



**XAT'SÜLL T'MICW  
RESOURCES LLP**

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May 11, 2022

British Columbia Environmental Assessment Office  
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V8W 1L8

Impact Assessment Agency of Canada  
Pacific and Yukon Office  
210A-757 West Hastings Street  
Vancouver, BC  
V6C 3M2

**Sent Via Email**

**Attention: Tanishka Gupta, Ward van Proosdij, and Katherine St James**

Dear Tanishka Gupta, Ward van Proosdij, and Katherine St James

**Re: Xat'sull First Nation – Spanish Mountain Gold Initial Project Description Comments**

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Xat'sull T'micw Resources LLP ("XTR LLP") on behalf of Xat'sull First Nation ("XFN") has reviewed the initial project description ("IPD") from the Impact Assessment Agency of Canada ("IAAC") and B.C. Environmental Assessment Office ("EAO").

Attached to this letter, please find our comments on the Spanish Mountain Gold IPD along with recommendations for consideration.

Should there be any questions or comments, please address them to Alexander Fanni, Project Manager, XTR LLP.

Sincerely,  
<Original signed by>

Alexander Fanni,  
Project Manager  
Xat'sull T'micw Resources LLP

CC: Chief Sheri Sellars, Xat'sull First Nation  
Mike Stinson, Mining Coordinator, Xat'sull First Nation Natural Resources Department

**Xat'sùll First Nation – Spanish Mountain Gold IPD Report Comments**  
**IPD Initial Environmental Review, May 5, 2022, Prepared by Adam Neil**

Introduction: This initial assessment of the IPD is built off the amalgamation of best practices and models currently in use for environmental impact assessment. Fundamentally, the focus is on examining the cumulative effects of any large-scale project and how these features interact with each other and feed towards a central and overriding goal of well-being for all relevant living species and ecosystems.

**Xat'sùll First Nation – SMG IPD Environmental Comments**

Section ref	Pg # Ref	Topic	Comment	Recommendation	Excerpt from Document
1.1.1	1	Proponent and IPD Lead Author	Recognizing the Director of Sustainability and Indigenous Affairs has significant experience in environmental disciplines, it will be important to ensure there is a clear separation and independent 3rd party assessments for the project.	Please clarify the authors for the environmental assessment sections of the IPD.	N/A.
2.0	3	Indigenous jobs and economic opportunities	Further details on the specifics around Indigenous jobs and economics would be appropriate here.	Provide specifics, such as the expected number of Indigenous jobs and targeted value of economic development opportunities.	The Project justification includes the provision of jobs and economic opportunities for local First Nations, and the people of BC and Canada.
2.0	3	Environmental project guidance	The project should be constructed, operated, and decommissioned in compliance with current and future environmental legislation, regulations, and best practices. BMPs are generally encouraged and have a specific meaning, whereas legislation and regulations are hard requirements.	Suggest rewording this statement to include current and future legislation, regulations, and BMPs.	The Project will be constructed, operated, and decommissioned in compliance with modern environmental best practices.
3.2	4	Existing infrastructure	Further clarification of existing infrastructure would be beneficial for greater project understanding.	Include further details in appropriate section in IPD if not already highlighted.	SMG benefits from significant existing infrastructure, which helps reduce the initial capital cost.
4.0	9	Legislative and Regulatory context	The section does not refer to any Indigenous legislation/context	Suggest including DRIPA and Sec 35 of CA, as well as Indigenous-specific requirements in the existing references.	N/A.
4.1	9	Regulatory processes	The process aims to seek regulatory approval	Suggest a bullet on seeking regulatory approval	Environmental Assessment Review Process.
4.1	9	Regulatory processes	Current regulatory processes, specifically BC new Act, points to consensus seeking	Suggest rewording "provide input" to "seek consensus".	Opportunities for all stakeholders and First Nations to identify potential issues and provide input.
4.4.1	13	HSRMP	XTR has not reviewed the HSRMP. Could this document be provided? Also, have the affected FN communities confirmed that the Project does not intrude on any cultural heritage features or cultural values?	Further discussion may be warranted on the above presence/absence of cultural features and values.	The Project does not intrude upon any Goal 2 areas identified in the Horsefly Sustainable Management Plan.

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5.0	14	Cumulative Effects	Existing mining operations should be considered with the proposed Project within the context of a cumulative effects assessment.	See above.	Placer claims still exist near Spanish Creek and Cedar Creek and placer operations continue in the area.
7.0	17	Baseline studies	EEM programs and corresponding studies have been undertaken since 2010, with the incorporation of new information and designs over time.	Further discussion and understanding may be warranted.	Baseline studies of: o Terrestrial vegetation o Wildlife o Species-at-risk o Terrestrial Ecosystem Mapping
7.5.10	25	Runoff Diversion	Will the diverted runoff be returned to the receiving stream directly or to an alternate receiving stream? Note this is relevant to a previous comment on the need for a detailed aquatic ecosystem baseline and assessments.	Provide further clarification if runoff will be diverted to original receiving waters or alternate streams.	Non-contact runoff from catchments directly upstream of the TSF will be diverted to Cedar Creek, while runoff from catchments upstream of the south embankment will be diverted to Boswell Lake, where it will be pumped around the west side of the TSF to be discharged into Cedar Creek during initial operations. In Year 10, the Boswell Lake South Diversion Channel will be.
7.5.10	26	SCPs design targets	Climate change has demonstrated an increase in the frequency and magnitude of rainfall and flood events. What was once considered a 1 in 200 event could conceivably be more frequent in future.	Climate change projections should be taken into consideration with respect to both impacts and design.	SCPs have been designed to store a 1 in 200-year return period 24-hr rainfall event, plus an operational pond volume of 2,000 m <sup>3</sup> (an estimate of a minimum-allowed volume, assuming the ponds are kept operationally pumped down), plus a one-meter freeboard allowance.
7.5.12	27	Temporary Disturbances	How and when will the temporary camp areas be restored to a pre-disturbance state?	Suggest a statement on restoring these areas once use is no longer required.	N/A.
7.6.3	31	Polishing wetland	Please confirm if the polishing wetland will be man-made or utilize a nearby natural feature?	None currently.	Aerobic polishing wetland (for minor removal of biochemical oxygen demand).
7.6.3	31	passive treatment beyond closure	How will the passive treatment be assessed with respect to its efficiency beyond closure?	None currently.	The passive systems will continue operating through and beyond the passive closure period.
7.6.5	32	Waste disposal	Please provide a rationale for incinerating waste. Actions to lessen air pollution and atmospheric loading are appropriate at this time.	Reconsider transporting all waste offsite to an appropriate disposal facility.	An incinerator will be used for the disposal of non-hazardous, combustible waste materials and will be located within the accommodation complex.
7.7	32	Decommissioning	The section is absent any plans for long-term monitoring.	Include a section that refers to the need, and high-level approach for long-term monitoring of the decommissioned areas (e.g., water quality, revegetation, invasive species monitoring/management, erosion effectiveness... etc.)	N/A.
8.4	42	Indigenous Engagement	Shared decision-making and consent are key to this process and the EA from a meaningful standpoint, as well as the specific requirement of the regulatory agencies under the newest legislation.	Provide further details on how SMG intends to share decisions and achieve consensus with affected communities.	N/A.

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9.4	61	Terrain description	The section could benefit from some additional details such as slope, aspect, elevation... etc.	Expand description.	N/A.
9.5	61	Climate	Any reference reports/studies on climate change in the region would greatly benefit this section.	Expand the section to include a discussion on climate projections for the region, if available.	N/A.
9.9	68	Sediment Results	A statement above suggests that elevated metal concentrations in surface water may, in part, be due to historic placer mine activity on Spanish Mountain. Would the same be expected here?	If appropriate, note the relevance of previous mining acidity with respect to the elevated sediment results.	This likely reflects natural conditions within bed sediments in this region, however, ongoing sampling will provide confirmation of the baseline condition.
9.10	68	Fisheries baseline and effects studies	The earlier section of the IPD lacks any reference to fisheries or aquatic-based baseline and effects studies. The presence of fishing within the claim boundaries necessitates further assessment.	Clarify in the report that fisheries and aquatic baseline studies and effects assessment are part of the project	N/A.
9.10	69	Fish Impacts	Increased flows in Winkley may not be a HADD, however, direct footprint on and diversion from Cedar Creek is expected to trigger.	Equal focus should be given to identifying/stating HADDs or lack thereof.	Flow contributions to Winkley Creek are not considered a harmful alteration.
9.11	74	Vegetation	What measures will be implemented to conserve/protect rare ecological plant communities and old growth forest if they have been found?	Outline what measures (at least high-level) will be taken to protect/conserv these ecological communities in general and/or if their presence is confirmed.	Potential rare ecological communities and old growth forest within the project area were prioritized for field verification. AND General comment – Section 9.11
9.12	74	Overlap with management and conservation areas	Overlap with these areas is only discussed with respect to caribou and grizzly.	Provide additional details on the presence and significance of overlap with the other noted management plans and conservation areas, with some additional detail for greater context.	Wildlife Management Unit (WMU) 5-15. It overlaps with several areas of wildlife management and conservation priority, including Williams Lake Sustainable Resource Management Plan area, Caribou Chilcotin Land Use Plan area, Quesnel Lake North Grizzly Bear Population Unit, Ungulate Winter Range U-5-002 for mule deer, and “matrix critical habitat” for the Quesnel Highlands herd of southern mountain caribou.
9.12	76	Wildlife	There is significant indication in the IPD, via modelling and survey activities, that a number of species at risk utilize the study/project area; yet a statement on plans to protect/conserv critical areas/habitat for these species is absent with the exception of migratory birds.	Provide additional measures/statement (at least high-level) that will be implemented to protect/conserv species at risk and their critical habitats within the study/project area.	General comment – Section 9.12
9.12	76	Habitat Modelling	Habitat suitability modelling can be quite subjective. Also, models are tools and do not provide definitive results. Note that many wildlife species, some of special concern, are known to inhabit the project area. Overlap of the project area with a guiding tenure also provides some insights. Calibration of a model with a high level of certainty would require many years of observation data.	Consider direct habitat assessments and population surveys within the project area as an alternate or parallel means of assessment.	The initial habitat suitability models will be completed and evaluated against the baseline study data, followed by model adjustments to accurately reflect areas of potentially suitable habitat within the study area.

10.3	82	Traplines	Perhaps note here if any community members also have trap lines in these areas.	None currently.	Tenures in the Project area include two traplines:
10.4	82	Non-traditional land use	Little information is provided on these activities.	Provide further details and insights on these land uses, as it will be important to the public consultation processes.	Land uses surrounding the Project include outdoor recreation, fishing, and hunting.
10.6	83	ERP	The section could benefit from additional details given nearby historic events.	Provide additional information and heightened awareness of ERP. Recall the nearby issue with Mt. Polly and lessons learned.	N/A.

Section ref	Pg # Ref	Topic	Comment	Recommendation	Excerpt from Document
11.2	94	GHG Emissions	The statement reflects a single project only and does not take into consideration the cumulative input or effect of GHG emissions.	Suggest rewording this statement and in the above section to reflect a cumulative perspective on GHG emissions. Every little bit of reduction we can achieve counts in this day and age.	Based on current projections, the project is not expected to affect the country's ability to meet GHG reduction targets.
11.3	97	Air Quality	Williams Lake and Quesnel areas were known to have relatively poor air quality, at least historically, which should be taken into consideration in this section for greater context.	Note background conditions for context.	N/A.
12.1	101	TSF site selection	No reference has been provided to environmental values in the selection of these sites.	Consider evaluating options against other values e.g., social, cultural, environmental... etc.	The TSF sites located within Cedar Creek (Sites F and G) and Blackbear Creek watersheds (Site B) were identified as preferred options for further study, because they were rated as having high storage efficiency, and were associated with lower capital cost.
Table 15.1	118	Potential Effects	The table below serves as a start point for the identification of potential project-related effects, which will be further assessed and detailed through baseline studies and an effects assessment as part of the project application to EAO.	Suggest a preamble to this section noting the above, as well as the need for an adaptive management approach which would include continuous effects assessment (confirmation of predictions) via long-term monitoring programs and a trigger response/action plan with a suite of measures that will be applied in circumstances where predictions differ from actual observations. Also, the use of compensation measures is absent from this section and would be required as permanent effects are likely to result.	General comment on Table 15.1
Table 15.1	118	Mitigation	Again, new legislation warrants consensus on these types of project-related decisions.	Terminology throughout the report needs to be consistent with current legislation and processes with respect to Indigenous engagement, consultation, decisions, and consensus in keeping with DRIPA.	The assessment of the Project will consider the rights and interests of Indigenous peoples in consultation. The participating Indigenous Peoples will be engaged in the evaluation and selection of mitigation measures to minimize potential effects. This may include avoiding/minimizing Project interaction with identified sites.

Table 15.1	120	Terrestrial Resources - Potential Effect	Inclusion of invasive/exotic species introduction because of construction, operations, and closure activities is absent.	Include acknowledgement in the Potential Effect section for the introduction and spread of invasive/exotic species because of Project activities.	General comment – Biological Environment – Terrestrial Resources in Table 15.1
Table 15.1	120	Terrestrial Resources – Mitigation	Inclusion of invasive/exotic species mitigation measures is absent.	Include mitigation examples that will be implemented to manage invasive/exotic species on the Project site throughout the life of the project and decommission period (i.e., iterative management plan – prevention, surveying, treatment, monitoring)	General comment – Biological Environment – Terrestrial Resources in Table 15.1
15.2	123	Project Effects	These statements inadvertently imply little impact on receiving environments, particularly with respect to cumulative effects. Previous sections indicate loss of fish-bearing streams, wildlife habitat, and existing effects on water/sediment quality. It's difficult to conceive that Project-related effects will be avoided, minimized, or mitigated to such a level that both residual and cumulative effects are avoided.	Suggest reconsidering these results at this early stage in the project and simply putting a placeholder that effects determinations will be made as part of the process. These statements are premature.	Through appropriate Project design and planning, SMG has worked to avoid, minimize, or mitigate any foreseeable negative changes to environmental, economic, social, cultural or health values. As a result, SMG anticipates that many cumulative effects can be avoided.

Section ref	Pg # Ref	Topic	Comment	Recommendation	Excerpt from Document
Table 15.3	124	Fish Habitat Impacts	Offsetting in itself is recognition of a direct impact. It often takes some period of time to function effectively and is only effective in this context if applied to the same population and based on the same limiting factor (or values lost). This is challenging in any watershed and it's unlikely that effects will be fully balanced/offset.	Reconsider this result, it may be premature.	Specific elements of the Project will alter fish habitat, but all such alterations will require the provision of offsetting habitat, such that the Project is not expected to cause a cumulative reduction in fish habitat availability or quality
Table 15.3	124	Wildlife Habitat Impacts	Direct loss of wildlife habitat should also be noted here, in addition to quality. Closure of the mine after a 15-year period does not negate impacts on wildlife habitat, let alone wildlife populations. Also, suggesting these areas would inevitably be impacted due to forest operations, which significantly differ in the level of impact on wildlife, is inappropriate, misleading, and not accurate.	Reconsider this result, it may be premature.	Closure will involve the provision of new habitat through site reclamation measures that will be defined later in project planning. The Project occurs within the footprint of a working forest, and much of the project footprint would eventually be harvested whether the Project is developed or not.
General			Any water derived from ground sources requires consideration of impacts of downstream aquifers and nearby surfacing waters. Any potential impacts on receiving waters as a result of decreased flows need to be considered as part of an aquatics effects assessment.		

**Xat'sùll First Nation – Spanish Mountain Gold IPD Report Comments**  
**IPD Initial Socio-Cultural Review, April 26<sup>th</sup>, 2022, Prepared by Jodie Asselin**

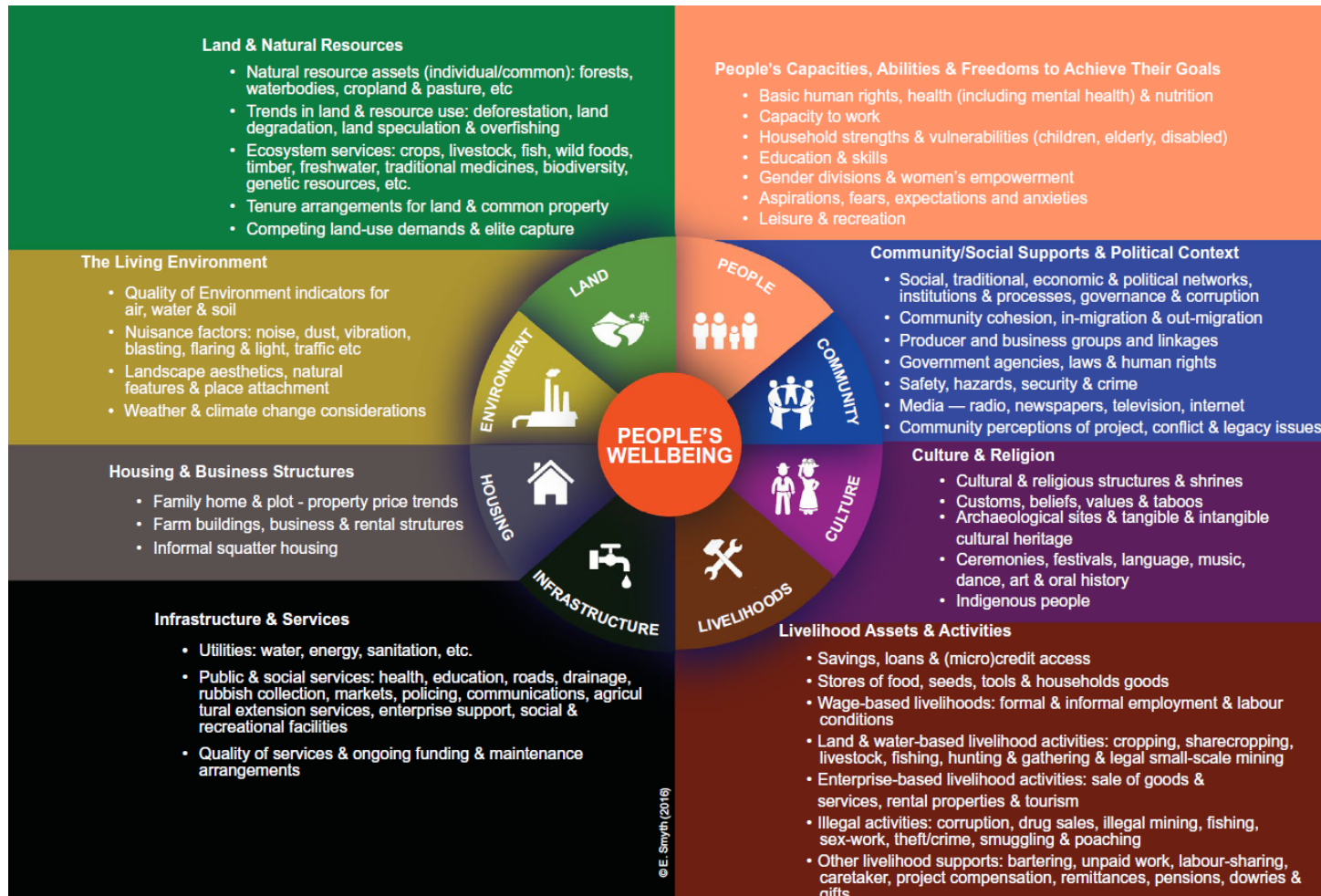
Introduction: This initial assessment of the IPD is built off the Social Frameworks for Project Model (Smyth and Vanclay 2017), an amalgamation of best practices and models currently in use for impact assessment. A copy of the model is included below. Fundamentally, the model proposes a wide range of features to be considered in any large-scale project and how these features interact with each other and feed towards a central and overriding goal of people's well-being. The categories chosen in the below chart are taken from this model. This model is meant to help visualize the connections between cultural values and livelihood, biophysical environment, and human health and well-being.

Topic/Section	General Comment	Specific Consideration
Land and Natural Resources	<ul style="list-style-type: none"> <li>Largely considered through the environmental review. Additional comments: Individual project risks may be higher because of surrounding developments. Consider how this area connects with surrounding lands and communities in terms of ecosystem services. Are there fish, water sources, birthing grounds, etc., that are important for surrounding regions and communities? Is this area a drought reserve for species when other areas are under stress? What moves across the boundaries laid out by the project, including people?</li> <li>We suggest a Community-Based Monitoring Program over the life and after-life of the mine regarding the state of health/traditional usability of the 'reclaimed' land</li> </ul>	<p>A cumulative impact assessment approach for all social and environmental features will be particularly necessary because this area has a history of intense resource development.</p> <p>Community-based monitoring program.</p>
Living Environment	<ul style="list-style-type: none"> <li>Nuisance factors include dust and noise that may be an issue in the immediate vicinity of the project, impacting both people and animals. Are there aesthetic concerns that apply to this area?</li> <li>Regarding water management and tailings storage/treatment and anticipated/unanticipated release, what concerns do community members have over their confidence in local water, fish, and aquatic plants for consumption. Regarding reclamation, what are the appropriate species to plant, and are there culturally significant species that perhaps cannot be cultivated and will require natural re-vegetation? Are there plants that might not be harvested if grown over tailings deposits?</li> </ul>	<p>Are there specific times of the year when community activities are more intense in this area? If so, suggest mitigation factors during this window.</p> <p>Is there an opportunity in the reclamation processes to shape local vegetation to support current land use values?</p>
Housing and Business Structures	<ul style="list-style-type: none"> <li>The impact of informal housing or workcamps can be significant on several fronts. Such camps can create informal economies where goods and services, both legal and illegal, can permeate local communities. What steps will be taken to control the impact of work camps? Are there steps possible to make workcamps more regionally appropriate? What steps will be taken to ensure workers within camps are not creating new entry points and trails in the local environment, putting pressure on fish or animals through legal/illegal harvesting? What do new trails into this environment mean for the community?</li> <li>Perhaps significant to a lesser degree, will the approval of this project impact local housing prices or housing availability for band members in Williams Lake and beyond? This connects to the affordability of life for band members.</li> </ul>	<p>Workcamp mitigation measures are needed for economic, social, and environmental impact.</p> <p>Housing prices and rental availability review needed in Williams Lake and other localities of off-community Band members.</p>
Infrastructure and Services	<ul style="list-style-type: none"> <li>Will the added workers put increased pressure on policing, wildlife monitoring etc.? Are there activities of particular concern that may occur in this relatively isolated region? (Poaching, drug use, sex trade, etc.). If so, how will these activities impact local services or band members' relations to these services? For example, if further policing in the area is needed, how might this impact band members already on the land and their interactions with conservation or police officers? Is a sense of belonging and safety impacted?</li> </ul>	<p>There is an opportunity here for infrastructure required by the project to be supported through the development corporation, as appropriate.</p> <p>Suggest discussion around additional enforcement needs because of camp and transportation of equipment/products, and impact of increased interactions with</p>

	<ul style="list-style-type: none"> <li>In a region with strained healthcare access, the two-year 265-person camp will put added stress on local health care/mental health resources and the quality of services that can be provided. What mitigating features might be possible to support this added burden? Are there particular sectors of support services where added pressure may be particularly detrimental or areas where SMG investment might reduce the local burden?</li> </ul>	<p>enforcement on local peoples already within this area.</p>
<p>People's Capacities, Abilities, Freedoms to Achieve Goals</p>	<ul style="list-style-type: none"> <li>The big question here is does this project increase vulnerabilities, and are there ways for this to build on strengths? One way to think about this is through aspirations and fears.</li> <li>In terms of strengths/aspirations, what are known strengths in the community? For example, existing businesses, a strong youth council, institutional experience with the natural resource sector, etc.? In what ways can this project leverage and improve on these known strengths? For instance, education funding (including but also extending beyond scholarships for tuition dollars), training sessions for those in resource management etc.</li> <li>What are the existing vulnerabilities that might be impacted here? Some common concerns that may or may not apply to the Xat'sull community include employment issues, housing, substance use, education accessibility, marginalization of community members, systemic racism, confidence, and access to the local environment etc. Are existing vulnerabilities (whatever they might be) increased through this project?</li> <li>Regarding Leisure and Recreation, what will access in this area look like for Xat'sull members? Will new roads open territory for quadding, hunting, etc. in ways that increase local risk or reduce enjoyment? What do trail networks in this area look like, especially considering existing projects and placer mining activities?</li> <li>Mining tends to be heavily gendered labour, are their current gender inequalities that might be exacerbated through increasing male-dominated labour options? Would it be appropriate for negotiations around work to include a gendered component?</li> </ul>	<p>Education/training opportunities</p> <p>Company rules around land access, culture/place training for workers</p> <p>A gendered component in economic partnership details?</p>
<p>Community/Social Supports and Political Context</p>	<ul style="list-style-type: none"> <li>Collaborative relationship building that supports existing community networks and decision-making processes is important. Does the relationship between SMG and the community support the roles of current community members up to now? If so, great; if not, are there specific components where change would be helpful?</li> <li>How does this project, especially in light of other projects in the area, impact a sense of belonging for members? It is increasingly being recognized that contentious projects can make existing divisions between community members worse. Is there a way to incorporate community-building events to counter this tension if this is the case (visits to the site prior/during/after, meals or other cultural events)?</li> <li>More than 50% of band members live out of the community. Outreach has already been discussed as including these individuals, but it also means that issues like housing costs and health care accessibility in Williams Lake and surrounding areas directly impact these members.</li> </ul>	<p>If applicable, reworking current relations and practices between SMG and the community.</p> <p>If applicable, community-building events.</p>
<p>Livelihood Assets and Activities</p>	<ul style="list-style-type: none"> <li>In terms of wage-based livelihoods, how can community members benefit from the employment and training opportunities provided through this project? Can existing enterprises be leveraged through this project to further expand their capacities and incomes?</li> <li>In what ways are land-based livelihoods impacted in terms of access, confidence, and belonging?</li> <li>The impact of illegal activities is mentioned above but should include the activities themselves and their repercussions – possible increased community vulnerabilities, interactions with enforcement while on the land, opening up land access for non-community members through trails and roads, and increased pressure on plants and animals for harvest.</li> </ul>	<p>Economic partnerships</p> <p>Traditional land-use study</p> <p>Review of SMG oversight and self-policing/enforcement procedures. Possible culture/place training for incoming workers.</p>



Sources	<p>Eddie Smytha and Frank Vanclay (2017) The Social Framework for Projects: a conceptual but practical model to assist in assessing, planning and managing the social impacts of projects. In Impact Assessment and Project Appraisal, 2017 VOL. 35, NO. 1, 65–80</p> <p>Ilya Gulakov, (2020) Modifying social impact assessment to enhance the effectiveness of company social investment strategies in contributing to local community development. In Impact Assessment and Project Appraisal, Volume 38, Issue 5</p>	
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Social Framework for Project Management. Eddie Smytha and Frank Vanclay (2017)