if they were staked before an area was protected. It is well known that thousands of claims were staked in the Peel Watershed after planning started but before a moratorium was put in place, creating legal uncertainty for land managers and claim holders.

Given the incompatibility of mining with a multitude of other land uses, allowing staking to proceed during planning does not align with Objective 11.1.1.2 of the Umbrella Final Agreement, where regional land use planning is intended "to minimize actual or potential land use conflicts both within Settlement Land and Non-Settlement Land and between Settlement Land and Non- Settlement Land".

CPAWS Yukon recognizes that staking withdrawals could be lifted in certain areas during a regional land use planning process, if it becomes clear that these areas are highly likely to be designated to permit mining development. We suggest that withdrawals be lifted during planning only when Yukon Government and First Nation Parties are in agreement with the decision.

### **Recommendation 4: Separate mining promotion, regulation, and enforcement within Yukon Government.**

CPAWS Yukon recommends that the conflicting mandate of the Department of Energy, Mines and Resources (EMR) be better separated to ensure communities and the environment are protected.

EMR houses the Mineral Resources branch, which "regulates exploration and mining activity and encourages its development."<sup>6</sup> This dual mandate makes the branch part promoter, part regulator. EMR also includes the Compliance, Monitoring and Inspections branch, meaning that mining promotion, regulation, and enforcement fall under one department. CPAWS Yukon believes that promotion is not compatible with regulation or enforcement.

Our recommendation echoes conclusions reached in other jurisdictions. Following the Mount Polley tailings breach, the Auditor General of British Columbia recently conducted an audit to determine if the government's regulatory and enforcement activities were protecting the province from significant environmental risk. As a result of the audit, the Auditor General called

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<sup>6</sup> <https://web.archive.org/web/20191121121839/http://www.emr.gov.yk.ca/mining/>

on the province to move compliance and enforcement from the Ministry of Energy and Mines (MEM) to an independent agency. The Auditor General's report<sup>7</sup> explains that:

“MEM's role to promote mining development is diametrically opposed to compliance and enforcement. This framework, of having both activities within MEM, creates an irreconcilable conflict. Because compliance and enforcement is the last line of defence against environmental degradation, business as usual cannot continue.”

There have been calls for similar action in the Yukon. The Council of Yukon First Nations (CYFN) spoke out in 2012 when responsibility for water inspections at hardrock mine sites was transferred from the Department of Environment to EMR. In a letter to Yukon Government, CYFN wrote<sup>8</sup>:

“Given that EMR's mandate is to promote the development of mining and mines in the Yukon, the CYFN maintains that mine inspections, enforcement and security under the *Waters Act* must not be the responsibility of the EMR Minister.”

Yukon Government must ensure that regulators have a clear mandate to prioritize protection of people and the environment, and act in the public's interest, not private industry's. This is challenging when the same department is responsible for promotion and regulation. We believe this principle applies to all industries, not just mining, and our recommendations could be applied to other sectors in the territory.

CPAWS Yukon recognizes there are multiple ways to restructure and better separate mining promotion, regulation, and enforcement. We recommend that Yukon Government:

- Move responsibility for mining project approval from EMR to an arms-length Development Assessment Branch.
- Move the mining enforcement program to an independent agency.
- Ensure inspection frequency is maintained by developing a formula to ensure additional Natural Resource Officers are hired when mines are approved.
- Publicly report the result of mining compliance and enforcement activities, including warnings issued and company compliance/non-compliance with mine permit conditions.
- Develop agreements with First Nations to support joint mining inspections.

### **Recommendation 5: Ensure that mining activities align with the Yukon's commitments to climate action and biodiversity conservation.**

The Yukon has committed to safeguarding biodiversity and taking action on climate change. The Yukon's values are reflected in meeting commitments and mining activities should not push the territory off its path to keeping these commitments, made at territorial, national, and international levels.

To stay on track with our commitments and keep the territorial footprint small, Yukon Government and the mining sector must strive to help safeguard the Yukon's ecological integrity

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<sup>7</sup> Auditor General of British Columbia. (2016). An Audit of Compliance and Enforcement of the Mining Sector. <https://www.bcauditor.com/sites/default/files/publications/reports/OAGBC%20Mining%20Report%20FINAL.pdf>

<sup>8</sup> Yukon News. 2012. Chiefs critical of mine monitoring changes. <https://www.yukon-news.com/news/chiefs-critical-of-mine-monitoring-changes/>

and resilience, which depend on clean rivers and streams, wide-ranging migratory wildlife species, intact boreal habitats and permafrost<sup>9</sup>, and ecologically and culturally important lands. As such, industrial activities must:

- Adhere to Yukon’s strategy for climate change, energy and a green economy, laid out in “Our Clean Future”<sup>10</sup>. This includes increasing the Yukon Government’s participation in initiatives related to mining innovation (e.g. [e-waste or urban mining](#)).
- Use renewable energy for new and existing projects. Renewable energy (excluding large hydropower) only accounts for 0.1 percent of the global mining industry’s total power supply; per year, the global mining industry consumes approximately 400 terawatt-hours of electricity, about as much as all of France<sup>11</sup>.
- Track and report greenhouse gas emissions<sup>12</sup>, and offset carbon costs. Offsetting carbon must not be the sole strategy however as it provides license to delay or even fail to make meaningful, long-lasting changes such as converting to renewable energy.
- Demonstrate commitment to place-based development (public and environmental safety included) by ensuring that local people are trained to conduct inspections, work in remediation, and respond to emergencies at mine sites.
- Align with the Yukon’s [Science Strategy](#) where it informs environmental assessment processes.
- Align with national commitments laid out in Canada’s [2020 Biodiversity Goals and Targets](#), goals stipulated in Canada’s Changing Climate Report<sup>13</sup>, and Canada’s commitments to protecting 25 percent of land and ocean by 2025, and 30 percent of land and ocean by 2030.
- Avoid sensitive habitats and areas that species at risk rely on in accordance with Canada’s Species at Risk Act (SARA).
- Consider transboundary concerns. Contamination from mines can flow across international boundaries and violate the Canada-U.S. Boundary Waters Treaty of 1909, which states that “waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.” The 3,190-kilometer Yukon River starts in northern B.C. and flows through the Yukon and Alaska, emptying in the Bering Sea with tributaries along the way; salmon are just one of the taxa that use these waterways.
- Adhere to international commitments, including the Convention on Biological Diversity’s Aichi Targets, the UN Sustainable Development Goals, and the Paris Climate Accord.

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<sup>9</sup> Hjort et al. (2018). Degrading permafrost puts Arctic infrastructure at risk by mid-century. *Nature Communications*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6289964/>

<sup>10</sup> Government of Yukon (2019). Our Clean Future: A Yukon strategy for climate change, energy and a green economy. <https://yukon.ca/sites/yukon.ca/files/env/env-our-clean-future-draft.pdf>

<sup>11</sup> Mining Industry Starts To Dig Renewables:

<https://energyandmines.com/2016/06/mining-industry-starts-to-dig-renewables/>

<sup>12</sup> Government of Yukon. Greenhouse gas emissions in Yukon. <https://yukon.ca/sites/yukon.ca/files/env/env-greenhouse-gas-emissions-yukon.pdf>

<sup>13</sup> Bush, E. and Lemmen, D.S., editors (2019). Canada’s Changing Climate Report; Government of Canada, Ottawa, ON. 444 p. [www.ChangingClimate.ca/CCCR2019](http://www.ChangingClimate.ca/CCCR2019)

### **Recommendation 6: Integrate the Mitigation Hierarchy into project assessment.**

The Mitigation Hierarchy<sup>14</sup> is used worldwide to reduce the environmental negatives of industrial projects. It consists of “four steps for the land”: avoid harm, minimize harm, restore what is damaged and, as a last resort, offset what is lost.

CPAWS Yukon recommends that YESAB integrate the Mitigation Hierarchy into project assessment to reduce the negative effects of development (e.g. habitat loss, wildlife declines, permafrost disturbance and degradation). The four steps are listed in the order they’re meant to be used: avoid is the best option and offset is the last resort.

Before using the hierarchy, ecological baselines must be established using traditional knowledge, local knowledge, and environmental science. Baselines create historical reference points, making us less prone to shifting baseline syndrome, which occurs when degraded environmental conditions are eventually accepted as normal. Once baselines are established, mining project proponents should demonstrate to YESAB how they plan to leave a positive legacy by:

1. **Avoiding** harm, which might mean wise site selection or working only at certain times of the year (e.g. in the winter to avoid nesting seasons of protected bird species).
2. **Minimizing** environmental impacts, which might involve using the most up-to-date technologies or reducing the scale of the project.
3. **Restoring** what was damaged, which could entail restoring topsoil to improve the success of revegetation. Restoration requires a clear vision of how a site will look and function afterwards and should be determined with local communities familiar with the environmental history of the land.
4. **Offsetting** environmental impacts, which takes place off the direct project site and is a last resort. Offsets come in two forms: restoration offset (remediating past damage elsewhere) and averting loss offset (protecting an area from future degradation elsewhere). Any offset must be permanent.

CPAWS Yukon strongly advocates for avoiding and minimizing negative effects first<sup>15</sup>. This is the most effective way to lower remediation costs, avert loss of biodiversity and other values, and reduce lasting harm to ecosystems. Restoring and offsetting are measures of last resort, and in some cases aren’t acceptable options.

### **Recommendation 7: Understand the full economic costs and benefits of mining to the Yukon.**

Gross Domestic Product (GDP) does not provide an accurate picture of the full costs and benefits of mining to the Yukon. Yukon Government should also measure revenue that stays in the territory and regularly conduct cost-benefit analyses of mining activity.

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<sup>14</sup> A cross-sector guide for implementing the mitigation hierarchy:

<https://www.icmm.com/website/publications/pdfs/biodiversity/cross-sector-guide-mitigation-hierarchy.pdf>

<sup>15</sup> Phalan et al. (2018). Avoiding impacts on biodiversity through strengthening the first stage of the mitigation hierarchy. *Oryx*. URL: <https://www.cambridge.org/core/journals/oryx/article/avoiding-impacts-on-biodiversity-through-strengthening-the-first-stage-of-the-mitigation-hierarchy/DDBA2EA1D468985A9CE5D089ABC5FAD5>

Yukon Government reports the territory's GDP each year and the contribution of the mining sector is typically highlighted. GDP measures the money generated in a given jurisdiction, and it's useful for showing the total size of an economy and the contribution of different sectors.

But it has some limitations:

- It includes costs to taxpayers, such as reclamation of abandoned mines. This means that taxpayer-funded cleanup of sites like the Faro mine show as a net positive to the economy.
- It also adds in money that's generated in the Yukon but doesn't stay in the territory. This includes profits made by out-of-territory companies that extract resources from the Yukon and then move their wealth elsewhere. It also includes wages paid to fly-in workers who don't pay income tax in the Yukon.
- It does not consider costs borne by tax-payers to support the industry, including infrastructure, regulation, promotion and other subsidies and incentives.

Because GDP is limited in what it measures, it is not possible to know the real economic impacts of mining in the Yukon. The data that would complete this picture are either not publicly available or do not yet exist.

To ensure decisions are well-informed, CPAWS Yukon recommends that Yukon Government immediately add other measures to their annual economic reporting, including:

- Revenue that stays in the Yukon, and thus directly benefits Yukoners.
- An annual report outlining the total costs and economic benefits of mining.

These data will allow us to stop making assumptions about the economic impacts of mining, and provide decision makers with the information needed in order to make better decisions for the economy and the environment.

Ultimately, once Yukon Government has moved toward full economic costing, the territory could adopt a framework such as the Triple Bottom Line<sup>16,17</sup> which considers economic, social, and environmental domains. For mining, this framework considers not only the money generated but also who benefits and any negative effects to the land. The Triple Bottom Line framework views the economy as a subset of the society we live and want to live in, which is a subset of our environment. In other words, the economy is a product of (and constrained by) the social aspirations we have and the physical limits of our living planet.

We thank you for the opportunity to provide recommendations for the Yukon Mineral Development Strategy. We hope our input helps shape more responsible mining practices in the Yukon, whose exceptional ecological integrity we must collectively steward.

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<sup>16</sup> Triple Bottom Line focus makes renewables more attractive to mines:

<https://energyandmines.com/2016/10/carbon-pressures-push-mines-toward-renewables/>

<sup>17</sup> Lederwasch & Mukheibir (2013). Triple Bottom Line and Progress toward Ecological Sustainable Development: Australia's Coal Mining Industry as a Case Study. *Resources*. <https://www.mdpi.com/2079-9276/2/1/26/pdf>

Sincerely,

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