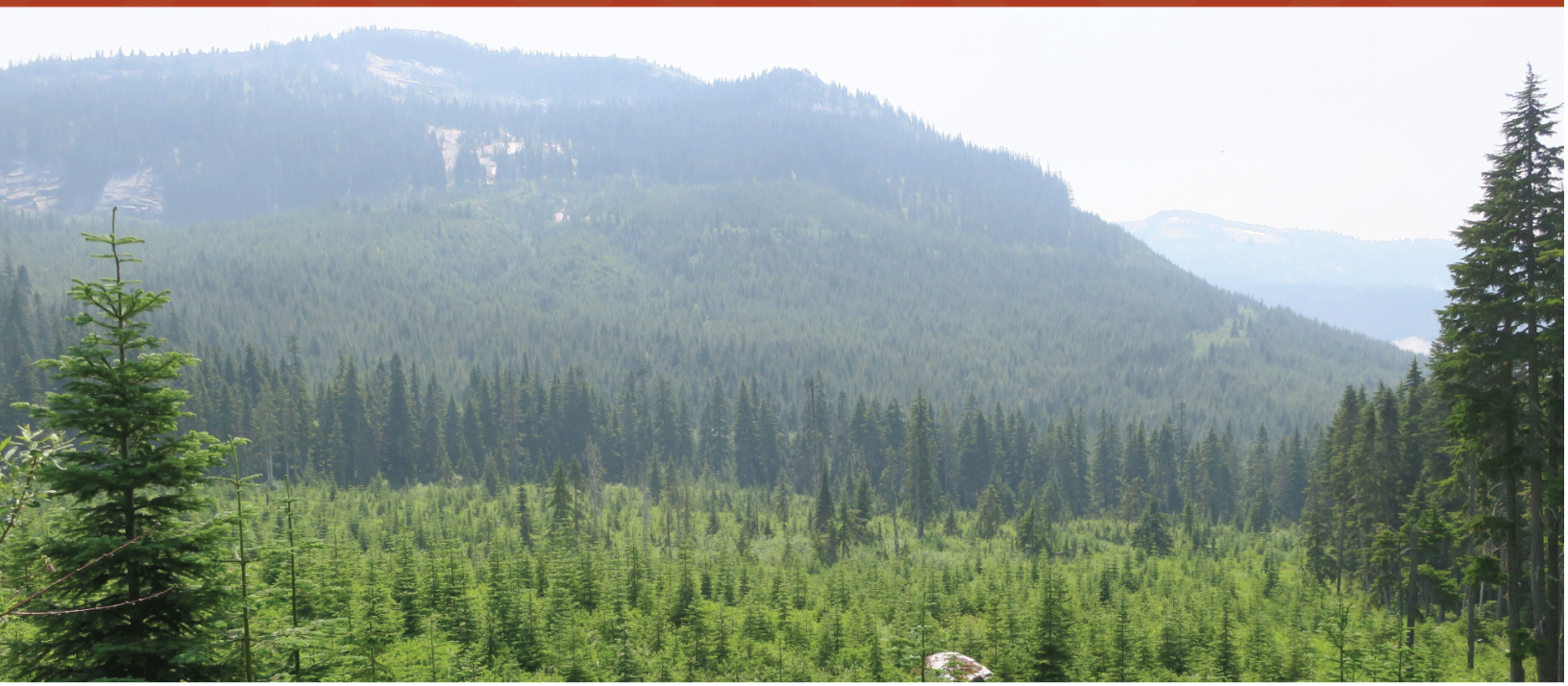

South Anderson Mountain Resort Project

Initial Project Description

1 May 2025

Prepared by:
Spuzzum First Nation
36437 Main Road
Spuzzum, BC V0K 2S1

SPUZZUM FIRST NATION

Forward Focused Nation Building.

Executive Summary

The intent of this Initial Project Description (IPD) is to provide information about the Spuzzum First Nation's proposed South Anderson Mountain Resort Project to Indigenous nations, local government and provincial and federal government agencies participating in the Environmental Assessment process and to identify preliminary interests and concerns to be considered by Spuzzum First Nation in the Environmental Assessment (EA) process.

Project Overview

Spuzzum First Nation, of the Nlaka'pamux speaking and cultural tradition (the "Proponent"), proposes to develop, through its legal entity, the South Anderson Mountain Resort Project (the "Project"), an all-season tourist destination resort in the upper South Anderson Valley within Spuzzum First Nation traditional territory.

The proposed Project includes a commercial village, hotels, condos, single-family townhouses, a golf course, RV campground and employee lodging. It will offer year-round activities, including high-quality alpine skiing, cross-country trails, camping and eco-tourism experiences, along with summer options such as mountain biking, golf, hiking and sightseeing. Project development will be guided by environmental and sustainable best practices, ensuring minimal ecological impact while using the South Anderson Valley's excellent recreational land, free from old-growth forest disturbance.

Project Need and Benefits

The Project will contribute significantly to BC's tourism industry by establishing a valuable and enduring asset that attracts visitors and boosts the provincial economy. The Project will service southwestern BC and northwestern Washington State, including Metro Seattle (population 4.1 million), Metro Vancouver (population 2.8 million) and the Fraser Valley (population 0.5 million), which are expected to increase in population by a minimum of 100,000 per year during the next decade.

Spuzzum First Nation believes this Project represents a once-in-a-lifetime opportunity for meaningful Reconciliation between the Province of British Columbia and our Nation. While past colonial practices eliminated our historic way of life, which we sustained for many generations, a positive decision by the EAO and Minister responsible will support us in creating: our future, numerous vocations and economic growth to sustain our Nation for generations to come.

Key Project benefits include:

- Creating substantial economic and social benefits for the Spuzzum First Nation and nearby communities by generating employment and fostering community growth.
- Promoting responsible and sustainable tourism practices by offering unparalleled all-season experiences in the Cascade Mountains while safeguarding the environment.
- Effectively addressing the growing demand for outdoor recreation due to expanding populations in nearby regions, attracting a substantial visitor base and ultimately positioning the resort as a leading destination for years to come.
- Meeting strategic directions of the 2010 BC Resort Strategy and Action Plan (Gov of BC, 2010), including to maintain and enhance BC's competitive edge in resort development and build Indigenous partnerships.
- Supporting BC's commitment to meaningful Reconciliation, as outlined in the Mandate Letters (2025) of the relevant Ministers responsible.

Regulatory Context

The Project is reviewable under the *British Columbia Environmental Assessment Act, 2018* because it meets the bed-count threshold for "Tourist Destination Resort Projects." Spuzzum is seeking an Environmental Assessment Certificate (EAC) Exemption Order for the Project. An Exemption Order is a legal order under the *Environmental Assessment Act* that allows a reviewable project to proceed without an EAC, provided the project is constructed, operated and decommissioned in accordance with the conditions described in the Order.

Our rationale for seeking this exemption is:

- Most of the identified resort area for the Project is already disturbed by industrial logging, including an extensive log sort area where the village would be located. This pre-existing activity has reduced the ecological and landscape value of the Project area such that it is conducive to a low-impact development. Feedback on the Project design from participants has also been used to refine the design in ways that reduce its environmental impacts.
- Spuzzum First Nation has extensive knowledge of the Project lands based on generations of lived experience. This Indigenous knowledge, supplemented by existing and future studies for resort engineering and design and permit application submissions, provide abundant knowledge of how the resort will interact with the environmental values that remain after the industrial scale logging of the Spuzzum First Nation's traditional territory.
- Through the BC Mountain Resorts Branch (MRB) review and approval process (currently in progress) and other federal and provincial permitting, there are established and formal processes for regulatory review prior to the issuance of conditions of approval to permit construction. These include extensive planning and consultation with Spuzzum's Indigenous neighbours, other communities, relevant government agencies and other interested parties to satisfy the Crown's duties under the *Constitution Act* 1982.
- There are standard and accepted mitigation measures available to address the anticipated Project-related environmental interactions such that novel and unique mitigation measures are unnecessary.
- The Project offers significant positive benefits to Indigenous Reconciliation and Healthy First Nation Communities in the Fraser Valley. This is consistent with the requirements of the BCEAA (s.2(2)(ii)) and serves to balance any potential negative impacts, which based on work to date, the Spuzzum First Nation believes can be effectively further explored, understood and managed through the MRB and other subsequent environmental approval processes.

The Project is also subject to the BC Mountain Resorts Branch Land Use Operational Policy for All-Season Resorts, which manages a staged process for provincial permitting, including tenure under the Land Act. Spuzzum has completed the first step of this process and is currently developing a formal proposal as part of step 2.

Other identified regulatory permits and approvals that the Project will require are:

- *Fisheries Act* notification (letter of advice) or Authorization
- *Canadian Navigable Waters Act* notification or Approval (to be confirmed)
- *Environmental Management Act* Waste Discharge Authorizations
- *Forest Act* Special Use Permit or Occupant Licence
- *Heritage Conservation Act* Heritage Inspection Permit or Site Alteration Permit (if required)

- *Water Sustainability Act* Change Approval or Notification
- BC Parks impact assessment
- *Local Government Act*
- *Health Act*
- *Transport Act*

Engagement

The proposed Project area lies largely within the South and Central Anderson River upper watersheds portion of the traditional territory of the Spuzzum First Nation, the southernmost group of Nlaka'pamux linguistic Peoples in the lower reaches of the Fraser Canyon. Nearby Indigenous communities include the Nlaka'pamux Nation linguistic Peoples to the north, Sto:lo Nations to the south and Okanagan Nations to the east.

The Project area is within the stated territory of the Nlaka'pamux Nation Tribal Council (NNTC), comprising four Nations to the north of the Nlaka'pamux territory, with which the Province of BC (the Province) has a shared decision making agreement regarding land use within Nlaka'pamux linguistic Peoples lands. The majority of the Nations within the Nlaka'pamux shared language and cultural history, including Spuzzum First Nation, are actively seeking a separate agreement with the Province in respect of their asserted territories, which includes land in which the Project is located. Spuzzum First Nation does not acknowledge NNTC jurisdiction within Spuzzum traditional territory.

Spuzzum began engagement with Indigenous Nations in 2021 with the goal of sharing early information about the Project with the Spuzzum First Nation community and neighbouring Indigenous Nations. Engagement and outreach activities to date included:

- Four community meetings with Spuzzum First Nation community members
- One-to-one meetings and correspondence with leadership from our Indigenous neighbours
- Formal referral letter from MRB as part of the EOI review (sent October 25, 2023) to all First Nations with overlapping interests as defined by the Province's Consultative Database; and a follow-up letter on May 7, 2024
- Public advertising and one open house as part of the MRB public comment period during the EOI phase held April 14 to May 24, 2024

The following 27 Indigenous Nations and organizations were identified and offered opportunities to provide input and feedback on Spuzzum's plans as part of the BC Mountain Resorts Branch process and Spuzzum's own outreach.

Ashcroft Indian Band	Nicomen Indian Band	Shackan Indian Band
Boothroyd Indian Band	Nlaka'pamux Nation Band Coalition	Siska First Nation
Boston Bar First Nation	Nlaka'pamux Nation Tribal Council	Skuppah Indian Band
Chawathil First Nation	Nooaitch Indian Band	Spuzzum First Nation
Coldwater Indian Band	Okanagan Indian Band	Sto:lo Nation
Cook's Ferry Indian Band	Oregon Jack Creek Indian Band	Sto:lo Tribal Council
Kanaka Bar Indian Band	Peters First Nation	Sts'ailes Nation
Lower Nicola Indian Band	Popkum First Nation	Upper Nicola Indian Band
Lytton First Nation	Scw'exmx Tribal Council	Yale First Nation

Through the MRB process, Spuzzum also engaged with identified governments, interest holders and the public.

High level themes of feedback received to date include:

- Expressions of Project support and of opposition
- Interest in environmental studies
- Questions about effects on hunting, fishing and gathering, and cultural practices
- Interest in economic opportunities

Spuzzum has carefully considered this input in refining the Project designs presented and in preparing this IPD and engagement plan. Specifically, Spuzzum is committed to ongoing engagement with participating First Nations through regulatory review and permitting processes as well as through Spuzzum-led engagements. This will include but not be limited to establishing a Nation-to-Nation technical working group and a Spuzzum-led advisory group to ensure that potential adverse effects are avoided, minimized or mitigated to acceptable levels, and to seek opportunities for shared economic benefits with Indigenous and non-Indigenous partners.

We are also committed to continuing to engage with identified governments, interest holders and the public through the regulatory processes. We also intend to establish a Project community office in Hope, BC where members of the public can drop in and communicate with Project personnel.

Environmental Interactions and Mitigation

Project construction and operation activities have the potential to interact with several identified valued components (VC). Based on studies to date, the following interactions are anticipated:

- **Key interaction with:** Aquatic Resources, Vegetation and Wetlands, and Wildlife and Wildlife Habitat.
- **Potential interaction with:** Atmospheric Environment, Archaeology, and Visual (the latter during operation only).
- **Limited interaction with:** Employment and Economy, Infrastructure and Service, Land Use, and Human Health.

To limit interaction with vegetation and wetlands, measures to minimize the Project footprint will be taken during detailed design. During construction, care will be used to locate laydown areas in already disturbed areas. Riparian setback zones will be maintained, invasive species managed and direct discharge of stormwater avoided. Where impacts are unavoidable, Spuzzum will implement offset plans and time activities to take place outside of breeding periods.

Spuzzum is committed to creating conditions that support reintroduction and reestablishment of spotted owls in our lands. We have taken great care in designing the Project to avoid impacts to their habitat, including relocating the primary access route from Highway 1 to Highway 5. Project plans also include standard best practices to avoid construction during primary nesting periods for migratory birds, working during reduced risk timing windows near water, application of erosion and sediment control and fugitive dust control to limit interactions with wildlife, wildlife habitat and aquatic resources. The Project also will install wastewater treatment systems to ensure that sewage and waste from operations do not contaminate nearby water resources.

Out of deep respect for our culture and our ancestors, Spuzzum is committed to protecting and avoiding alteration or loss of archaeological sites. As a result of Spuzzum's work to date, we have found and taken care to avoid new archaeological sites within the area. As the Project continues, Spuzzum will have qualified

professionals carry out an archaeological impact assessment including a ground truthing study, as well as avoid known archaeological sites during construction activities, implement buffer zones around archaeological sites during construction and chance find protocols, and provide archaeological awareness training for construction and operations personnel.

Atmospheric Environment interactions can be effectively mitigated through application of appropriate mitigation measures, including using best management practices and design standards and guidelines; managing fugitive dust emissions and GHG emissions; limiting noise during construction and limiting nighttime use of grooming equipment and snowmobiles during operation; using or shielding lighting equipment during construction; and following dark-sky guidelines during operation.

Positive impacts on employment and the economy are anticipated. The Project would provide information to interested local community organizations on employment opportunities and training. Interested Indigenous groups would be provided support and the Project would increase their ability to participate in Project activities and training.

As a result of these mitigation measures and the future permitting processes, significant adverse residual or cumulative effects can be avoided or managed as part of Project construction and operation. Additionally, the Project represents a significant potential for economic reconciliation with lasting economic and human health benefits in BC's Fraser Valley, while advancing BC's Tourism objectives.

List of acronyms and abbreviations

Acronym/Abbreviation	Definition
AIA	Archaeological Impact Assessment
ATV	All-terrain vehicle
BC	British Columbia
BCEAA	BC Environmental Assessment Act
CDP	Community Development Plan
CEMP	Construction Environmental Management Plan
CRA	Controlled Recreation Area
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
eDNA	Environmental DNA
EOI	Expression of Interest
FSR	Forest Service Road
FVRD	Fraser Valley Regional District
GHG	Greenhouse gas emissions
IPD	Initial Project Description
LUP	Land Use Plan
MOE	BC Ministry of Environment and Parks
MOTT	BC Ministry of Transportation and Transit
MRB	BC Ministry of Tourism, Arts, Culture and Sport – Mountain Resorts Branch
NNTC	Nlaka'pamux Nation Tribal Council
OCP	Official Community Plan
OEMP	Operational Environmental Management Plan
OGMA	Old Growth Management Area
RGS	Regional Growth Strategy
ROW	Right of Way
SFN	Spuzzum First Nation
STC	Scw'exmx Tribal Council
SWMP	Stormwater Management Plan
The Project	The proposed ***South Anderson Mountain Resort Project***

Acronym/Abbreviation	Definition
The Proponent	Spuzzum First Nation
The province	The Province of British Columbia, as represented by the BC government
TNRD	Thompson Nicola Regional District
UWR	Ungulate Winter Range
VC	Valued Component
VTM	Vertical transport meters
WWTP	Wastewater treatment plant
WHA	Wildlife habitat area

List of symbols and units of measure

Symbol / Unit of Measure	Definition
ha	hectare
hr	hour
km	kilometre
m	metre
sec	second(s)

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1 Introduction

Spuzzum First Nation, of the Nlaka'pamux speaking and cultural tradition (the "Proponent") proposes to develop, through its legal entity, the South Anderson Mountain Resort Project (the "Project"), an all-season Tourist Destination Resort in the upper South Anderson Valley within Spuzzum First Nation traditional territory on lands east of Highway 1 and west of Highway 5.

The proposed Project includes a commercial village, hotels, condos, single-family townhouses, a golf course, RV campground and employee lodging. It will offer year-round activities, including high-quality alpine skiing, cross-country trails, camping and eco-tourism experiences, along with summer options such as mountain biking, golf, hiking and sightseeing. Project development will be guided by environmental and sustainable best practices, ensuring minimal ecological impact while using the South Anderson Valley's excellent recreational land, free from old-growth forest disturbance.

The Project is located within Spuzzum First Nation's asserted traditional territory. Several neighbouring First Nations have also expressed interest in the area. The proposed resort connection to Highway 5 and emergency access to Highway 1 will require coordination with the BC Ministry of Transportation and Transit (MOTT). Creation of the new access road to connect the new mountain resort property with Highway 5 will cross Crown land managed by BC's Ministry of Environment and Parks. The Project also requires approval of the Ministry of Tourism, Arts, Culture and Sport - Mountain Resorts Branch (MRB), and this process is underway. Additional permits also will be required.

The intent of the Initial Project Description (IPD) is to provide information about the proposed Project to those participating in the environmental assessment process and to identify preliminary interests and concerns to be considered and assessed by the Project in the Environmental Assessment (EA) process.

Spuzzum First Nation is seeking an exemption to the BC *Environmental Assessment Act 2018* (BCEAA) process because:

- The identified resort area offers extensive benefits to BC, not the least of which is economic reconciliation.
- The Project site has already been disturbed by industrial logging.
- Spuzzum First Nation has extensive cultural, historic and environmental knowledge of our lands and how the resort will interact with the wildlife, water, landscape and heritage values that remain after extensive forestry activity was conducted in the catchment.
- We are committed to working with federal and provincial regulators and permitting agencies through the various environmental permit approval processes that are required as part of project development and the rigorous MRB process. Work on these approval processes has already guided us in developing Project modifications to limit potential negative impacts.
- We believe that, as part of ongoing planning through permitting processes and the MRB process, any potential negative impacts can be effectively avoided, managed or mitigated such that there will be minimal residual negative effects.

This IPD was prepared in accordance with guidance published by the Environmental Assessment Office (EAO) under the BCEAA – specifically, the Early Engagement Policy (BC EAO, 2024).

1.1 Spuzzum First Nation

Spuzzum First Nation is an Indigenous community based in BC's Fraser Canyon, with traditional lands extending east of Highway 5 and west to the mountain ridges overlooking Harrison Lake. We are a First Nation with a rich culture and heritage, and an ambitious economic strategy to regain and develop our economy and provide infrastructure and sustainable housing for our community. Our vision for the Project is two-fold: to create vocations, societal and financial opportunities for our Nation's membership and to create an exceptional all-season mountain resort that will offer visitors an experience of beauty and recreation opportunities in the Cascade Mountains in an environmentally sustainable and responsible manner.

Spuzzum First Nation is a self-governing First Nation. Our elected Council, comprising a Chief and two Councillors, serves as Leadership for our community. Council is responsible for making decisions on behalf of Spuzzum First Nation members. Chief and Council direct Nation business with a clear mandate to provide good government, consistent with the vision and principles established by members. Project leadership consults with our community members and seeks to work with our First Nation neighbours with whom we share cultural, historic and economic ties. We also recognize the broader Project economic benefits to our non-Indigenous neighbours, and to all British Columbians, and we look forward to participation of all interested parties as we continue to advance the Project through this EA process.

1.2 Project Contacts

Spuzzum First Nation is the Proponent. Key Project information and contacts relevant for the IPD and the EA process are provided in **Table 1-1**.

Table 1-1 Project Contact Information

Key Contact	Relevant Project Information
Project Name	South Anderson Mountain Resort
Industrial Sector and Type	Tourist Destination Resort
Proponent	Spuzzum First Nation
Address	36437 Main Road Spuzzum, BC V0K 2S1
Project Leadership Team	Spuzzum First Nation Council Email: admin@spuzzumnation.com Number: 604-863-2395 Mel Woolley, Project Co-Lead Email: MountainResort@spuzzumnation.com Number: 403-852-3164
Primary Representative and Contact	Mel Woolley, Project Lead Email: MountainResort@spuzzumnation.com Number: 403-852-3164
Website	spuzzumnation.com

1.3 Project Purpose and Needs

The purpose and needs of the Project are to establish a premier, contemporary all-season mountain resort that provides an array of outdoor recreation opportunities alongside a diverse range of accommodation, real estate and visitor amenities.

The Project will service southwestern BC and northwestern parts of Washington State, including Metro Seattle (population 4.1 million), Metro Vancouver (population 2.8 million) and the Fraser Valley (population 0.5 million), which are expected to increase in population by a minimum of 100,000 per year during the next decade.

Collectively the purposes of the Project are to:

1. Create substantial economic and social benefits for the Spuzzum First Nation and nearby communities by generating employment and fostering community growth.
2. Contribute significantly to BC's tourism industry by establishing a valuable and enduring asset that attracts visitors and boosts the provincial economy.
3. Promote responsible and sustainable tourism practices by offering unparalleled all-season experiences in the Cascade Mountains while safeguarding the environment.
4. Effectively address the growing demand for outdoor recreation due to expanding populations in nearby regions, attracting a substantial visitor base and ultimately positioning the resort as a leading destination for years to come.
5. Create a Project for the province that meets the strategic directions of the 2010 *BC Resort Strategy and Action Plan (Gov of BC, 2010)*:
    a. Maintain and Enhance BC's Competitive Edge in Resort Development
    b. Increase Resort Development
    c. Support Resort Communities
    d. Improve Transportation Infrastructure
    e. Build Indigenous Partnerships
6. Support BC's commitment to meaningful Reconciliation, as outlined in the Mandate Letters (2025) of the relevant Ministers responsible.

1.4 Project Benefits

Spuzzum First Nation believes this Project represents a once-in-a-lifetime opportunity for meaningful Reconciliation between the Province of British Columbia and our Nation. While past colonial practices eliminated our historic way of life, which we sustained for many generations, a positive decision by the EAO and Minister responsible will support us in creating our future, numerous vocations and economic growth to sustain our Nation for generations to come.

Anticipated benefits for Spuzzum First Nation will be realized through land lease payments, land sale royalties and through equity benefits, and will contribute to economic reconciliation by enabling the Spuzzum First Nation to develop the Project within our traditional territory.

The Project will provide direct and indirect benefits to other Indigenous Peoples in the region through job, business and/or economic opportunities. As construction planning progresses, discussions with Indigenous Nations, communities and government officials will continue to identify and refine these opportunities.

The Project is also anticipated to stimulate significant economic activity through indirect business opportunities, including hotels, campgrounds, restaurants, retail shops, construction firms and property management companies. This will create opportunities for Indigenous and non-Indigenous people to participate in entrepreneurial opportunities.

Furthermore, the Project will support Indigenous tourism by incorporating features like a First Nations Cultural Center and other all-season experiences.

The Project will create substantial revenue for all levels of government through property and other non-income tax payments. Preliminary economic analysis indicates the Project will generate approximately $210 million from skiing and approximately $580 million from the real estate components of the Project over the first ten years of operations. In addition to the above, there is opportunity for Spuzzum First Nation to be a 100% owner/operator of ancillary businesses that are catalyzed by the Project and take advantage of new visitors to the territory such as the golf course (part of the Project) and off-site campground and RV park.

The construction phase of the Project is expected to create around 4,400 full-time equivalent person years of employment over the 10-year phase of construction and 200 full-time equivalent jobs in the initial year of operation, building to 800+ full time employees by year 10.These jobs will benefit Indigenous Peoples and neighboring communities such as Hope, Boston Bar and Merritt. It is estimated that a significant number of these jobs will be filled by First Nations, and training for interested First Nations people will be available in advance of the Project components coming onstream. The Project also will generate opportunities for contractors, suppliers and service providers in the Fraser Valley region. A majority of the construction and operational workforce are anticipated to be sourced locally and within British Columbia, leveraging the expertise of world-class professionals already available in local communities and across the province. There are many economic benefits from the Project and as part of the Mountain Resorts Branch formal submission process, and a socioeconomic study will be undertaken and provide further breakdown of the economic benefits of the Project.

2 Project Overview

The following sections include information on the Project location, regional context, site background, components, siting and design considerations, activities, anticipated schedule, workforce requirements and alternative means of carrying out the Project.

2.1 Project Location and Regional Context

Located in the North Cascade Range of southwestern British Columbia, the South Anderson Mountain Resort, a proposed 7,415-hectare (ha) Controlled Recreation Area (CRA), is sited in the South Anderson River Valley and the north side of three peaks: Iago (1,730 m), Winter's End (1,700 m) and Wolverine Track (1,705 m), all within Spuzzum First Nation's traditional territory. Located northwest of the Coquihalla Summit Recreation Area, this CRA borders the proposed Juliet Creek Resort CRA to the east (see **Figure 2.1**).

The South Anderson River's headwaters are at the base of Iago Peak, flowing westward to meet Anderson Creek before joining the Fraser River south of Boston Bar. The proposed resort's base area facilities straddle both sides of the river, extending up both north-south oriented drainage between Iago, Winter's End and Wolverine Track mountains. A group of dramatic granite peaks are found on the north side of the South Anderson River Valley, including Gamuza (1,944 m), Steinbok (2,012 m) and Ibex (2039 m).

Preliminary analysis of the South Anderson Resort study area revealed suitable slopes for alpine skiing and other summer and winter activities. The potential for high-quality four-season recreational facilities and suitable land for base area development within close proximity to the Greater Vancouver Area and the Fraser Valley make the South Anderson Resort Concept a viable opportunity for economic development for the Spuzzum First Nation lands.

The Project area, falling within the Fraser Valley Regional District's (FVRD) Electoral Area B, encompasses diverse land uses, including Wildlife Habitat Areas (WHA) for northern spotted owl (*Strix occidentalis caurina*), Old Growth Management Areas, authorized forestry areas, active cut blocks and existing mineral claims and coal reserves.

A Section 16 reserve, dedicated to MOTT for avalanche control and scientific research, overlaps the CRA near Mount Iago's summit. This peak, reaching 1,734 m, offers significant vertical relief above the approximately 1,220 m elevation of the river valley below.

There is no existing public road access to the Project area; however, extensive past logging has resulted in a large network of Forest Service Roads (FSR) in variable conditions that connect to Highway 1 on the east side of the Fraser River. There is partial access developed from Highway 5.

The Project includes a proposed new public road connecting to the provincial highway system.

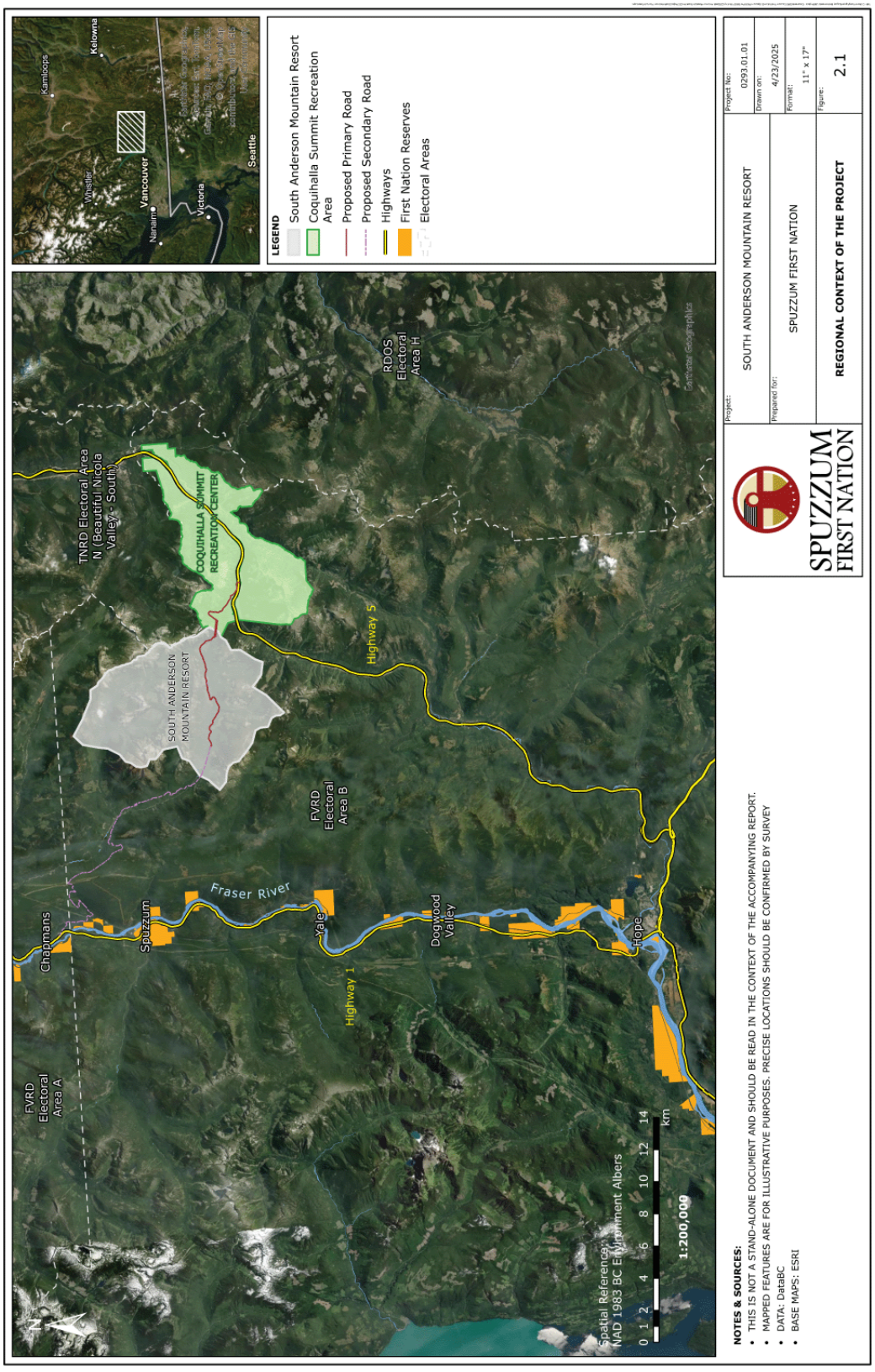

Figure 2.1 Regional Context of the Project

2.1.1 Indigenous Territory

The proposed Project area lies largely within the South and Central Anderson River upper watersheds portion of the traditional territory of the Spuzzum First Nation, the southernmost group of Nlaka'pamux linguistic Peoples in the lower reaches of the Fraser Canyon. Nearby Indigenous communities include the Nlaka'pamux Nation linguistic Peoples to the north, Sto:lo Nations to the south and Okanagan Nations to the east.

The Project area is within the stated territory of the Nlaka'pamux Tribal Council (NNTC) comprising four Nations to the north of the Nlaka'pamux territory, with which the Province of BC (the Province) has a shared decision-making agreement regarding land use within Nlaka'pamux linguistic Peoples lands. The majority of the Nations within the Nlaka'pamux shared language and cultural history, including Spuzzum First Nation, are actively seeking a separate agreement with the Province in respect of their asserted territories, which includes land in which the Project is located. Spuzzum First Nation does not acknowledge NNTC jurisdiction within Spuzzum traditional territory.

2.2 Project Status and History

Spuzzum First Nation conceptualized the Project by identifying economic development opportunities in our territory that would be beneficial to our community and members for the provision of jobs and cash flow. In 2021, we commenced baseline analysis, feasibility studies and engagement with Indigenous Nations, community and government bodies.

Following completion of preliminary feasibility, planning and designs, Spuzzum First Nation submitted an Expression of Interest to the MRB in July of 2023 for approval to acquire a land based termed Controlled Recreation Area (CRA) for the purpose of resort use (SFN, 2023). The CRA would comprise fee-simple and permits of use. Following engagement and consideration of feedback received as part of this provincial regulatory process, MRB invited Spuzzum First Nation on 16 September 2024 to submit a Formal Proposal. This work is underway.

As part of this IPD for an effects assessment process under the BC *Environmental Assessment Act* [SBC 2018, c.51], Spuzzum First Nation is pursuing a certificate exemption for the Project, consistent with the EAO's Certificate Exemption Policy (EAO, 2020). The rationale for seeking an exemption and the characteristics of the Project that show it is a candidate for a positive ministerial decision to exempt it from EAC requirements are detailed in **Section 5**.

Table 2-1 Existing Permits and Tenures in Place for the Project

Permit/Tenure	Purpose	Date issued	Expiry Date
Notation of Interest Crown Lands File No.: 2411545	Expression of Interest (Alpine Skiing)	16 April 2024	16 April 2029
Sole Proponent Status – Mountain Resorts Branch	Invitation to Proceed to Formal Proposal stage	16 September 2024	n.a.

2.3 Project Components and Activities

Spuzzum First Nation's vision is to create a world-class, all-season mountain resort, with amenities typical of a mountain location (**Figure 2.2)**. The Project will offer a diverse range of outdoor activities, including skiing, snowboarding, snowshoeing, hiking, sightseeing, mountain biking, golfing and cultural experiences. The resort will also provide a variety of accommodation and real estate options for residents and visitors, as well as conference and meeting facilities, which are expected to attract business during the spring and fall shoulder seasons. A modest Nlaka'pamux interpretive centre reflecting Spuzzum culture and heritage is also planned. Key components which are discussed below include:

- Mountain Facilities
- Base Area Facilities
- Road and Tunnel Infrastructure
- Utilities Infrastructure and Networks

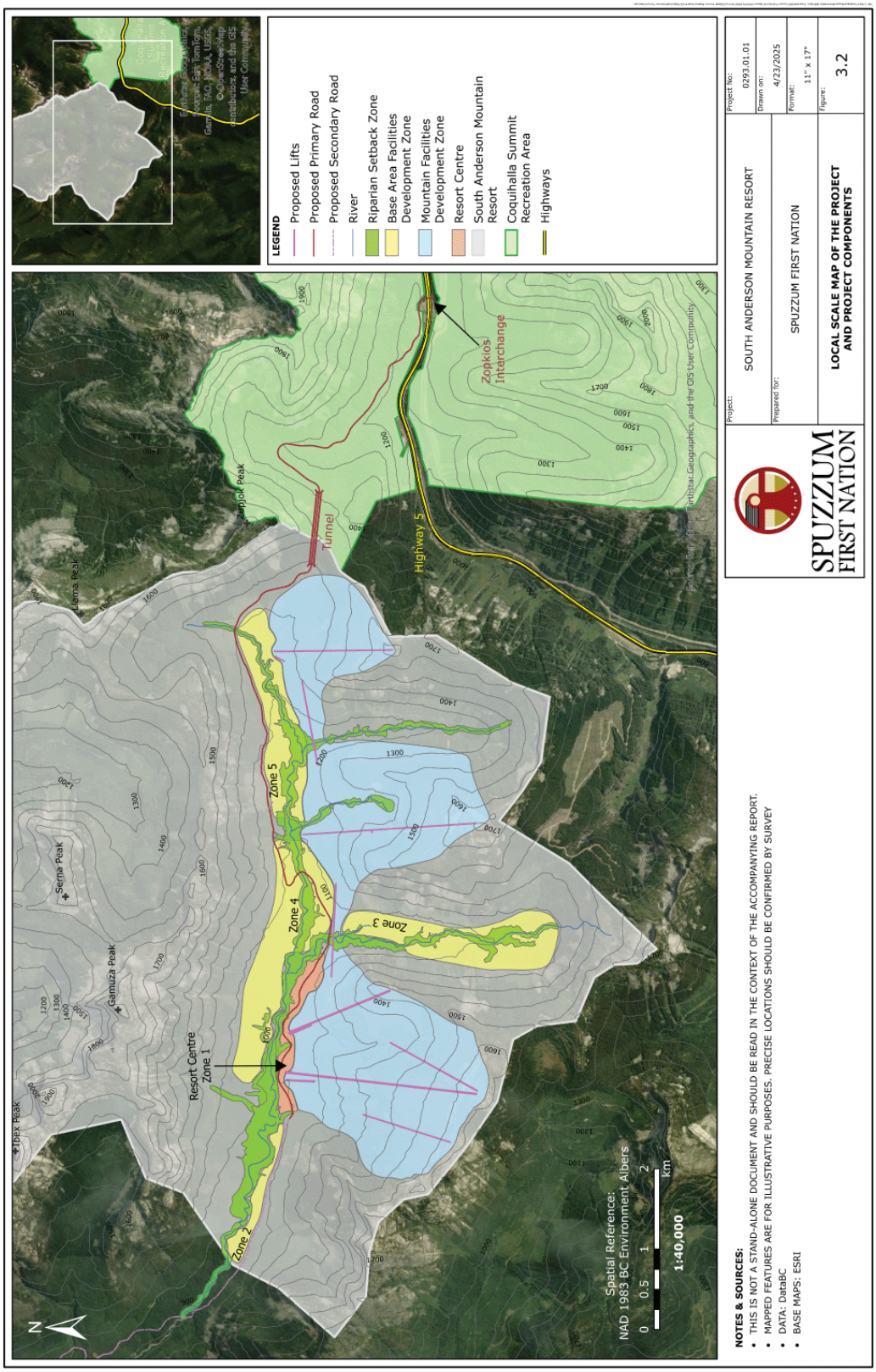

Figure 2.2 Local Scale Map of the Project and Project Components

2.3.1 Mountain Facilities

Proposed mountain facilities include an alpine ski facility on the north side of three mountains (Iago, Winter's End, Wolverine Track) encompassing eight main aerial lifts (chairlifts and a gondola) and five secondary smaller lifts in the base areas that provide access to learning areas and between base zones (**Figure 2.2**).

The lowest elevation of the mountain facility is 1,000 m in the Resort Center at the west side of the Project area, with lift facilities extending to 1,685 m on Wolverine Track ridge, 1,700 m at Winter's End summit and 1,730 m at the top of Iago Mountain. The total maximum skiable vertical at the resort is 700 m, on par with Silverstar and Sun Peaks.

The mountain is planned with a capacity to comfortably support 9,000 skiers per day at buildout. A snowmaking system is planned for the main ski slopes in all three zones using water collected in mid-mountain ponds constructed for snowmaking purposes.

A resort operations base is planned in the Resort Center zone, including a garage for snow grooming machines and snowmobiles, as well as a maintenance area for all vehicles and equipment and a signage shop. The operations base will include a fuel source and storage area. A secondary small operations base is planned at the base of the Winter's End lifts.

A lift from the Resort Center, ascending Wolverine Track Ridge, will serve as the cornerstone of summer recreation at the resort. This lift will unlock 360-degree panoramic views of the Coast Mountain Range, a perspective that isn't offered elsewhere in BC and will allow access to hiking trails, mountain biking routes and other activities.

2.3.1.1 Ecotourism Services

Beyond the immediate resort area, the South Anderson and Central Anderson Valleys and Alpine Areas boast a wealth of summer recreation opportunities. Most prominently, the awe-inspiring granite spires of Ganuza, Steinbok, Ibex, Gemse and Reh, towering over 2,000 meters, offer world-class hiking, mountaineering and rock-climbing prospects. Accessing these peaks today requires significant effort and expertise. The Project will improve accessibility by providing well-maintained roads and dedicated parking areas for both casual hikers and experienced mountaineers. This will attract domestic and international visitors seeking unique and unforgettable alpine adventures.

Some of the areas outside the main Resort Center are identified as locations for adventure recreation zones that could include summer activities such as zip lines, rope courses and team building exercises. The locations for these activities will be evaluated at latter stages of the planning process.

2.3.2 Base Area Facilities

Five primary zones for base area development are identified in the valley floor on both sides of the South Anderson River as illustrated in **Figure 2.2**. These zones should be considered as gross development areas and may include parts of the South Anderson River riparian zone, hazard areas and drainages. A more defined land use plan will be prepared during the detailed master planning phase. The South Anderson Resort Concept is planned with 12,300 bed units and day visitor parking for 900 cars.

- **Zone 1 Resort Center** – All primary commercial, service and resort operation facilities are planned in the Resort Center at the base of the Wolverine Track Mountain. The base area development zone includes gently sloping terrain between the base of mountain facilities and the top of the bank on the south side of the South Anderson River. The Resort Center includes parking for day skiers, day lodge facilities for skiers and four-season recreational activities, hotels, apartments/condotel, commercial facilities such as restaurants and retail space, conference facilities, a cultural center, administrative offices and a transit hub. A medical center and ambulance triage are planned in this area, providing direct access for the ski area's ski patrol as well as the general public in this area. Private real estate in the form of apartments or townhouses are envisioned on the peripheral of the Resort Center zone. The primary focus of development in this area is related to tourism and access to the mountain resort for visitors and operations.
- **Zone 2 Employee Housing, Civil Infrastructure, Campground** – Zone 2 is accessed from an existing forest road that follows the base of the mountain parallel to the South Anderson River to the edge of the proposed CRA boundary. Development sites in this area are planned with supporting facilities such as employee housing, a riverside campground and the resort's civil infrastructure such as a sewage treatment facility, recycling and waste management. Zone 2 is outside of the primary access route to the Resort Center from the Coquihalla, therefore suitable for supporting facilities.
- **Zone 3 Four-Season Recreation, Low Density Accommodation** – Zone 3 includes gently sloping terrain at the base of a north-south oriented valley between Wolverine Track Mountain and Winter's End Mountain. This area is more isolated from mountain facilities, so it is suitable for other recreational facilities such as a golf course (used for cross-country skiing and snowshoeing in the winter), an adventure activity area (ropes-course, trails, team building) and low-density cabins.
  - The golf course will cover approximately 67 ha and will use bridges to cross the tributary watercourse at two locations (to be defined as other aspects of the Project advance). The golf season will be June 1 to October 31 (approx. 150 days), and in the non-golf season the course will be used for Nordic skiing. Water uses are on average estimated at 500m^3 per day, depending on weather conditions (75,000m^3 annually), with a holding reservoir required for storage (*Water Sustainability Act* storage and use permits will be needed). Course care treatments for management will adhere to agricultural application standards to limit runoff and will respect buffers from watercourses.
- **Zone 4 Resort Accommodation & Real Estate, Four-Season Recreation** – The main access road follows the north side of the river valley before crossing to the south through Zone 4 to access the Resort Center. Zone 4 includes developable land on the north side of the valley suitable for resort real estate (single-family and multi-family units) with southern exposure and excellent views of the mountain facilities on the opposite side of the valley. A network of trails blend into the development envisioned in this area, providing connections to a riverside greenspace, the Resort Center and other activity zones such as a potential golf course clubhouse, hiking and biking trails.
- **Zone 5 – Resort Accommodation & Real Estate, Four-Season Recreation** – Zone 5 is situated farthest from the Resort Center, therefore suitable for low density resort real estate, residential housing and other supporting facilities. Recreation trails are integrated throughout, including a day visitor parking lot to access the Central Anderson recreation area.

2.3.3 Road Infrastructure / Tunnel Infrastructure

Several options for a prime access road were assessed for feasibility, environmental impacts, cost and overall benefit (see **Section 2.8**). Following completion of these preliminary studies, the Proponent determined the most feasible access to the Project will be from Highway 5, as shown in **Figure 2.2**. Discussions with MOTT are underway.

The proposed new primary access to the resort is from a new 6.6 km road intersecting with Highway 5 at the Zopkios Interchange (elevation 1200 m). The new road extends through the south end of the Coquihalla Recreation Area to a 900 m long tunnel that crosses from the Coquihalla valley into the South Anderson River Valley, avoiding the 1,400 m elevation pass between the two valleys. This access road meets at network of deactivated FSRs at the base of Iago Mountain. Construction of the tunnel will result in approximately 80,000 to 95,000 m^3 of rock excavation. The rock will be transported to a suitable location near the proposed village, where it can be stockpiled and crushed at a later date for road base aggregate.

The rock excavation from the tunnel construction will produce enough aggregate to construct approximately 10 km of roadway base. The road base will be capped with imported hot mix asphalt to create a finished road structure.

Further field investigation, detailed mapping, geotechnical investigation, geometry design review and environmental studies are required to prove the feasibility of this alignment and will be completed as part of the MRB Master Plan Review Process. Sections of the existing road will likely require realignment to improve geometry, grade and address potential hazards.

2.3.3.1 Internal Roads

Proposed internal roads within the resort use existing FSRs where it is possible to access proposed development on both sides of the river valley. The main access road to the Resort Center follows an existing forest road on the north side of the valley, crossing to the south side of the valley over an existing bridge at the base of Winter's End Peak. The existing bridge will require engineering evaluation and will likely need upgrading. From the south side of the bridge, the main road to the Resort Center follows a flat plateau, then crosses the drainage between Winter's End and Wolverine Track Mountain, then follows existing dirt roads to the Resort Center.

Internal roads within all base area development zones extend off the main access road between the Resort Center and the Coquihalla. From the west side of the Resort Center, the road continues along the south side of the river following existing FSRs to an existing bridge where it crosses to the north side. This route eventually connects to the Fraser Valley after approximately 25 km and one more crossing of the South Anderson River. This unpaved access road will serve as a secondary emergency egress for the resort to Highway 1.

2.3.3.2 Emergency Alternative Access

The emergency alternative access route is from Highway 1 at Alexandra Bridge Provincial Park and follows the following FSR segments:

- Anderson River FSR from 0 km to 2.8 km
- Gilt Creek Hydro Access from 2.8 km to 7.6 km
- Historical FSR (overgrown) from 7.6 km to 11.7 km
- Ottomite FSR from 11.7 km to 19.6 km
- North Fork Ottomite FSR from 19.6 km to 21.2 km (at the boundary of the village department and CRA area).

Minor upgrades, including ditching, culverts, danger tree removal and surfacing improvements are expected from 0 km - 7.6 km and 11.7 km - 21.2 km. The 7.6 km - 11.7 km section requires clearing and new ditching, cross culverts and road surfacing. There are a few areas of known significant repairs and works from the 11.7 km mark at the following approximate markers:

- 14.7 km – road section washed out, requires complete reinstatement
- 14.8 km – South Anderson River bridge and abutment damage, likely replacement
- 15.5 km – larger slide area over road, potential stabilization works with removal
- 18.6 km – small bridge crossing in poor condition, upgrades required

2.3.4 Utilities Infrastructure and Networks

The Project requires a comprehensive utility network, including potable water supply, fire protection systems, sanitary sewers, stormwater collection and drainage, electrical grid and telecommunications. Given the terrain (steep slopes and high elevations), careful engineering considerations are required. Initial plans for the various utilities are summarized in the sub-sections below.

2.3.4.1 Water Supply

Water for the Project will be sourced from groundwater wells completed in the sand and gravel aquifer located at the Anderson River valley bottom. This aquifer is recharged by the Anderson River. Flow monitoring has been conducted to establish base flow levels in the river.

To assess the aquifer's recharge capacity and determine the maximum sustainable withdrawal from the wells, a groundwater hydrologist will be retained. Their work will involve drilling test wells, which are planned for summer 2025.

Water quality in this part of the watershed is expected to be high, with treatment likely limited to disinfection. The final treatment requirements will be confirmed through water quality sampling from the test wells.

The proposed groundwater wells will supply water to a treatment facility before being distributed through a water system. The system will include reservoirs designed to maintain adequate service pressure, buffer peak demand and provide fire protection.

The water system will primarily serve potable water and fire protection needs. A significant irrigation demand is not anticipated at the resort. Water for the proposed golf course will not come from the potable water system but will instead be sourced from reclaimed water and, if necessary, surface water.

More detailed groundwater investigations will be conducted in subsequent phases by qualified experts. This will inform the design of a robust potable water network, incorporating water mains, booster pump stations, reservoirs and treatment facilities to meet all residential and commercial demands, including fire protection requirements. Water quality will strictly adhere to all Municipal and Provincial regulations, including all required permitting.

A *Water Sustainability Act* Change Approval or Notification for the diversion and use of ground or surface water will be required. Temporary use permits may also be necessary for the construction period. The provisions of the Dam Safety Regulation (design and monitoring) may need to be addressed. The provisions in this act catalyzed the ongoing hydrology studies, which will continue as the engineering design for the overall Project advances. Long-term studies to understand fish presence, water volumes, seasonal discharges and river rating curves, and environmental flow needs will continue / be conducted to achieve environmental performance standards for compliance with this act.

2.3.4.2 Wastewater Treatment System

Preliminary assessments confirm the need for an on-site Wastewater Treatment Plant (WWTP), which will require approval under the Municipal Wastewater Regulation from the Ministry of Environment and Parks (MOE). A specialized engineering firm has been engaged to evaluate drainage solutions and recommend a suitable WWTP design.

The WWTP will be designed and constructed to meet all MOE standards and regulatory requirements. Based on initial soil assessments, the site appears suitable for groundwater disposal; however, further investigations, including soil analysis and infiltration testing, will be conducted in subsequent phases before detailed design.

Wastewater will flow by gravity to the lower end of the village area, where it will be treated at the WWTP using biological nutrient removal technology. This process relies on bacteria to break down waste, converting nutrients into sludge. The sludge will be regularly removed and used as a soil amendment for the golf course.

The facility will be capable of producing either Class A or Class B effluent, depending on the disposal method. Ideally, the effluent will be discharged into subsurface disposal fields beneath the golf course fairways, allowing water to infiltrate the soil without human exposure while benefiting the golf course by reducing water and fertilizer use.

Test pits are planned for excavation in 2025 to confirm soil suitability for subsurface disposal. If the soils are unsuitable, effluent will be discharged into the Anderson River during the winter and applied to the golf course during the summer. Surface water disposal will require the facility to be registered and monitored under the Wastewater Systems Effluent Regulations to ensure compliance with effluent quality standards and environmental safety.

2.3.4.3 Stormwater Drainage System

A Stormwater Management Plan (SWMP) will be developed to guide rainwater collection and detention requirements. The SWMP will assess the hydrological impacts of the proposed development on the surrounding area, with both upper and lower areas implementing stormwater management strategies tailored to their specific layouts and topography. Storm water systems will be designed as part of the sub-division planning process. Where possible, the systems will be designed to minimize peak flows during rain events through a variety of means, including direct to ground infiltration from parking lots and use of retention ponds including those that will be part of the golf course.

2.3.4.4 Solid Waste Disposal

A detailed solid waste collection, management, recycling and disposal plan will be developed during detailed design as part of the MRB Master Plan review process.

2.3.4.5 Site Power

It is expected that electrical service will be provided by an overhead line connecting the proposed resort development to the existing BC Hydro transmission line at or near the Zopkios truck stop on the Coquihalla Highway 5. This overhead line will follow the proposed access road from the Zopkios interchange on the Coquihalla Highway to the resort, a distance of approximately 8 km. It has been determined that micro-hydro is not financially feasible. Natural gas and wind power are not being considered. Small scale solar power (e.g. rooftop installations) will be encouraged if it makes financial sense to do so.

2.3.4.6 Communication

Communication providers will need to be engaged to determine the most suitable solutions for the resort. Satellite or wired services may be feasible through existing electrical transmission lines. Mobile phone access will be further investigated.

2.3.4.7 Community Facilities

The Project will include a firehall, a medical clinic and a search and rescue/ski patrol operation. Other community facilities include a day care and a community centre. An elementary school will be identified in the resort master plan and built when the demand warrants, as was done for other similar BC resort communities (e.g., Big White).

2.3.5 Construction Laydown, Temporary Buildings and Associated Facilities

Temporary laydown areas will be delineated to facilitate construction. These areas will serve as storage for infrastructure prior to completion of construction.

2.3.6 Project Siting and Design Constraints

The proposed Project site was developed to take best advantage of past clearcut areas, maximize the recreation advantage of vertical slopes and avoid impact to spotted owl habitat. Within these constraints, the access route off Highway 5 was selected and the internal road network was designed based on the topography of the area. Additional refinements will be made as Project planning continues.

2.3.7 Project Activities

The following section outlines the anticipated activities required during the construction and operational phases of the Project.

2.3.7.1 Construction Phase

The following is a general list of construction activities that are anticipated prior to, during and after construction:

Preparation

- Clearing and grubbing to facilitate construction, including soil movement and grading, heavy machinery use, and vegetation trimming and removal
- Install erosion control mitigations
- Acquire aggregate for roading, roadways and foundations, including extraction and reuse of suitable gravel from tunnel construction and external sources if required
- Acquire water for construction, dust suppression and fire safety
- Upgrade existing FSRs and construct new access roads
- Excavation of the tunnel (approximately 80,000 to 95,000 m^3 of rock)
- Stockpiling of aggregate from tunnel excavation
- Construction of access to the resort from Highway 5, including a 900 m tunnel
- Create laydown areas
- Transport and store required equipment and materials into the Project area
- Excavate substrates for infrastructure foundations

Installation

- Install lifts and gondolas
- Install fibre optic cables
- Install transmission lines
- Install gondolas, lifts and other infrastructure

- Install utilities such as sewage and waste disposal facilities
- Install wildlife conflict management systems
- Decommission construction laydown areas

2.3.7.2 Operations Phase

Once initial construction is complete and the Project has been commissioned, the operations will begin. The operations phase is expected to include the following activities:

- Operate gondolas and lifts
- Operate the mountain top restaurant and other outlets such as the conference centre
- Operate the golf course and other summer activities
- Maintain and repair the gondolas and lifts
- Maintain ski terrain and mountain biking and hiking trails
- Maintain roads and other infrastructure
- Create/clear snow creation, where required
- Monitor weather conditions
- Monitor the number of visitors per day
- Monitor wildlife occurrences

It is expected that the operations phase will last an indefinite number of years. The duration of the lifespan of the gondolas and chairlifts can be extended through continual upkeep and refurbishment as necessary.

2.3.7.3 Decommissioning Phase

Decommissioning is not scheduled as upgrading of the Project is more likely at the end of life. If decommissioned, infrastructure would be deconstructed and removed, and the Project area would undergo restoration.

2.4 Project Schedule

The Project schedule is described in the pre-construction, construction, operation and decommissioning phases. The pre-construction phase will involve activities such as engineering design; baseline studies; engagement with Indigenous Nations, community and government; regulatory approvals; and procurement of a construction contractor and equipment. Details on construction, operation and decommissioning activities are provided in **Section 2.3.6**. The approximate schedule for these proposed phases is outlined in **Table 2-2**.

Table 2-2 Approximate Project Schedule

Project Phase	Timing
Pre-construction	Until Q2 2028
Start of Construction	Q3 2028
Start of Operations	Q4 2029
Decommissioning	Not anticipated with upgrading of the Project

Seasonal timing constraints that will be considered during the planning and execution of construction and operation of the Project will include:

- Fisheries least risk periods for in-water or riparian area construction activities to protect fish during critical life stages such as spawning or migration.
- Bird nesting and bat roosting periods for construction activities such as vegetation clearing, blasting or other disruptive activities.
- Amphibian breeding periods for construction activities in or near aquatic habitats.
- Seasonally dependent Indigenous cultural or land use events or practices.

2.5 Land and Water Use

The Project is located northwest of the Coquihalla Summit Recreation Area, encompassing 7,415 ha of land in the South Anderson and Central Anderson watersheds. **Error! Reference source not found.** presents the proposed Project within the context of Highway 5, the Coquihalla Summit Recreation Area and other existing tenures in the area. The eastern side of the proposed Project boundary abuts the proposed Juliet Creek Resort CRA and the boundary of the Coquihalla Summit Recreation Area, flowing the height of land around Iago Peak to Wolverine Track Peak and the west side of the series of granite peaks from Steinbok to Anderson River Mountain.

The Project is un-surveyed provincial Crown land with the exception of an area adjacent to Highway 5, which is included in the highway right-of-way. No private parcels or federal land were identified in the Project area. Lands along the Fraser River, which the secondary (emergency) access road is proposed for, are a mix of private, provincial and federal ownership.

Potable water for construction and operation may be supplied through a combination of shipped water and onsite potable water treatment facilities. Onsite water sources could include groundwater wells or freshwater streams with adequate annual available volumes, or a combination of these sources. Water requirements will vary depending on the Project phase and activities. During construction, water use may include consumption and plumbing needs for personnel as well as environmental mitigation measures such as dust suppression. In the operational phase, water use is anticipated for workforce and visitor consumption, fire protection, snow generation, and plumbing and septic systems. Also see **Section 2.3.1.5**.

Initial desktop reviews suggest that the region has adequate groundwater sources, based on the basin area and observed South Anderson River flows. A comprehensive groundwater investigation will be conducted as Project design and construction planning advance. Once groundwater sources and well locations are confirmed, a potable water network will be designed to include water mains, booster pump stations, reservoirs and treatment facilities. This water network is capable of accommodating all or a portion of residential and commercial needs as well as fire protection and snow generation. Surface water sources within the Central Anderson watershed (including the Anderson River) and Fraser River and its tributaries are also potential options for meeting water requirements during construction and operation. The feasibility of using these surface water sources, including assessments of their quantity and quality, was evaluated starting in 2023 and will continue as engineering design and construction planning progress. Necessary permits and licences for water use will be acquired prior to use. Also see **Section 2.3.1.5**.

2.6 Land Use Plans

2.6.1 Indigenous Nations Land Use Plans

The Spuzzum First Nation Comprehensive Community Land Use Plan (SFN 2021) sets the future vision for Spuzzum First Nation reserve lands and guides the direction of future land use and development decisions on the lands. The plan has four purposes, which are to:

- Define land management goals and visions for Spuzzum First Nation lands, now and in the future
- Establish planning areas and use designations that will guide future growth and development
- Protect, preserve and enhance cultural and environmental features
- Serve as a basis for policies, regulations and decisions related to land use on Spuzzum reserve lands.

The Project is consistent with the Spuzzum Comprehensive Community Plan.

Yale First Nation has a Comprehensive Community Plan and land use plan (not publicly available), and Boston Bar First Nation does not have a land use plan.

2.6.2 Provincial Land Use Planning

The Province of BC has developed land use plans to set strategic direction to guide sustainable resource stewardship and management of provincial public land and waters that meet economic, environmental, social and cultural objectives (Land Use Planning for Provincial Public Land). The Province is modernizing land use planning (LUP) in partnership with First Nations to ensure responsible stewardship and management of land and resources that includes unique values, perspectives and knowledge of First Nations. Information about progress on the updated LUP is not available. The available LUP information is out-of-date and comes from the South Coast Land and Resource Plan, which describes the Project area in the Anderson Landscape Unit (Fraser Canyon Landscape Units 2003). The Land and Resource Management Plan largely describes timber harvesting with some information on spotted owl (which have since been extirpated from the area) and old growth forests (the current absence of which are likely to be related to the extirpation of spotted owl).

The Province has been engaging with Indigenous governments and stakeholders to identify high-priority planning projects. One such high priority project, the Nicola Watershed Governance Project (Nicola Watershed Planning) has been initiated. This project area is directly to the east side of Spuzzum First Nation's proposed Project.

Old Growth Management Areas (OGMA) have been established for the landscape units within the Chilliwack Natural Resource District, which aims at sustaining elements of biodiversity in the area. OGMA occur within the Project area. Also see the Anderson Landscape Unit in the Land and Resource Management Plan.

2.6.3 Local Government and Land Use Planning

The Project is in FVRD Electoral Area B, bounded on the northwest by Thomson Nicola Regional District (TNRD) Area N (Beautiful Nicola Valley South). The closest incorporated areas to the Project are the District of Hope, approximately 30 km to the south, and Merrit, approximately 63 km to the northeast. Small First Nations reserves and non-Indigenous communities along the Fraser River include Choate, Dogwood Valley, Emory Creek, Yale and Spuzzum.

The Project is within the Rural Area in the FVRD 2023-2026 Strategic Plan. Priorities identified in this include Climate and Environment, Growth Management, Indigenous Relationships, and Wellness and Prosperity. There is also an Official Community Plan that covers portions of the FVRD Electoral Area B along the Fraser River; however, it does not cover the Project area.

The FVRD Regional Growth Strategy, and related Schedule A of the FVRD Bylaw No. 1706 (2023), provides a strategic plan enabled by the *Local Government Act* that provides an overarching planning framework for coordinating the activities of local governments and the provincial government. The strategy considers transit, housing, parks, economic development and environmental issues from a regional perspective with the goal of creating healthy, sustainable communities. The 30-year horizon strategy is a long range aims to ensure the region as a whole is working toward a common future. The goals outlined in the strategy, in which the Project aligns, are as follows:

- Economic Strength and Resiliency: To realize the region's economic potential by providing opportunities in employment and education that will grow the economy by building on the region's strengths.
- Ecosystem Health: To protect the air, water and biodiversity on which we depend.
- Infrastructure and Services: To provide efficient, sustainable and cost-effective services that contribute to compact and sustainable growth.
- Climate Change: To mitigate the region's impact on global climate change and adapt to the impacts of climate change on the region.

The TNRD Regional Growth Strategy is a framework for achieving a sustainable future for the region and contains policies for destination resorts where the development is based on site specific and distinct location factors, characteristics and amenities. There are multiple Official Community Plans (OCPs), the closest being the Nicola Valley OCP; however, none of these include geographic scopes that overlap the Project.

2.7 Emissions Discharge and Waste

The Project is anticipated to have minimal emissions discharge and waste impacts. During construction, air and dust emissions will be controlled through mitigation, while the operational phase emissions are expected to be minimal. Noise and vibration impacts are expected to be minimal and due to the Project's distance from the nearest community, the implementation of noise emissions during the construction phase are likely inaudible. Light emissions are expected to have minimal emission impacts during the construction phase although are expected to have some level of impact during the operational phase. Solid and liquid waste generated during construction and operation will be managed responsibly to minimize environmental impact.

2.7.1 Air and Dust Emissions

The Project will create minor air and dust emissions during the construction phase that will be managed through a Construction Environmental Management Plan (CEMP), which will include erosion management and sediment control measures to minimize air and dust emissions, and traffic controls to limit idling. During the operational phase of the Project, minor air and dust emissions may be created through maintenance vehicle use, use of mountain bike trails and through use of gondolas and lifts. Air and dust emissions created during the operational phase will be managed through an Operational Environmental Management Plan (OEMP).

2.7.2 Greenhouse Gas Emissions

During the construction phase, minimal Greenhouse Gas Emissions (GHG) are expected to occur. GHGs which may be emitted from the Project during operation include transportation to and from the ski resort, fossil fuel used for equipment and vehicles on the ski resort, and electricity to power equipment such as gondolas, chair lifts and to make artificial snow. A desktop air quality study will be conducted to determine forecast GHG and related mitigation measures to maintain air quality standards, if required.

2.7.3 Noise and Vibration

Project activities will generate some noise and vibration emissions during construction, and minimal noise and vibration emissions during operation. Noise and vibration levels typically decrease with increasing distance from the source due to factors like distance, ground absorption and atmospheric conditions.

The Project is located around 30 km from the nearest residential area and therefore no noise and vibration impacts are expected to affect communities during the construction phase. The Project will be guided by the *BC Noise Control Best Practices Guideline* Version 2.4 (2024) when implementing noise and vibration mitigations. More detailed noise management plans will be developed as part of the Project's future OCP and Rezoning Application during the Master Plan Review Process as part of the MRB All-Season Resort Application Process.

2.7.4 Lighting Emissions

Lighting emissions from lighting installed on Project infrastructure can lead to potential light pollution, more-so during the late afternoons and evenings. To minimize light spill, measures such as directing lights downward can be implemented.

2.7.5 Solid and Liquid Waste

During construction and operation of the Project, there will be solid and liquid waste generated which will be managed through contracts with local waste management companies. Some of the solid and liquid waste mitigations and contracts that would be in place include:

- Storing all solid waste in identified containers, regularly scheduling removal and disposal
- Waste materials will be properly contained and removed from the Project site
- All construction-generated waste will be removed or disposed of according to federal, provincial and local requirements
- Sanitary facilities will be provided at each work area. Sanitary waste will only be discharged in approved facilities
- Hazardous waste will be stored in containers, which will be sealed to prevent potential spills and will be transported for treatment
- If workforce accommodations require a site temporary camp, a water well and septic system will be permitted, installed and decommissioned as required.

2.8 Alternative Means of Carrying out the Project

Alternative approaches to the Project were explored while refining the Project design and through engagement feedback, always keeping in mind the Project purpose outlined in **Section 1.3**. This involved evaluating technically and economically viable options, including the use of the best available technologies, to ensure the Project meets its objectives while improving the environmental performance.

The initial site selection aimed to establish the Project within Spuzzum First Nation's territory, supporting our economic development and ensuring continued leadership and management of the land and waterways. Technical experts were then retained to carefully consider alternative means of meeting our objectives for an all-season mountain resort, including alternative designs and approaches that would meet regulatory standards while minimizing impact on wildlife habitats.

2.8.1 Location of the resort and facilities

Spuzzum engaged Ecosign Mountain Resort Planners, Ltd. (Ecosign) in April 2021 to conduct a feasibility study for an alpine ski resort in the South Anderson area. Using mapping prepared from aerial photography, Ecosign prepared a technical assessment and two conceptual alternatives for a potential four-season mountain resort. At the conclusion of the study, the potential for a mountain resort development was confirmed and a preferred concept was selected for further study.

After completing the feasibility study, Spuzzum commissioned high-quality LiDar mapping of the South Anderson River Valley and the mountains to the south of the river in the area for proposed development. A technical assessment was carried out to analyze the climatic and physiographic characteristics of the terrain within the area, through an understanding of the sites existing conditions and natural processes. Environmentally sensitive areas such as old growth forests, known archaeological sites and riparian area setbacks were avoided, and development on already disturbed areas was maximized. Minimizing the use of and disturbance to land is important to the Spuzzum First Nation, and to achieve this much of the Project accommodation areas have been designed for high-density use. Approaches to manage and minimize the requirements for water have been considered and will be built into the site servicing plans for the Project (see 2.3.4.1).

The technical assessment revealed that there is excellent potential for a high-quality alpine ski facility with balanced terrain, good vertical, summer sightseeing and four-season recreation. A total of 19 pods of ski terrain were identified, and through site visits and baseline environmental work, the design of the proposed resort was selected.

2.8.2 Alternative road access

Establishing safe and reliable public road access to the proposed Project is key to its success. After evaluating several road access options, in terms of feasibility, cost, environmental impact (especially spotted owl interactions) and overall benefit to the Project, access from Highway 5 via a new road and tunnel is now proposed.

Initial access plans to the Project site were from Highway 1, which would have additional benefits for Spuzzum and other communities along this route. Alternative routes that used existing FSR were also considered. However, these alternatives were deemed too steep for day-to-day public use. Additionally, each of these alternative routes resulted in some interaction with spotted owl nesting and foraging habitat; all but one (the Emergency Alternative Access discussed in **Section 2.3.1.3.1**) also required extensive widening and new road route construction in some places to achieve the required grades and widths for access by resort visitors, which would have required extensive shoring, rockfall protection and restoration work.

Despite extensive explorations to find a suitable access route from Highway 1 based on existing Forest Service Roads, the engineering and financial challenges, and possible impacts to future spotted owl habitat, determined that a lower impact alternative is the proposed access from Highway 5. The decision to choose the Highway 5 alternative balances Project economics, engineering feasibility and reduced environmental impacts to spotted owl, with economic reconciliation for the Spuzzum First Nation.

3 Existing Conditions

This section provides a summary of existing environmental conditions in the Project area. Information which is applicable to the biophysical environment, archaeological and heritage resources, hydrology, and human and community well-being are provided in **Sections 3.1 to 3.5**.

Existing access to the Project site is via Highway 1 at Alexandra Bridge Provincial Park, approximately 44 km north of Hope, BC. The proposed resort base is a scenic 25 km drive east on former logging roads to the upper valley watershed.

Much of the Project area is situated within the sub-alpine basin in the coastal and mountain hemlock zones of the Canadian Cascade Mountains. The Project area has experienced recent logging activity, including the development of road, clearcuts and yarding, which has created an uneven aged forest. Mature forest stands are still present within the least affected riparian areas and subalpine areas; however, clearcuts and immature forests are present in accessible valley areas.

The topography of the Project area is complex and consists of clearcut areas, with remnants of mature forests. Steep elevation is present within the Project area, making it suitable for a ski resort.

The Project area supports aquatic habitat for fish and terrestrial habitat for wildlife. Numerous watercourses are present within the Project area, which potentially connect to the Anderson River or Boston Bar Creek. Fish species that have the potential to be within the Project area include rainbow trout (*Oncorhynchus mykiss*), steelhead (summer-run) (*O. mykiss*) and Dolly Varden (*Salvelinus malma*). One species of concern, spotted owl (*Strix occidentalis*), is potentially present within the Project area. The Project area is located within the Spotted Owl Habitat Provincial Management.

No contaminated sites are known to exist in the Project area. Detailed descriptions of the physical characteristics and conditions in the Project area are provided in the following sections.

3.1 Past and Current Studies

Past studies of the Project area include:

- Environmental Overview Assessment completed by Hemmera Envirochem Inc. (2021)
- Engineering report completed by Welder Engineering (2021)
- Archaeological Reviews completed by Similkameen Consulting (2021, 2025)

Ongoing studies include those for development of alternative routes (2022-2024), economic feasibility and impact/benefit studies, and hydrology baseline studies to understand volumes and rating curves (2023-2024).

3.2 Biophysical Environment

The following sections present existing conditions information within the Project area pertaining to atmospheric and climate conditions (**Section 3.2.1**), soils, terrain and geology (**Section 3.2.2**), vegetation and wetlands (**Section 3.2.3**), wildlife and wildlife habitat (**Section 3.2.4**), and aquatic resources (**Section 3.2.5**). The information in these sections was pulled from the above-noted studies and additional desktop research.

3.2.1 Atmospheric and Climate

The climate at the Project site is dictated by elevation, approximately 900 m in the valley to 1,700 m at the summit. Snowfalls resulting from cool, moist maritime airmasses from the Fraser Valley being pushed up the mountain passes and precipitating as snow currently provide up to 1,000 cm of annual snowfall (BC Parks data). These snowpacks remain into the summer, with 3 m snowpacks recorded (MOTT). The reliable natural snow for the Project study area within the elevation range of 1,000 meters to 1,700 meters supports a 120-day winter alpine ski operation.

Mean temperatures range from -15 degrees centigrade (winter nighttime low) to over 25 degrees (summer daytime high). A comprehensive aspect / solar analysis has been conducted and is presented in the Expression of Interest (EOI) for the MRB process. Predominate winds are from the west / southwest.

There are no nearby air quality monitoring stations. Air quality indices are expected to be rarely exceeded, except during summertime conditions with nearby wildfire activity.

3.2.2 Soil, Terrain and Geology

The Project area is primarily situated in the Needle Peak pluton, a large intrusion exceeding 200 km^2 area and comprised primarily of granite and granodiorite with some felsic dykes. The bedrock type in the area is granodioritic intrusive rocks from the Paleogene geological period.

3.2.3 Vegetation and Wetlands

The Project area overlaps with five biogeoclimactic zones, which in increasing elevation range are the Coastal Western Hemlock zone, the Interior Douglas-fir zone, Mountain Hemlock, the Coastal Mountain-heather Alpine zone and the Interior Mountain-heather Alpine zone.

The majority of the footprint for the Project is located in second-growth forest, the result of logging activity. Some of this activity is very recent, with clearcuts and log sort areas dominated by red and mountain alder and other species that are pioneers on disturbed sites. The riparian zones of the South Anderson River and its tributaries (western hemlock forest) and high elevation slopes (mountain hemlock) are less disturbed by logging activity and more mature. Several of the riparian areas are designated as old growth management areas under the *Forest and Range Practices Act*. Old growth management area set-asides are a landscape level management tool for current or future mature forest values. The old growth management areas in the Project area generally also overlap with riparian protection zones around the South Anderson Creek watercourses.

Within the Project area, there is the potential for listed plant species to occur. The Project area overlaps with critical habitat for whitebark pine (*Pinus albicaulis*), a provincially blue listed species that is federally listed as endangered. This overlap is on the access road to the eastern tunnel portal from Highway 5. To date, whitebark pine has not been documented in the Project footprint. A provincially blue listed ecological community (western hemlock–Douglas-fir / electrified cat's-tail moss (Dry Submaritime 1)) overlaps with the forest service access road connecting to Highway 1.

Invasive plant species (chamomile, blackberry, tansey) were documented along the forest service access road to Highway 1. Several of these species are regulated under the provincial *Weed Control Act*.

The Project area overlaps with one (unnamed) wetland of 3.7ha in the higher elevation area near the South Anderson tunnel portal.

3.2.4 Wildlife and Wildlife Habitat

The presence of wildlife in the Project area is reflective of the location at around and above 1200m in the Coast Mountains, and the habitat conditions as a result of past human activity, especially forestry harvesting. A preliminary and desktop screening identified common species, species at risk and species with value to Spuzzum First Nation present in the Project area.

Songbirds, raptors, bats and small mammals, ungulates and bears (American black), and amphibians such as western toad, which are all typical of mid to high-elevation forests, are present. During the review, the Project area was found to overlap with an occurrence for an unnamed species at risk. These occurrences typically identify very sensitive species that the government does not want knowledge of this species' location to be widely available. It is expected that this occurrence is a historical (1990's era) observation of spotted owl, a species that has been extirpated from the Project area. The Project area boundary and access road to Highway 1 overlap with identified spotted owl wildlife habitat area, which is designated as a long-term owl habitat area as part of the Special Resource Management Zone set aside to achieve recovery of spotted owls. While this area is known to have historic occurrences of spotted owls, confirmed occurrences within the last fifteen or more years have not been documented. Nesting habitat for the species is old-growth, tall forests with broken treetops or old raptor nests (for nesting) in stands up to around 1000 m elevation. Foraging habitat is characterized by mature, moderately tall stands that may extend further upslope to above 1200m. The location of the footprint of the Project is above the upper elevational limit for nesting and at the elevational limit for foraging.

The Project has been deliberately designed to avoid impact to habitat that offers future habitat for reintroduction or reestablishment of owls in the area. The interactions between identified suitable habitat for spotted owl and the five access route alternatives in the lower Anderson catchment area were examined during design. A lowest-impact route was identified (Gilt Creek), and this route has been chosen as the emergency access for the Project. Avoiding extensive use of the lower elevation areas of the Anderson Forest Service Road and the South / Central Anderson catchment has reduced many of the Project-related interactions with the species.

Spotted owl populations in BC have declined to near extirpation, due to extensive impacts to its old growth forest habitats from logging activities. Spotted owls have not currently been identified to be present within the Project area; however, suitable foraging and nesting habitat should BC's recovery objectives for the species be successful has been identified in lower elevations of the forest service road to Highway 1 and on the access road to Highway 5 (less suitable due to human activity). Key threats to spotted owl across BC are the continued loss and fragmentation of old-growth habitat, competition from barred owls (*Strix varia*), predation, climate change and disease. Of these threats, the primary threat is habitat loss due to forest clearing. Spotted owl prey availability and abundance is influenced by the suitable forested habitats available, and spotted owl reproduction and survival is directly influenced by habitat loss. The Proponent, the Spuzzum First Nation, has been instrumental in protection from logging of the last remaining habitat for wild spotted owl (Spuzzum River catchment) and in bringing court-ordered protection for 4,000 ha of critical habitat.

The nests of certain bird species are protected from impacts, such as bald eagle (*Haliaeetus leucocephalus*) or osprey (*Pandion haliaetus*). A review of the Wildlife Tree Stewardship Program Atlas did not identify any bald eagle or osprey nests within a 5 km radius of the Project area. However, this database is not exhaustive and cannot be relied upon to determine the absence or presence of these nests, as nests can change from year to year.

Historic occurrences of mountain beaver (*Aplodontia rufa*) have been identified approximately 1 km east of the Project area. This occurrence did not overlap with the Project area, and this species is typically associated with moist watercourses areas to a maximum elevation of 1,900 m.

Wildlife habitat area (WHA) has been identified for coastal tailed-frog (*Ascaphus truei*) and grizzly bear (*Ursus arctos*) approximately 6-to-7 km northeast of the Project area. The Project does not overlap with these WHA; however, there is potential for these at-risk species to be present within the Project area. Steeper mountain streams suitable for coastal tailed-frog are more common downstream / downhill from the Project area.

Ungulate Winter Range (UWR) for mountain goat (*Oreamnos americanus*) and mule deer (*Odocoileus hemionus*) is close to the Project area. The UWR for mountain goat is present within the southeastern portion of the Project area whereas the northwest access road overlaps the UWR for mule deer. Mule deer are present, and mountain goat, which is less common in the Project area, may occur on slopes facing Highway 5 (i.e., above the proposed access road and tunnel). Mountain goats require steep, rocky and lightly vegetated terrain with escape routes from predators; terrain that is generally unsuitable for development and skiing.

3.2.5 Aquatic Resources

Within the Project area, there are a total of nine unnamed lakes, one river and 160 stream networks, including the Anderson River and Boston Bar Creek. The Anderson River is a fish-bearing watercourse and there is confirmed fish presence throughout the Project area. The Anderson Rivers headwaters are located within the Project area boundary, and the majority of the streams identified are tributary streams to the Anderson River. The Anderson River discharges into the Fraser River, which is situated west of the Project area. Due to the connection between the Anderson River and the Fraser River, the Anderson River contains a high diversity of fish species, specifically in the lower gradient areas.

The South Anderson River is part of a mountainous catchment, which drains into the Fraser River, approximately 7 km north of Hells Gate. The South Anderson River watershed is fish-bearing, and lower reaches have records of bull trout, rainbow trout and steel head. The five major salmon species have also been recorded within the watershed: pink (*O. gorbuscha*), coho (*O. kisutch*), chum (*O. keta*) and chinook salmon (*O. tsawytscha*), but only in the lower reaches.

The portion of the Anderson River that is present within the Project area has confirmed recordings of rainbow trout (*Oncorhynchus mykiss*) and Dolly Varden (*Salvelinus malma*).

Boston Bar Creek is a fish-bearing watercourses that boarders the southeastern portion of the Project area. Fish species that have been confirmed in Boston Bar Creek include rainbow trout, steelhead (summer-run) and Dolly Varden. The tributary streams that flow into Boston Bar Creek are located within the Project area and the proposed road access off Highway 5 will cross one of these tributaries. The Fraser River is located east of the proposed west access road location that connects to Highway 1, and this proposed west access road has the potential to cross 12 watercourses. Federal species at risk or designated critical habitat for federal species are not found to occur within the Project area.

A screening study for the at-risk species bull trout (*Salvelinus confluentus* pop. 28) was undertaken in the South Anderson River in 2023 by Spuzzum First Nation. This study objective was to determine the presence of the threatened bull trout within the Project area as it is difficult to distinguish bull trout from the more common Dolly Varden when both species' ranges overlap. Genetic analysis (eDNA) was used for accurate species identification and indicated that bull trout were not present within the sampling locations in the South Anderson River, during the time of sampling. Bull trout were captured during electrofishing farther downstream at the South and Central Anderson confluence in 1999, but there is a possibility that this population has been since extirpated as no evidence of this population was found.

3.3 Human Environment[1]

3.3.1 Local Communities and Economy

FVRD Electoral Area B had a population of 869 people in 2021, which was a 2.6% decrease from 2016. Additional information regarding residents of FVRD Electoral Area B is summarized below from the 2021 Census.

- The median age of the population was 57.2 years, which is higher than the median age of 42.8 years for BC.
- 9.0% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 7.0% of the population was racialized, which is less than the provincial average of 34.4%.
- Median total household income in 2020 was $61,000, which is less than the provincial median income of $85,000.
- 21.6% of the population is considered low income, higher than the provincial average of 10.8%.

TNRD Electoral Area N had a population of 717 people in 2021, which was a 2.6% decrease from 2016. Additional information regarding residents of TNRD Electoral Area B is summarized below from the 2021 Census.

- The median age of the population was 56.8 years, which is higher than the median age of 42.8 years for BC.
- 15.2% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- Median total household income in 2020 was $74,000, which is less than the provincial median income of $85,000.
- 8.8% of the population is considered low income, which is lower than the provincial average of 10.8%.

The District of Hope had a population of 6,686 people in 2021, which was an 8.2% increase from 2016. Additional information regarding residents of Hope is summarized below from the 2021 Census.

- The median age of the population was 54.8 years, which is higher than the median age of 42.8 years for BC
- 11.4% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 7.7% of the population was racialized, which is less than the provincial average of 34.4%.
- Median total household income in 2020 was $64,000, which is less than the provincial median income of $85,000.
- 14.3% of the population is considered low income, higher than the provincial average of 10.8%.

[1] Source of all population statistics quoted in this section are:
Statistics Canada. 2023. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed January 16, 2025)

Merritt had a population of 7,051 people in 2021, which was a 1.2% decrease from 2016. Additional information regarding residents of Merritt is summarized below from the 2021 Census.

- The median age of the population was 49.2 years, which is higher than the median age of 42.8 years for BC.
- 21.9% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 9.3% of the population was racialized, which is less than the provincial average of 34.4%.
- Median total household income in 2020 was $70,000, which is less than the provincial median income of $85,000.
- 14.0% of the population is considered low income, higher than the provincial average of 10.8%.

Dogwood Valley is an unincorporated community with a population of 211 people in 2021, which was a 20.6% decrease from 2016. Additional information regarding residents of Dogwood Valley is summarized below from the 2021 Census.

- The median age of the population was 57.2 years, which is higher than the median age of 42.8 years for BC.
- 13.6% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 14.0% of the population was racialized, which is less than the provincial average of 34.4%.
- Income data are not available for Dogwood Valley.

Yale is an unincorporated community with a population of 162 people in 2021, which was a 13.3% increase from 2016. Additional information regarding residents of Yale is summarized below from the 2021 Census.

- The median age of the population was 62.4 years, which is higher than the median age of 42.8 years for BC.
- 6.7% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 10.0% of the population was racialized, which is less than the provincial average of 34.4%.
- Income data are not available for Yale.

Boston Bar is an unincorporated community with a population of 166 people in 2021, which was a 16.6% decrease from 2016. Additional information regarding residents of Boston Bar is summarized below from the 2021 Census.

- The median age of the population was 60.8 years, which is higher than the median age of 42.8 years for BC.
- 18.8% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- 15.6% of the population was racialized, which is less than the provincial average of 34.4%.
- Income data are not available for Boston Bar.

Spuzzum First Nation's reserve area had a population of 55 people in 2021, which was a 41.0% increase from 2016. Additional information regarding residents of Spuzzum is summarized below from the 2021 Census.

- The median age of the population was 28.4 years, which is lower than the median age of 42.8 years for BC.
- 100% of the population identify as Indigenous, which is greater than the provincial average of 5.9%.
- Income data are not available.

3.3.2 Infrastructure and Services

As discussed above, the proposed access point is from Highway 5. The proposed access road would be a paved, two-lane highway designed and constructed to MOTT standards, with appropriate engineering considerations for potentially challenging grades.

There are no railways in the Project area.

The Project site currently lacks existing infrastructure, including power, water and sanitary sewer systems. On-site infrastructure development will be necessary. This presents an opportunity to construct a modern, efficient and low-carbon system. Initial desktop reviews estimate that acceptable groundwater sources are available in the region based on the surrounding basin area and observed South Anderson River flows. Health and recreation services in surrounding communities include:

- Fraser Canyon Hospital in Hope
- Two fire halls in Yale
- GFL Environmental Inc. provides curbside collection service to all Electoral Area B residents (except Sunshine Valley) and to individual First Nations in this area on a contract basis

The Project is not anticipated to have adverse impacts on existing infrastructure and services and is proposed to operate as a "stand alone" all-season resort. The Project will include a firehall, a medical clinic and a search and rescue/ski patrol operation. Other community facilities such as a day care, a community centre and an elementary school will be identified in the resort master plan and built when the demand warrants.

3.3.3 Protected and Recreational Areas

Areas that are protected under forestry legislation (*Forest & Range Practices Act*) that are in or adjacent the Project area are:

- The Central Anderson watershed, which adjoins the South Anderson watershed to the north, is to be protected, preserved and managed for ecotourism opportunities and Indigenous traditional uses.
- A portion of the project area overlaps with one of two Section 17 designated use area tenures held by the Ministry of Transportation and Transit for the purpose of environmental protection and conservation. The tenures are located on the west side of Highway 5, near Ottomite Mountain, adjacent to Box Canyon, and extending towards Shylock Road.

Provincial parks and protected areas in the region include the following:

- Coquihalla Summit Recreation Area, on either side of the Coquihalla Highway. The western side is adjacent to a portion of the Project. The management plan for the park designates the area adjacent to the Project as a Natural Environmental Zone. The prime objective of the zone is to provide for a variety of easily accessible non-mechanized outdoor recreational opportunities in a largely undisturbed natural environment.
- Yale Garry Oak Ecological Area, near the Fraser River.
- Emory Creek Park, near the Fraser River.
- Alexandra Bridge Park, near the Fraser River.
- Coquihalla River Park, adjacent to the Coquihalla Highway, south of Project.
- Coldwater River Park, adjacent to the Coquihalla Highway, north of Project.

Spuzzum First Nation community members currently use lands in the Project area for hunting, fishing and other cultural practices. This planning process recognizes and intends to integrate the cultural practices of First Nations into Project design. Due to extensive logging, these lands will require a period of regeneration to achieve a healthy, biodiverse ecosystem.

3.3.4 Visual

The Project area is not classified for visual values. The Province has established visual sensitivity classes for locations where there is a public interest in protecting visual aesthetics. The absence of identified polygons, except for one very small and low-value polygon in the west of the valley (VLI polygon 136), reflects the current absence of public viewpoints of the Project area. Visual sensitivity has been incorporated into the design and location of the Project.

3.3.5 Community Benefits and Interactions

Potential interactions include benefits to local and regional employment and business activity, contributing to regional economic output, gross domestic product and government tax revenues. Currently, it is anticipated that the Spuzzum First Nation will maintain a substantial interest in the Project through a Band-owned economic development corporation.

The mountain resort upon build-out will create in the order of 800 jobs comprising numerous vocations for not only Indigenous Peoples but for the surrounding non-native communities such as in Hope and Boston Bar.

Across the FVRD Electoral Area B, the main industries were reported as:

- Construction
- Retail Trade
- Professional, scientific and technical services

The construction period is expected to provide significant economic benefits to suppliers, contractors and service sector businesses in the Upper Fraser Valley, including Hope.

The Project is not anticipated to have adverse impacts on existing infrastructure and services and is proposed to operate as a “stand alone” all-season resort. The Project will include a firehall, a medical clinic and a search and rescue/ski patrol operation. Other community facilities such as a day care, a community centre and an elementary school will be identified in the resort master plan and built when the demand warrants.

The Project will attract the majority of its winter and summer visitors from Metro Vancouver, Metro Seattle and neighbouring communities such as Chilliwack and Bellingham. Substantial population growth is projected in these areas during the next ten years and beyond. This growth will generate more than enough additional demand for winter and summer time recreational activities to support the proposed Project as well as existing regional attractions, including nearby ski hills such as Manning Park Resort and Sasquatch Mountain Resort.

The resort master plan, which will be submitted to the Mountain Resorts Branch, will include employee housing. The amount and type of employee housing remains to be determined but is expected to accommodate at least 50% of employees that work directly for the resort. It is estimated that a portion of employees will find accommodation elsewhere (e.g. in rental suites offered by local homeowners) and a small percentage of employees are expected to commute on a daily basis from nearby communities, including Hope and Merrit.

The Project is expected to generate significant economic benefits for regional and provincial governments, with an estimated $210 million in revenue from skiing and $580 million from real estate over the first ten years. Additionally, the Spuzzum First Nation has the opportunity to fully own and operate ancillary businesses spurred by the Project, including a golf course, off-site campground and RV park.

The Project will create approximately 800–900 full-time equivalent jobs, both seasonal and year-round, benefiting Indigenous communities and neighboring towns such as Hope and Boston Bar. Up to 15% of these positions are expected to be filled by First Nations individuals, with training available in advance. The construction phase will also generate significant employment and business opportunities for contractors, suppliers and service providers in the Fraser Valley region. The majority of the workforce, both during construction and operation, is expected to be sourced locally and within British Columbia, leveraging the expertise of skilled professionals in the area.

3.4 Indigenous Knowledge and Uses

The South Anderson catchment area where the Project is located, has been an area of use by Indigenous Nations. Previously recorded archaeological sites (see **Section 3.5**) indicate a history of use and passage. Knowledge of contemporary use by the Spuzzum First Nation is also available, including for hunting, fishing and food gathering. In recent years, access has been restricted with bridge and road washouts due to extreme weather events.

3.5 Archaeological and Heritage Resources

Archeological Reviews of the Project Area were conducted by Brenda Gould of Similkameen Consulting along with Council and staff of the Spuzzum First Nation, and the Project feasibility/development team participated in day trips to the study area and on-site meetings.

The study area contains significant prehistoric and historic archaeological resources. The Anderson River watershed likely served as a prehistoric and relatively undocumented historic transportation corridor, as evidenced by upgrades undertaken by the Royal Engineers from 1858 to 1859. Its role in the ethnography and origins of the Spuzzum people warrants further investigation, which will be conducted in the next phase of this Project.

The current FSR from Highway 1 (the proposed emergency access road) passes within 20 m of a significant First Nations cultural site just east of the proposed base village. To provide greater protection for this cultural site, a portion of the emergency access road will be relocated to provide a minimum separation of 200 m, and additional measures would be put in place (such as fencing and a monitored security system) if deemed advisable.

There are 11 previously recorded archaeological sites within the study area, and depending on future access decisions, one or more of these archaeological sites will intersect with the Project's footprint. See **Table 3** for details. Significant portions of the study area also have the potential to contain unrecorded archaeological sites.

Table 3 Previously recorded archaeological sites that intersect or are near the Project area[2]

Site ID	Intersects with Study Area	Site Type	Date Recorded	Comments
DjRh-1	Yes, potential recreation area	Rock Art, Lithic Scatter	1996, 2021	Pictograph recorded because of an AIA for Cattermole Logging in 1996 (Oliver 1996); west-facing, numerous images, super positioning present, Plateau Horizon Projectile Point (ca. 2400-1200 BP) observed in 2021.
DjRh-2	Yes, the recreation area	Lithic Scatter	2019	Lithic scatter was observed on the surface of the escarpment overlooking the recreation area; diagnostic artifacts suggest occupation to at least 2400 B.P. (Cameron, 2020).
DkRi-6	Yes, potential intersection with access road	Rock Art, historic trail	1927, 1941, 1977, 1987, 1988, 2006, 2008	The large petroglyph site was first documented in 1927 (Smith 1927) and reported to the National Museum of Canada. The site has since been negatively impacted by the construction of logging roads as well as BC Hydro Transmission lines.
DkRi-53	Yes, bisected by the south option access road	Cultural Depression, Lithic Scatter	1986, 2008	The archaeological site consists of a lithic scatter and at least three cultural depressions, likely cache pits. It is bisected by the access road as well as the BC Hydro transmission line and will be impacted by any upgrading or potentially maintenance activities.
DkRi-94	Yes, bisected by Gilt Creek FSR option access	Lithic Scatter	2012	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of a single fragment of chert lithic material on the transmission line access road.
DkRi-95	Yes, bisected by the south option access road	Lithic Scatter	2012	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of a single fragment of fine-grained volcanic lithic material on the transmission line access road.
DkRi-96	Yes, bisected by the south option access road	Lithic Scatter	2012	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of a single fragment of fine-grained volcanic lithic material on the transmission line access road.
DkRi-112	No	Lithic Scatter	2013	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of a single fragment of fine-grained volcanic biface fragment on the transmission line access road.

[2] Similkameen Consulting, 2021.

Site ID	Intersects with Study Area	Site Type	Date Recorded	Comments
DkRi-122	No	Lithic Scatter	2014	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of two mudstone lithic flakes on the transmission line access road.
DkRi-134	No	Lithic Scatter	2015	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of three fine-grained volcanic flakes on the transmission line.
DkRi-138	Yes, bisected by the south option access road	Lithic Scatter	2015	Discovered on ROW during the BC Hydro ILM project (Mason and Campbell 2012). The site consisted of a single fine-grained volcanic flake on the transmission line. This site is also associated with an unregulated trail and group of CMTs.

It is recommended that a rigorous Archaeological Impact Assessment (AIA) process be put in place consisting of the following components:

1. Non-permitted archaeological study of the Hope Boston Bar trail from Coquihalla Summit to the intersection with the Tikwalus Trail.
2. Ground truthed archaeology overview assessment of the proposed access roads (from Spuzzum and Highway 5) to identify areas of potential to be subjected to a more detailed and rigorous AIA process undertaken under the Heritage Conservation Act permit to prospect for archaeological sites within the finalized development footprint of the access roads to and from the resort/recreation area.
3. Ground truthed archaeology overview assessment of all potential recreation developments (ski runs, trails, lifts, residential, commercial, etc.) to inform a more detailed and rigorous AIA process undertaken under *Heritage Conservation Act* permit to prospect for archaeological sites within the finalized development footprint.
4. A full AIA is undertaken under *Heritage Conservation Act* permit by a qualified archaeological consulting firm with experience in large projects and the Environmental Assessment Process. The AIA will be required for identified portions of all finalized access routes, recreation, residential and commercial development areas.

All archaeological sites, whether recorded or unidentified, are protected by legislation and may not be altered, damaged, moved, excavated in or disturbed in any way without a permit issued under either **Section 12.2** or **Section 12.4** of the *Heritage Conservation Act*.

3.6 Proposed Studies

As the Project advances, a large number of studies will be conducted to provide information for Project design and to achieve permit requirements, with associated mitigation development. The following broad study areas, each with more detailed topic requirements, are necessary and are planned for the Project:

- **Water quality and quantity.** Studies are underway as a long-term record of current conditions is necessary to design potable water and sanitation infrastructure, and to develop road culvert and bridge design in a way that achieves the necessary permits (*Water Sustainability Act, Environmental Management Act*, *Health Act*, Dam Safety Regulation) and respects environmental flow needs and public health.

- **Geotechnical.** Geotechnical studies have been advanced and will continue to be refined to address mass movement processes. Key for the Project is an understanding of the risks of and mitigation for snow movements (avalanche) and soil and rock movements (rockfall, landslide, debris flow, glacial moraine, acid rock drainage and metal leaching, and floods. This work feeds into building and infrastructure design and location, and permitting (e.g., Dam Safety Regulation, *Environmental Management Act*).
- **Wildlife.** Several processes and permit requirements for the Project will require additional wildlife work. Information requirements for permits such as those under the *Water Sustainability Act and Parks Act*, and for the MRB Formal Proposal and Master Plan processes require studies of terrestrial wildlife (mammals, birds and vegetation) and aquatic wildlife (fish and fish habitat). In achieving the permit information requirements, these studies will support the development of mitigation design and compliance with federal (*Fisheries Act, Species at Risk Act*) and provincial statutes (*Wildlife Act*).
- **Economic.** A comprehensive preliminary understanding of the Project's economic feasibility and financial viability, including the market and benefits (job creation, tax paid, secondary service employment), has been generated. Further analysis will be advanced in support of the MRB Formal Proposal and Master Plan processes.
- **Archaeology.** Recommendations from the Project's Archaeology Overview Assessment (2021) will be followed, and an Archaeology Impact Assessment will be conducted in the Project area.
- **Socio-community and Infrastructure.** Analysis of the Project's interaction with the community and infrastructure will continue as the design advances. Issues such as traffic (MOTT permits), housing (worker accommodation), community health (e.g., *Health Act* permits), energy, education and safety (e.g., emergency safety and policing) will be studied in support of permits and community planning. Discussion with local authorities and suppliers has been conducted over the provision of services, and these will be advanced in support of the MRB Formal Proposal and Master Plan processes to develop a more comprehensive understanding of these important planning issues and decisions.
- **Community engagement.** Engagement with the community, including with Indigenous Nation neighbours of Spuzzum and the general public, will continue to be advanced to achieve the MRB Formal Proposal and Master Plan processes. Comments from the community will be used to understand issues and concerns and to build this feedback into the feasibility assessment and design of the Project, including mitigation to address concerns.

4 Project Interactions

This section provides an overview of the interactions between the proposed Project and the biophysical and human environments, including Indigenous Nations' interests.

These interactions have led to the identification of candidate Valued Components (VC). Valued Components are the categories of physical, biological, human, community and heritage environments that will be studied and assessed to manage Project-related effects. **Section 4** provides a description of the existing conditions for the candidate VCs. Confirmation of the VC will be established during effects Early Engagement with Indigenous Nations, regulators and stakeholders, and if an exemption is not granted, again during Process Planning Engagement.

While the residual effects of the Project have not yet been evaluated, data from past reports indicates the potential Project-related effects include alterations to local ecosystems and risks to avian and fish populations. Although noise and visual impacts are less likely due to the remote location of the Project, an assessment is necessary to understand the Project's potential residual effects. An evaluation of cumulative effects will be conducted to assess how the Project's residual effects may interact with those of other nearby current and future projects.

Based on preliminary review of available data, potential Project interactions and preliminary mitigation measures are available in **Table 4-1** and **Table 4-2**. The candidate VCs presented for the consideration of the Indigenous Nations, regulators and stakeholders are listed below:

- **Atmospheric and Climate**: During construction, the combination of weather/ atmospheric conditions and construction activity may affect fish and fish habitat by altering water quality and disrupting instream and riparian environments.
- **Aquatic Resources**: Construction activities including site preparation, vegetation clearing and road building may affect fish and fish habitat by altering water quality and disrupting instream and riparian environments.
- **Vegetation and Wetlands**: During construction, activities such as vegetation clearing, site preparation and road upgrading may interact with vegetation and wetlands. Several provincially listed plant species and ecological communities could be located within the Project area. Wetlands also have the potential of being located within the Project area.
- **Wildlife and Wildlife Habitat**: Wildlife habitat for spotted owl, grizzly bear and mule deer overlap with the Project area. These areas may require further study to determine the importance of use of the habitat. Construction activities may directly impact wildlife through habitat loss, disturbance and mortality, particularly during site preparation and vehicle operations.
- **Archaeology and Heritage Resources**: Further studies are needed to understand how construction clearing, grading and filling may interact with potential archeological and heritage sites. These archaeological or heritage sites could include culturally modified trees or historical structures.
- **Human and Community Well-being**: Potential interactions include benefits to local and regional employment and business activity, contributing to regional economic output, GDP and government tax revenues. The Project has the potential to influence community health and social well-being by placing additional pressures on community infrastructure and services, transportation infrastructure and accommodation availability. The Project may impact tenured and non-tenured land and resource use, which has the potential to result in conflicts and social tension. The Project may result in noise, vibration and air quality changes, which could indirectly affect human health.

- **Visual**: The Project's influence on the landscape will be cultivated though use of methods developed for the forestry sector that will examine the current visual sensitivity of the landscape and the ability to absorb the Project's changes. Community input to the evaluation is expected.

The following components of the environment are expected to be studied, but their assessment will be conducted within other identified VCs (i.e., the receptors of effects).

- **Soil, Terrain and Geology**: Potential interactions with terrain and soil have the potential to include terrain stability, soil erosion and dust. Terrain stability concerns may arise in areas with steeper slopes or unstable soil conditions. Typically, soil, terrain and geology work is included as part of other work packages or is undertaken for detailed design and engineering.
- **Land Use**: Land use interactions will be investigated in support of the tenure agreements and human and community well-being. Effects will be assessed in the human and community well-being VC.
- **Noise**: Studies of potential noise impacts support effects assessment of VCs such as human health. Noise impact studies may not be necessary if receptor sites are distant from the Project. The BC Government has standards for noise studies.

4.1 Potential Project Interactions

Potential interactions between the Project's construction and operation activities, and candidates for valued components (VC), are outlined in **Table 4-1**. The candidate VCs presented in this section represent a possible arrangement of environmental values that may need to be mitigated during the construction phase. The candidate VCs will be confirmed after engagement and consultation with participants in the process. Input into candidate VCs is invited.

The interactions identified are prior to the application of mitigation measures. Preliminary evaluation of possible interactions allows for the effects assessment – through the MRB process and the EAO process if an exemption is not granted – to be focused on those Project VC interactions of greatest importance. Further analysis may be warranted for interactions that are known to have no or negligible effects, or possibly those that are already well regulated or managed under another government. Coding for the table is listed below:

- Little to no interaction expected; no further consideration warranted
- Potential interaction; warrants further consideration
- Key interaction; warrants further consideration

Table 4-1 Potential Project Interactions Matrix

Project Activities	Candidate Valued Components									
	Atmospheric Environment	Aquatic Resources	Vegetation and Wetlands	Wildlife and Wildlife Habitat	Employment and Economy	Infrastructure and Service	Land Use	Visual	Archaeology	Human Health
Construction										
Transport of workers, equipment and materials	🟡	🔴	🔴	🔴	🟢	🟢	🟢	🟢	🟡	🟢
Site clearance and preparation	🟡	🔴	🔴	🔴	🟢	🟢	🟢	🟢	🟡	🟢
Road and stream crossings	🟡	🔴	🔴	🔴	🟢	🟢	🟢	🟢	🟡	🟢
Drilling and blasting	🟡	🔴	🔴	🔴	🟢	🟢	🟢	🟢	🟡	🟢
Construction of infrastructure	🟡	🔴	🔴	🔴	🟢	🟢	🟢	🟢	🟡	🟢
Decommissioning temporary facilities	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
Operation										
Start-up and commissioning	🟡	🟡	🟡	🟡	🟢	🟢	🟢	🟡	🟢	🟢
Operation of mountain resort	🟡	🟡	🟡	🟡	🟢	🟢	🟢	🟡	🟢	🟢
Decommissioning										
Decommissioning of infrastructure	🟢	🟡	🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢
Site reclamation	🟢	🟡	🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢

4.2 Example Mitigation Measures

Potential Project interactions with VCs and general mitigation measures are presented in **Table 4-2**. A Construction Environmental Management Plan would be prepared and implemented for the Project to protect sensitive environmental features with best management practices and mitigation measures. An Operational Environmental Management Plan would be prepared and implemented prior to operations beginning.

Table 4-2 Summary of Potential Project Interactions and Example Mitigation Measures

Assessment Component	Potential Project Interaction	Example Mitigation Measures
Atmospheric Environment	Fugitive dust emissions	Construction: • Implementing erosion and sediment control plans • Watering and dust suppression on exposed soil and access roads • Wind barriers and vegetative buffers to reduce wind driven dust • Stabilization of exposed surfaces, including covering stockpiles and haul vehicle loads • Limiting the extent of exposed soil at any given time by sequencing earth works • Implementing speed limits and traffic control on unpaved roads to reduce dust suppression • Minimizing duplication of material movement by stockpiling materials close to use areas and covering trucks Operation: • Road surface stabilization through pavement of high traffic roads and using dust suppressants on unpaved routes • In dry conditions, applying water in high-traffic areas • Vegetation management through replanting disturbed areas to stabilize soils • Improving drainage and soil control • Regular road and trail maintenance • Mountain biking trail hardening and maintenance

Assessment Component	Potential Project Interaction	Example Mitigation Measures
	GHG and other emissions	Construction: • Using high efficiency diesel generators with higher fuel efficiency and lower Nox/CO2 output • Load optimization using the right size generators to match demand (avoiding using generators that are larger than necessary) • Implementing idle reduction policies, including restricting idle time limits for heavy equipment and transport vehicles. • Using locally sourced materials where appropriate to minimize emissions from transportation Operation: • Prioritizing grid connection • Using high-efficiency diesel backup generators • Using fuel-efficient groomers and effectively managing vehicle fleet • Optimizing grooming only on necessary trails to reduce fuel use • Applying GPS-optimized route grooming practices to minimize fuel burn with real time GPS tracking • Efficient snowmaking operations • Exploring shuttle and employee shuttles from major hubs – keeping in mind the village is walking distance from ski lifts • Fleet optimization using low-emission resort service vehicles where appropriate

Assessment Component	Potential Project Interaction	Example Mitigation Measures
	Increase in noise levels	Construction: • Using low noise equipment, where available • Regular maintenance of machinery to ensure it is in good working condition to prevent excessive noise • Installing mufflers and sound barriers • Limiting high noise activities to daytime • Avoiding concurrent high-noise activities • Monitoring and limiting blasting • Avoiding heavy equipment operation near sensitive areas where possible • Using portable noise barriers around high noise equipment • Strategic placement of stockpiles to act as natural noise barriers Operation: • Limiting nighttime snow grooming and maintenance • Using low-noise groomers and snowmobiles where possible
	Light pollution from ski resort	Construction: • Using directional and shielded lighting to avoid unnecessary sky glow • Reducing unnecessary lighting when work is not in progress • Ensuring lights are only operating when needed • Avoiding, where possible, lighting in sensitive wildlife habitat areas Operation: • Following dark-sky guidelines in public and operational areas where able • Limiting nighttime lighting to essential areas only and considering low angle lighting
Soil, Terrain and Geology	Terrain Stability	• Completing geotechnical assessments by qualified engineers during detailed design • During operations, ensuring regular geotechnical inspections are carried out to identify potential instability areas and take corrective action • Monitoring for signs of slope movement • Designing trails and roads to minimize erosion
	Soil erosion and dust	• See fugitive dust emissions mitigations.

Assessment Component	Potential Project Interaction	Example Mitigation Measures
Vegetation and Wetlands	Change in abundance of plant species of interests Change in abundance or conditions of ecological communities of interest Change in wetlands	Construction: • Minimizing Project footprint during detailed design • Minimizing vegetation clearing and grubbing • Reducing and managing potential interactions with vegetation and wetland resources when developing the detailed Project layout • Locating laydown areas in already disturbed areas • Establishing no-work buffers around riparian zones and wetlands and maintaining setback distances to protect sensitive ecosystems • Limiting heavy equipment in sensitive areas • Using elevated boardwalks or bridges if necessary to minimize ground disturbance • Invasive species management – inspecting and cleaning equipment before entering the site to prevent the introduction of invasive species • Avoiding direct discharge of stormwater into the wetland using sediment traps and vegetated buffers if required • Where able, maintaining natural drainage patterns • Where impacts are unavoidable, implementing offset plans • Timing activities in wetlands that contain amphibian egg masses or tadpoles to occur outside the amphibian breeding period Operation: • Implementing industry and standard management processes to reduce the introduction or spread of invasive plant species and noxious weeds • Following BC Riparian Area Protection Regulation and Wetland Guidelines
Wildlife and Wildlife Habitat	Change in habitat availability	Design: • The Project has been deliberately designed to avoid future habitat for reintroduction or reestablishment for owls • The interactions between identified suitable habitat for spotted owl and the five access route alternatives in the lower Anderson catchment area were examined during design

Assessment Component	Potential Project Interaction	Example Mitigation Measures
	Change in movement	• A lowest-impact route was identified (Gilt Creek), and this route has been chosen as the emergency access for the Project to avoid spotted owl habitat • Avoiding extensive use of the lower elevation areas of the Anderson Forest Service Road and the South / Central Anderson catchment has reduced many of the Project-related interactions with the spotted owl Construction and operation: • Conducting vegetation clearing outside of the primary nesting period for migratory birds • Establishing and enforcing speed limits within the Project Area • Prohibiting the feeding or harassment of wildlife • Avoiding using well-used wildlife trails as workspaces
	Change in mortality risk	
Aquatic Resources	Change in surface water quality	• Implementing erosion and sediment control plans • Establishing riparian buffers • Following DFO's Code of Practice, Interim Codes of Practice and Interim Standards for design of crossings • Following requirements and Best Management Practices for Making Changes in and About Stream in BC • Scheduling construction activities occurring near water within the Reduced Risk Timing Windows when or where possible. • Conducting a fish salvage prior to instream works for fish bearing streams. • Controlling fugitive dust emissions • Developing fuel management measures for refueling construction vehicles and equipment
	Change in fish habitat	
	Change in fish mortality risk	
Employment and Economy	Positive interactions with local and regional employment	• Adverse impacts on employment and economy are not anticipated, and even so, the Project would provide information to interested local community organizations on employment opportunities and training, and interested Indigenous groups would be provided support and an increase in their ability to participate in Project activities and training
	Positive changes to local and regional business and economic activity	
	Positive contributions to regional economic output, GDP and government tax revenues	

Assessment Component	Potential Project Interaction	Example Mitigation Measures
Infrastructure and Service	Change to community infrastructure and services Change to transportation infrastructure Change to accommodation availability	• Developing emergency response mitigation measures • Incorporating waste management mitigation measures and policies • Providing onsite and camp based medical services for construction workers to reduce demand on existing health care services • Planning for temporary accommodations to house workers during Project construction • The Project, when operational, will include a firehall, a medical clinic and a search and rescue/ski patrol operation. Other community facilities such as a day care, a community centre and an elementary school will be identified in the resort master plan and built when the demand warrants.
Land Use	Change to tenured land and resource use Change to non-tenured land and resource use	• Notifying identified tenure holders of proposed works • Engaging with local trapline holders and outfitters
Visual	Change to visual quality	• Where possible, following natural contours for slope grading and ski runs • Retaining vegetation buffers along key viewpoints • Where clearing is required, using selective clearing instead of large scale clearing to create a more natural transition between developed areas and forests where possible • Where possible, using earth tone colours and natural materials to match the surrounding areas
Archaeology	Alteration to site archaeological sites Loss of access to archaeological sites	• Having qualified professionals carry out an archaeological impact assessment including ground truthing • Avoiding known archaeological sites during construction activities • Implementing buffer zones around archaeological sites during construction • Implementing a chance find protocol • Providing archaeological awareness training
Human Health	Change to biophysical factors with potential to affect human health Change to mental and social wellbeing	• See mitigations for Atmospheric Environments • Installing wastewater treatment systems to ensure that sewage and waste do not contaminate nearby water resources • Implementing stormwater management plans • Ensuring that first aid and emergency medical services are readily available

The Project will require a number of approvals and permits (**Section 5**), each of which will involve comprehensive consultation and environmental studies. The suite of environmental studies that will be conducted for the Project will be used to understand the potential effects and will inform mitigation design measures and activities. As the Project advances through development, the detailed understanding gained from these studies will allow for the refinement of the mitigation measures. This preliminary summary outlines the initial mitigation approach, which will be further tailored as the environmental assessment progresses and Project design is refined.

The Project's design will be improved throughout the regulatory approval process based on feedback from stakeholders. This will involve making changes to the Project to avoid or minimize environmental impacts, such as refining turbine locations or access roads. To minimize potential impacts on ongoing activities and communities, specific mitigation measures will be implemented. These mitigation measures may include strategies to maintain access for forestry, guiding, recreation and trapping activities, as well as plans to avoid disruptions to these operations. The Project will incorporate measures to manage socio-community interactions, such as providing employment opportunities and maintaining essential community services. Preliminary mitigation measures can be found below in **Table 4-2**.

A comprehensive environmental monitoring program will be established to assess the effectiveness of these mitigation measures. During construction, the owner and contractor's Environmental Monitoring team will conduct regular monitoring. Once the Project is operational, the Proponent's facility management team and qualified environmental professionals will oversee the monitoring program. Regular monitoring results will be submitted to regulatory agencies and Indigenous Nations.

4.3 Potential Cumulative Effects

Cumulative effects are the combined interaction in space and time between the residual effects of the Project and the residual effects of other current and reasonably foreseeable future projects. The assessment of cumulative effects looks to understand the South Anderson Mountain Resort Project in the context of other projects and activities, rather than examining it in isolation.

The cumulative effects assessment considers past, present and reasonably foreseeable projects and activities, including:

- Projects or activities outside the direct zone of influence of the Project that are likely to affect the same VC that the Project interacts with.
- The effects of past and present projects and activities that are expected to continue into the future.
- Activities associated with both reviewable[3] and non-reviewable projects, if those activities are likely to affect the VC cumulatively.

The cumulative effects assessment for the Project examines past, present and future projects that interact with the same VC for the Project. The projects and activities examined are provided below.

[3] Reviewable projects are those triggered by the *BC Environmental Assessment Act* Reviewable Projects Regulation.

The assessment conducted by the Proponent here concludes that, for the past, present and future projects, cumulative effects interactions with the South Anderson Mountain Resort Project are unlikely because, either:

a. There is no interaction in space and time between the projects. Spatial separation or the low likelihood of the other projects advancing avoid interactions.
   - OR -
b. Ongoing or future regulatory processes for the South Anderson Mountain Resort Project, or for the other projects and activities, are expected to avoid or minimize their residual effects such that there is no interaction.

Other projects that were considered in this assessment are:

Coquihalla Pass Resort Development. A 16,672 ha CRA has been issued for a proposed mountain resort in the Highway 5 area immediately north of the Project. First proposed in 2005 by Westscapes as the Juliet Creek All-season Resort Project, this project has been re-located and re-named in response to concerns from Indigenous Nations and the public. The project has an approved Application Information Requirements document in the previous major EA process (2016); however, it has not publicly advanced regulatory approvals since that time. There are currently no project-related documents on the Mountain Resorts Branch's active project list.

Given the approximately 10 years since there was any regulatory approval activity for this potential project and the well-known Indigenous Nation and public concerns about this project it is not considered reasonably foreseeable. If it were to proceed, the project would be subject to review by two provincial branches, during which the interactions between residual effects of the two projects would be examined. At this time there are no expected interactions that need to be examined.

Bridal Veil Mountain Resort Project, and Cascade Skyline Gondola Project. Approximately 70 km southwest of the Project and in the Chipmunk Creek / Popkum watersheds 100 km east of Vancouver. These two commercial recreation projects are close to each other, and expectations are that only one of these very similar projects can reasonably be expected to proceed.

- **Bridal Veil Mountain Resort:** This proposed project is a Sto:lo Nation owned year-round mountain resort for mountain biking, snow sports, hiking and general tourism. The resort would include commercial, retail, hotel and residential accommodation on the 4,360 ha CRA area (in application). The project is expected to be reviewable under BCEAA; however, it has not formally entered the EAO's approval process.
- **Cascade Skyline Gondola Project:** This proposal is for a multi-passenger gondola associated with an eco/cultural tourism facility. The gondola will be based on the current Bridal Falls Golf Course, owned by the Cheam First Nation, who along with the Pelolxw First Nation, are partners in the project. A licence of occupation (330 ha) has been issued for this project. Water and land use applications are in process.

The large distance between these projects suggests an absence of interactions with the South Anderson Project and no potential for cumulative effect.

Highway 5. Highway 5 is a four-lane separated highway providing a connection between Hope and Merrit. The highway opened in the mid-1980s and is owned and operated by MOTT. As discussed above, Highway 5 is proposed to be the main access point for the Project.

The expected environmental interactions between the effects of Highway 5 and the Project are traffic and air quality. Both interactions will be examined in the MRB major projects approval process to achieve a permit required by MOTT for a new access point from Highway 5. These regulatory processes will examine the interactions and develop mitigation to address any effects.

Trans Mountain Expansion. Trans Mountain has recently completed twinning the existing oil and gas pipeline through the Coquihalla Summit area. The existing and new pipelines roughly follow Highway 5. The Trans Mountain Expansion project completed major project effects assessment reviews through federal and provincial agencies, and subsequent permitting. Residual effects of the project were or are being addressed through ongoing mitigation, including compensatory activities to offset effects to parks and protected areas, species at risk and other issues. The spatial separation of the projects is expected to limit their potential for interactions.

Enbridge Sunrise Expansion Program. Westcoast Energy Inc. (Enbridge) is proposing expansions on their existing pipeline to install new pipeline loops, additional compression at select existing compressor stations and new powerlines to support the electric-driven compressors. An application has been filed with the Canadian Energy Regulator, and studies are currently underway. Based on available information the new pipeline loops, powerlines and compression largely appear to be at existing facilities (Othello and Kingsvale compressor stations) and distant from the South Anderson Resort. The closest footprint effects of the Enbridge Sunrise Expansion Project to the South Anderson Project is Othello (near Hope) and Kingsvale (near Merritt). No interacting effects are currently expected.

Forestry. Forestry tenures have been issued for harvesting in the South Anderson Valley. While forest harvesting was more common, the combination of access restrictions (bridge washouts), past harvesting (little remaining harvestable lands) and environmental protections (riparian setbacks, species at risk restrictions) suggests there may be little future forestry harvesting.

Consultation with forestry tenure holders will be necessary as part of the MRB tenure issuance process. Negotiation with existing tenure holders to maintain the potential for their ongoing exercise of forestry activities will be necessary and will ensure potential interactions are addressed.

Otter Lake Wind Power. An investigative licence for the evaluation of the potential for a wind energy project has been issued for 4,112 ha in the Bedded Range, 22 km east of the South Anderson Mountain Resort Project. The two projects are separated by the Thar Peak ridge, Highway 5 and the Mount Henning ridge. Distance, transportation and geographical barriers limit the potential for the two projects to interact. Both projects will be subject to effects assessment and permitting processes.

Recreation. Hiking and backcountry skiing (non-motorized) activities are conducted in the Coquihalla Summit Recreation Area (BC Parks) from various access points on Highway 5. Most of these activities are not expected to interact with the Project because the resort is located on the opposite side of the high elevation ridge separating the two catchments. There is no spatial overlap between the Project and the Coquihalla Summit Recreation Area.

A small interaction between the small number of users that do access or cross the ridge to use Crown land in the South Anderson Valley or look into the valley from the ridge is expected. An increase in recreational access to the Coquihalla Summit Recreation Area may be mediated by the Project access road. This will improve front country access in an area where such access is limited by Highway 5 (few access points and limited ability to cross the highway). On balance, the improved recreational access to the Coquihalla Summit Recreation Area is expected to offset any impacts and no residual effects are expected. A permit for the use of land in the Coquihalla Summit Recreation Area is required for the Project and impacts on the park and recreational users will be examined and addressed through that process.

5 Legislative and Regulatory Context

This section outlines the legislative and regulatory context for the Project in relation to regulatory triggers, anticipated permits and relevant policies and agreements between the Province and Indigenous Nations.

The Spuzzum First Nation is seeking an exemption from the EAO managed environmental assessment process, seeking instead to have the Project's environmental effects management and approvals be reviewed and determined through the numerous permits which, with or without the EA processes, must still be obtained. This section outlines the rationale and benefits of this approach.

5.1 British Columbia Environmental Assessment Act 2018

The BC Environmental Assessment process for major projects provides an integrated process for identifying potential environmental, social, economic, health and cultural effects of a reviewable Project. The Reviewable Projects Regulation [BC Reg. 243/209] of the *Environmental Assessment Act 2018* [S.BC 2018, c.51] (BCEAA) identifies the trigger thresholds for activities and/or facilities that require the issuance of an environmental assessment certificate (EAC) before they can be constructed.

The Project is reviewable and requires an EAC as per the criteria outlined in the Reviewable Project Regulations – Tourist Destination Resort Projects. Under the Project Category "Ski Resorts," the trigger for an environmental assessment is "any new project that is a ski resort development and has ≥ 2,000 bed units."

As provided by s.17 of the BCEAA, projects that meet certain criteria can be considered for an EAC Exemption Order. Exemption Orders are granted only after a reviewable project completes the early stages of environmental assessment and provide a rationale for appropriate environmental protections outside of the BCEAA. After completing the early engagement phase of the environmental assessment process, a project can be exempted by the Minister after having consideration for the purposes noted in s.2 of the BCEAA; specifically:

- Promoting sustainability by protecting the environment and fostering a sound economy by, among other items, coordinating assessments with other ministries and agencies (s.2(2)(i).
- Supporting reconciliation with Indigenous peoples by, among other items, supporting UNDRIP, recognizing Indigenous jurisdiction and the right to participate in decision-making, and acknowledging Indigenous rights affirmed by s.35 of the *Constitution Act* during decision-making (s.2(2)(ii).

Spuzzum First Nation is seeking an exemption on the following grounds, which are consistent with the Ministerial test for exemption decisions and the Exemption Policy direction (EAO 2020):

1. Most of the identified resort area for the Project is already disturbed by industrial logging, including an extensive log sort area where the village would be located. This pre-existing activity has reduced the ecological and landscape value of the Project area such that it is conducive to a low-impact development.
2. Spuzzum First Nation has extensive knowledge of their lands, including the Project area, based on generations of lived experience. This Indigenous knowledge, supplemented by existing and future studies for resort engineering and design and permit application submissions (see **Section 5.2**), provides abundant knowledge of how the resort will interact with the environmental values that remain after the industrial scale logging of the Spuzzum First Nation's traditional territory.

3. Through the MRB approval process and other federal and provincial permitting there are established and formal processes for regulatory review prior to the issuance of conditions of approval to permit construction. A key feature of all these permitting processes is the extensive planning and consultation with Spuzzum's Indigenous neighbours, other communities, relevant government agencies and other interested parties that must be undertaken. This engagement, including consultation to satisfy the Crown's duties under the *Constitution Act* 1982, provides an assurance that the community will be (i) well-informed, (ii) have abundant opportunities to engage in the design and assessment of the Project, and (iii) be involved in decision-making. Already, substantive regulatory and community input has been received and has been incorporated into a design that is more sustainable and performs better.
4. The combination of knowledge of the Project area and the confidence in permit processes providing a robust means of determining the mitigation to avoid, minimize and reduce environmental effects and enhance the benefits means appropriate environmental management is assured. There are standard and accepted mitigation measures available to address Project-related environmental interactions such that novel and unique mitigation measures are unnecessary. Further, the collective permit approval requirements for the Project (see **Section 5.2**) to address all provincial and federal regulators address all the BCEAA Section 25 matters. This includes addressing effects and risk assessment, benefits, accidents and malfunctions, sustainability, greenhouse gas emission reduction, alternatives, effects of the environment on the Project, and disproportionate effects on communities.
5. Finally, the Project offers significant positive benefits to Indigenous Reconciliation and Healthy First Nation Communities in the Fraser Valley. This is consistent with the requirements of the BCEAA (s.2(2)(ii)), and serves to balance any potential negative impacts, which based on work to date, the Spuzzum First Nations believes can be effectively further explored, understood and managed through the MRB and other subsequent environmental approval processes.

5.2 Permits and Approvals

The following permits and authorizations will be required for the Project to proceed to construction and operation.

- ***Environmental Assessment Act* 2018, Environmental Assessment Certificate.** The Project exceeds thresholds for Tourist Destination Resort Projects as listed in the Reviewable Projects Regulation because it is planned to offer more than 2,000 bed nights. An exemption from certification (s.17 of the Act) per the rationale presented in **Section 5.1** is proposed as the Project meets the criteria.
- **Land Use Operational Policy All-season Resorts.** The MRB manages a staged process for major resorts to achieve their provincial permit needs, particularly the tenure under the *Land Act*. The Project will follow the EOI (complete), Formal Proposal and Master Plan process to plan and develop the Project. Through this process, the economic, heritage, ecological and engineering feasibility of the Project is explored. Studies necessary to complete the MRB process include those related to geotechnical, risk assessment, climate change, engineering and landscape design, water quality and quantity, land use (Crown land tenure), fisheries and wildlife, and economic feasibility.

- ***Fisheries Act* notification (letter of advice) or Authorization.** The determination of the potential for a Harmful Alteration Disruption or Destruction of fish or fish habitat is conducted by the Department of Fisheries and Oceans (DFO). Studies to understand the impacts on fish (presence and abundance) and fish habitat (distribution and value plus water quality and quantity) will be conducted to develop mitigation to avoid, minimize or offset the impacts to aquatic and fish values. This rigorous process is required prior to construction to achieve approval and will be overseen and monitored by the DFO.
- ***Canadian Navigable Waters Act* notification** (if the Project infrastructure is classified in the Minor Works Order) or approval.
- ***Environmental Management Act* Waste Discharge Authorizations** for air, effluent, fuel storage, sewage and other required operational permit requirements.
- ***Forest Act* Special Use Permit** or Occupant Licence to Cut for harvest of trees. This provides assurance that the value in timber is properly compensated to the tenure holder or to government.
- ***Heritage Conservation Act* Heritage Inspection Permit or Site Alteration Permit** if required for intrusive investigations or the management of a heritage site. An archaeological overview assessment for the Project area has been completed, and an impact assessment is planned. The Spuzzum First Nation have deep heritage in the Project area, with abundant evidence of historical occupation known. Spuzzum management of its heritage resources, with the support of the Archaeology Branch, provides assurance of site protection.
- ***Water Sustainability Act* Change Approval or Notification** for the diversion and use of ground or surface water. Temporary use permits may also be necessary for the construction period. The provisions of the Dam Safety Regulation (design and monitoring) may need to be addressed. The provisions in this act catalyzed the ongoing hydrology studies, which will continue as the engineering design for the overall Project advances. Long-term studies to understand fish presence, water volumes, seasonal discharges and river rating curves, and environmental flow needs will continue / be conducted to achieve environmental performance standards for compliance with this act.
- **BC Parks impact assessment** (Park Use Permit under the Park Act) for permission to occupy land in Coquihalla Summit Recreation Area. The alternatives assessment for road access determined that on balance the access route via Highway 5 was the lower impact one, regardless that it intersected with a provincial park. By avoiding future spotted owl habitat and challenging and costly engineering design, an intersect with the provincial park became necessary. Such impacts will be reduced through use (i.e., re-opening) of existing historical roadways that were developed prior to the gazetting of the park, and through an access tunnel under the park. Park Use permit applications require adherence to the BC Parks impact assessment process.
- ***Local Government Act*.** Building permits for compliance with bylaws (usually conducted prior to construction and after major permits are obtained.
- ***Health Act***. Permits for the management of potable water and eventually commercial food supply.
- ***Transport Act***. Permit for the addition of an access / egress from a provincial highway.

Mitigation actions and planning will be necessary for compliance with legislation that, regardless that there are no permits to be issued, must be complied with. This includes for values protected by the *Species at Risk Act*, *Wildlife Act, Migratory Birds Convention Act* and *Workers Compensation Act*. Such compliance provides additional environmental protection measures.

We anticipate that the EA exemption process will run concurrent with the Formal Proposal portion of the MRB review process, up to and including Exemption Order decision, after which the MRB process would continue and EAO staff would conduct post-exemption coordination and monitoring.

5.3 Policies, Strategies and Guidelines

The following section outlines policies, strategies, guidelines and agreements that the government of Canada or BC have implemented or are party to, and in which the Project is in alignment with either directly or indirectly.

Spuzzum First Nation 5 - Year Economic Development Plan

The 5 - Year Economic Development Plan (SFN 2022) guides the Spuzzum First Nation Council to pursue opportunities that make best use of Spuzzum human, land and financial resources – and communicate this overall economic vision for the community and potential stakeholders.

The Plan, drawn from industry sector feasibility studies, Council workshops and community meetings, serves as our implementation guide for the Spuzzum economy. Succinctly, our vision is to create sustainable wealth and employment, all the while strengthening our culture and protecting the precious environment of our traditional territory. Our major commercially oriented economic sectors are natural resources and tourism sectors. The Economic Development Plan highlighted this mountain resort as the priority Project for the community and Council.

Spuzzum First Nation Community Development Plan

The Spuzzum First Nation (SFN) Community Development Plan (CDP) (SFN 2021) outlines a roadmap with goals and guidelines, which aim to lead to a healthy and sustainable future for the entire Nation. Key points from the CDP relevant to the Project include aiming to retain and attract community members by addressing barriers such as the lack of economic and employment opportunities, which have prevented individuals from returning to live in Spuzzum. Development goals focus on economic growth, using natural resources and supporting employment, social development and recreation. Additionally, cultural priorities include educating children about heritage and creating awareness of traditional practices to preserve and promote the community's culture.

Spuzzum First Nation Land Use Analysis

The SFN Land Use Analysis published in 2017 (SFN 2017) defines a roadmap for future land use opportunities that will help in achieving the goals set out in the SFN CDP. The Land Use Analysis is limited to reserve lands but recognizes that natural systems, water courses, wildlife and the historic use of these land have no boundaries. Potential land uses identified in the Land Use Analysis are as follows: commercial (small scale), tourism, recreation, commercial (destination resort), resource use (e.g. forestry, plant harvesting, agriculture, fishing, nursery), community services, parks and residential. The Spuzzum Comprehensive Community Plan (Spuzzum 2021) sets out the vision and objectives for management on reserve lands (for more details, see **Section 2.6.1**).

All Seasons Resort Policy

The Land Use Operational Policy for All-Seasons Resorts applies to all-seasons resorts development projects that take place on Crown land in BC, including Alpine Ski Resorts. The All-Seasons Resort Guidelines and Best Management Practices will be used by the Proponent to assist in the process of planning and evaluating the Project. The vision of the policy is to develop BC as a world-class All-Seasons

Resort destination. The operating principle of the policy is "Sustainable land use that commits to environmental stewardship and consideration of climate change impacts," and the operating goals of the policy are as follows:

1. Maintain and enhance BC's competitive edge in resort development and expansion.
2. Provide enhanced business certainty and security.
3. Promote new investment, economic generation and jobs.
4. Minimize conflict between competing land uses.
5. Promote sustainable land use that commits to social responsibility and environmental stewardship and the consideration of climate change impacts.
6. Promote Indigenous tourism/resort development opportunities.
7. Ensure an efficient and coordinated approval process with clear, well defined and timely decision making.
8. Meet changing market and business conditions in a competitive international marketplace.
9. Promote diversification and four season use.

The Project integrates sustainable development practices, economic growth, Indigenous ownership and partnership, while maintaining BC's competitive edge in global tourism. The Project has been designed to achieve these goals with approaches to minimize land and water uses and avoid sensitive areas, and Indigenous ownership being at the forefront. The Project balances impacts with benefits. For more details on Project avoidance measures, see **Section 6.2**.

Fraser Valley Future 2050 – Regional Growth Strategy

Fraser Valley Regional District Bylaw No. 1706, 2023 – Regional Growth Strategy (RGS) coordinates regional development across various sectors, fostering sustainable communities through collaboration between local, provincial and Indigenous governments. It serves as a long-term vision and decision-making framework, updated to reflect changing demographics and priorities, ensuring a unified regional future. Key themes of the RGS in which the Project aligns with include:

- Collaboration – Achieve common goals for the future of the region by encouraging collaboration between jurisdictions, cultures and neighbours through building and strengthening relationships with Indigenous communities and governments, recognizing and supporting their initiatives and developing services that mutually benefit and support communities across the region. Promotes collaboration with local, Indigenous and provincial governments, along with stakeholders, to develop services that mutually benefit and support communities across the region. Collaboration also includes recognizing the importance of private sectors in regional development.
- Economic Strength and Resiliency – To realize the region's economic potential by providing opportunities in employment and education that will grow the economy by building on the region's strengths through providing jobs in fields that encourage younger generations to stay in the Fraser Valley, supporting employment initiatives in rural and Indigenous communities, promoting mixed-use development for increased accessibility, ensuring equal access to employment for Indigenous peoples, and supporting local ecotourism initiatives.

- Community Building – The RGS promotes sustainable, regionally-scaled resort development by ensuring resort development proposals involve meaningful engagement, collaboration or partnership with Indigenous communities, meeting the standard of free, prior and informed consent. It also supports compact, complete resort development that meets the needs of both visitors and residents, minimizes ecological and cultural impacts, protects the surrounding environment's scale and character, and adheres to high energy efficiency standards.
- Ecosystem health – To protect the air, water and biodiversity on which we depend through monitoring, studying and protecting air quality, watershed health and biodiversity.
- Climate Change – To mitigate the region's impact on global climate change and adapt to the impacts of climate change on the region by considering the impacts of GHG emissions.

By fostering collaboration with Indigenous communities, local governments and stakeholders to ensure mutual benefits for the region, the Project aligns with key themes in the FVRD RGS. The Project supports economic strength and resiliency by creating job opportunities, promoting local eco-tourism and encouraging development that aligns with the region's growth priorities.

Climate Change Commitments

Canada is committed to a number of climate change initiatives, including the 2030 Emissions Reduction Plan, the A Healthy Environment and a Healthy Economy Plan, and the 2016 Pan-Canadian Framework on Clean Energy Growth and Climate Change. Together, these plans and frameworks aim to achieve Canada's 2030 Paris Agreement emissions reduction target (ECCC 2022).

- The 2030 Emissions Reduction Plan roadmap outlines a sector-by-sector path for Canada to reach its emissions target of 40-45% below 2005 levels by 2030 and net-zero emissions by 2050.
- The A Healthy Environment and a Healthy Economy plan launched in 2020 contains new or strengthened federal policies, programs and investments to cut carbon emissions.
- The 2016 Pan-Canadian Framework on Clean Growth and Climate Change was Canada's first-ever national climate plan, developed in collaboration with provinces and territories and with input from Indigenous peoples.

The Project will consider the use of low carbon technologies, energy-efficient infrastructure and sustainable transportation solutions. Potential strategies may include exploring the use of high-efficiency snowmaking systems and renewable energy sources and facilitating public transit and electric vehicle charging infrastructure.

To support initial operations, the Project will use diesel generators as an interim measure while assessing alternative energy options as they become viable. The Project will also explore opportunities to enhance energy efficiency and reduce emissions where feasible.

Environment and Climate Change Canada – Sustainability Development Strategy (2022 – 2026)

The 2022 to 2026 Federal Sustainability Development Strategy (*Federal Sustainability Act* [S.C. 2008, c.33]) outlines Canada's commitments to building a sustainable future by addressing climate change, conserving biodiversity and promoting resource-efficient, low carbon economic development (ECCC 2022a). The strategy was developed under and is consistent with the 17 Sustainable Development Goals of the United Nations 2030 Agenda for Sustainable Development. The strategy focuses on reducing greenhouse gas emissions, protecting nature, building resilience to climate impacts and ensuring sustainable practices

across federal operations and procurement. Relevant themes of the strategy in which the Project aligns include:

- Biodiversity and Habitat Conservation: Minimizing environmental impacts and protecting biodiversity in areas development occurs, including ensuring construction doesn't affect water sources and mitigation and management of wastewater.
- Indigenous Engagement and Partnerships: Promoting collaboration with Indigenous communities to ensure development respects traditional land and knowledge.
- Poverty Reduction: Reducing poverty rate by 50% from its 2015 level by 2030.
- Support Mental Health and Adopt Healthy Behaviours: Maintaining healthy lives and promoting the well-being of Canadians. The Project promotes outdoor recreation, in turn promoting physical activity and healthy behaviours.
- Encouraging inclusive and sustainable economic growth in Canada and promoting knowledge and skills for sustainable development.

The Project fosters Indigenous partnership, supports local economic growth, creates job opportunities and encourages outdoor recreation to promote physical and mental well-being. The Project will seek to minimize environmental impacts and preserve biodiversity through the implementation of mitigation measures, construction environmental management plans and operational environmental management plans.

Environmental Mitigation Policy for BC

BC's environmental mitigation policies are designed to minimize the environmental impacts of development projects. These policies focus on avoiding, minimizing or compensating for negative impacts on ecosystems, wildlife and natural resources. They are implemented through environmental assessments, permitting requirements and guidelines for managing ecological impacts.

Water Quality Guidelines

The BC Water Quality Guidelines are used to: protect aquatic life, wildlife and their habitats; protect water values; provide the basis for the evaluation of ambient water quality and environmental impact assessments to inform resource management decisions such as wastewater discharge limits and provide the basis for water quality objectives; and report to the public on the state of water quality and promote water stewardship (Gov of BC 2025).

These guidelines, along with the *Water Sustainability Act* and BC Best Management practices, will be used to inform any water quality assessments, provide a basis for water quality objectives and report on the state of water quality.

6 Indigenous Nation Interests

Spuzzum has engaged our Indigenous neighbours in developing the proposed Project to date. We also recognize that the Province has a duty to consult First Nations and, where appropriate, accommodate in situations where a proposed decision may adversely impact asserted or established Indigenous rights. This includes engagement with Spuzzum First Nation.

This section describes Identified Indigenous Groups that may have an interest in the Project, potential Project interactions and the Proponent's understanding of their interests based on engagement to date.

6.1 Identified Indigenous Groups

Nearby Indigenous communities include the Nlaka'pamux Nation communities, Sto:lo Nation communities and Okanagan Nation communities as well as independent First Nations (Ashcroft, Boston Bar, Cooks Ferry, Kanaka Bar, Lower Nicola, Lytton, Nicomen and Siska). In total, 22 First Nations and/or Tribal Councils have consultative areas overlapping the South Anderson EOI area, as outlined by the Province of BC – Consultative Area Database, as summarized in **Table 6-1**.

Table 6-1 Identified Indigenous Groups

Indigenous Group	Relevant Agreements	Proximity to Project
Nlaka'pamux Linguistic Nations:		
Spuzzum First Nation		Proponent
Scw'exmx Tribal Council (STC) Nations:		Merritt, BC
Coldwater Indian Band	See above	Merritt, BC
Nooaitch Indian Band	See above	Merritt, BC
Shackan Indian Band	See above	Merritt, BC
Nlaka'pamux Nation Tribal Council (NNTC) Nations:	Nlaka'pamux Nation Tribal Council Land and Resource Decision Making Agreement Nlaka'pamux Nation Tribal Council Political Accord on Advancing Recognition, Reconciliation, and Implementation of Title and Rights	Lytton, BC
Boothroyd Indian Band	See above	Boston Bar, BC
Lytton First Nation	See above	Lytton, BC
Oregon Jack Creek Indian Band	See above	Ashcroft, BC
Skuppah Indian Band	See above	Lytton, BC
Independent Nations:		
Ashcroft Indian Band		Ashcroft, BC
Boston Bar First Nation	Economic and Community Development Agreement Boston Bar First Nations Clean Energy Business Fund Revenue Sharing Agreement Boston Bar Forest Consultation and Revenue Sharing Agreement	Boston Bar, BC
Cook's Ferry Indian Band		Spences Bridge, BC

Indigenous Group	Relevant Agreements	Proximity to Project
Kanaka Bar		Lytton, BC
Lower Nicola Indian Band		Merritt, BC
Nicomen Indian Band	Nicomen First Nations Clean Energy Business Fund Revenue Sharing Agreement Nicomen Interim Forestry Agreement	Lytton, BC
Siska First Nation	Siska Band Forest Consultation and Revenue Sharing Agreement	Lytton, BC
Sto:lo Nations:		
Sto:lo Nation		Chilliwack, BC
Popkum First Nation		Rosedale, BC
Yale First Nation	BC C-62: Yale First Nation Final Agreement Act Yale Forest Consultation and Revenue Sharing Agreement S'ólh Téméxw Stewardship Alliance SEA	Hope, BC
Sto:lo Tribal Council		Agassiz, BC
Chawathil First Nation		Hope, BC
Peters First Nation		Hope, BC
Okanagan Nations:		
Okanagan Indian Band		Vernon, BC

6.2 Potential Project Interactions

Preliminary analysis and discussions indicate that the Project has the potential to interact with Indigenous hunting, fishing and gathering practices, as well as heritage values, cultural practices and recreation. Design of the Project has incorporated input from Indigenous Nations, including the Spuzzum, to avoid areas with archaeological sites and higher ecological values such as old forests, riparian buffer areas and watercourses, and to efficiently use the land and resources through sensitive land and water use practices.

The Project also will generate economic development and jobs for Spuzzum First Nation community members and other First Nations, which has the potential to positively affect Indigenous health and well-being.

Spuzzum First Nation, the Proponent, will engage with participating First Nations to understand and assess these interactions and others that may be defined as part of engagement on this IPD.

6.3 Engagement and Consultation with Indigenous Nations

The Proponent began engagement with Indigenous Nations in 2021 with the goal of sharing early information about the Project with the Spuzzum First Nation community and neighbouring Indigenous Nations. Feedback informed the development of the IPD and Engagement Plan to align with Indigenous Nations' interests.

Engagement and outreach activities to date included:

- Four community meetings with Spuzzum First Nation community members
- One-to-one meetings and correspondence with leadership from Spuzzum's Indigenous neighbours

- Two letters of preliminary support to further pursue Project feasibility (Boston Bar First Nation and Yale First Nation)
- Formal referral letter from MRB as part of the EOI review (sent October 25, 2023) to all First Nations with overlapping interests as defined by the Province's Consultative Database; and follow-up letter on May 7, 2024
- One written letter of opposition through the MRB's engagement during the EOI phase
- One meeting with neighbouring First Nations to review the draft Project overview, planned engagement, and discuss Spuzzum First Nation's intent to seek an EA exemption (April 24, 2025)

Table 6-2 summarizes Indigenous group feedback to-date.

Table 6-2 Key Interests and Concerns or Questions Raised by Indigenous Nations

Theme	Potential Issue or Concern Raised	Response/Action
Project support	Leadership from several First Nations have expressed support for the Project feasibility, subject to community members' feedback and additional analysis.	The Proponent will continue to engage as Project planning and environmental reviews continue.
Project opposition	One Indigenous group has expressed opposition to the Project but did not provide details as to the rationale for its opposition.	As a First Nation, the Proponent asserts its rights to the proposed Project area lands. Without rationale for the expressed opposition, we have been unable to consider Project changes as of yet. The Proponent is committed to continuing to engage with other Indigenous Nations as Project planning continues and looks forward to learning more about potential concerns with a view to identifying creative solutions.
Environmental studies	General interest in informing environmental studies, including sharing Traditional Knowledge and participating in data collection, etc.	The Proponent will continue to engage as Project planning and environmental reviews continue.
Hunting, fishing and gathering	The Project has the potential to affect current and traditional practices.	The Proponent will continue to engage as Project planning and environmental reviews continue, with intent to avoid these areas.
Cultural practices	The Project has the potential to affect Indigenous cultural practices.	The Proponent will continue to engage as Project planning and environmental reviews continue, with intent to avoid negative impacts to cultural practices and to create opportunities to share Indigenous knowledge and cultural practices with others as a key component of the Project.
Economic opportunities	General interest in employment and participation in procurement opportunities	The Proponent will seek preferential opportunities for employment and will invite Indigenous businesses to participate in bidding opportunities. This aspect is a key rationale for the Spuzzum First Nation to support the Project.

During the EA process, the Proponent will continue to engage with Indigenous Nations, in line with our understanding of Indigenous Nations' priorities, governance mechanisms, connection to the land and interests in the Project area, as well as the Province's Guide to Consensus-Seeking under the EA (2018) and the Early Engagement Policy (2024). The draft EA Engagement Plan (available under separate cover) provides further details.

7 Government, Public and Stakeholder Interests

Since 2023, through the MRB EOI process, the Proponent has identified and engaged with a variety of governments, interest holders and members of the public.

7.1 Identified Stakeholders

Table 7-1 summarizes the list of identified governments, interest holders and members of the public. The Proponent anticipates that this list will grow as Project planning continues and more people become engaged in the review process. Given their role as process leaders, the EAO and MRB are not listed here.

Table 7-1 Identified governments, interest holders and public groups

Government organizations	Interest holders	Public
• MOTT, South Coast Region • MOTT, Southern Interior Region • Ministry of Water, Land and Resource Stewardship • Ministry of Forests • BC Parks • Ministry of Environment and Climate Change Strategy • Ministry of Mining and Critical Materials • Environment and Climate Change Canada • Fraser Valley Regional District • District of Hope	• BC Hydro • Western Canada Timber Products (WCTP) • Trans Mountain	• Federation of Mountain Clubs of BC • Other mountain resort owners • Skiing enthusiasts • Back country enthusiasts • Day tourists • Weekend and extended-stay tourists • Potential Project partners • Potential suppliers and contractors • Future Project employees • Travelling public on Highway 1 and Highway 5

During the EA process, the Proponent will continue to engage with these groups, in line with our understanding of their interests, rights and role in regulatory approvals, as well as the Province's Guide to Consensus-Seeking under the EA (2018) and the Early Engagement Policy (2024). The draft EA Engagement Plan (available under separate cover) provides further details.

7.2 Potential Project Interactions

Preliminary analysis and discussions indicate that the Project has the potential to interact with existing recreation in the Project area while also providing new opportunities for year-round recreation and related health benefits for a significantly larger population of users.

The Project also will generate a marginal increase in traffic volumes along Highway 5 and related travel times and GHGs along these routes. Construction of the emergency access route to Highway 1 also creates a new outlet for traffic in the event that forest fires or floods cause temporary closures/detours on Highway 5.

The Project has the potential to affect access by existing tenure holders (currently two) in the Project area.

The Project also will require servicing, necessitating review, approval and agreements with numerous government entities. Additionally, Project construction and operation will create jobs and procurement opportunities for public businesses and may result in increases/changes in BC tourism.

The Proponent will engage with these parties to understand and assess these interactions and others that may be defined as part of engagement on this IPD.

7.3 Engagement and Consultation with Governments, the Public and Other Stakeholders

Table 7-2 summarizes the list of identified governments, interest holders and members of the public. The Proponent anticipates that this list will grow as Project planning continues and more people become engaged in the review process. Given their role as process leaders, the EAO and MRB are not listed here.

Table 7-2 Key Interests and Concerns or Questions Raised Through Engagement and Consultation (Governments, Public and Other Stakeholders)

Theme	Potential Issue or Concern Raised	Response/Action
Road access	A new access road is required to serve the site and capacity of existing highways is constrained	The Proponent is committed to working with MOTT (Interior and Coast regions) and MRB to further explore access
Spotted owl habitat	Protection/avoidance of this habitat is requested	The Proponent has adjusted access plans to incorporate Highway 5 as the main access point; Highway 1 will only be used as a temporary access route during construction and as an emergency access route only during operation
Archaeology resources	Potential for archaeological finds	As a First Nation that has existed in this area for millennia, the Proponent has deep knowledge of our history and culture; additionally, the Project team includes a First Nations' archaeology consultant Preliminary assessment of the proposed access road corridor is complete and additional fieldwork is planned
Back country recreation	Impacts to existing established trails	The Proponent plans to invite representatives from backcountry organizations to discuss current uses, share information about Spuzzum First Nations' asserted interests and discuss opportunities to collaborate as planning continues
Powering the Project	Lack of existing electricity source	The Proponent has initiated discussions with BC Hydro and will continue to seek alternative sources of power
Overlap with other tenures	Impact to existing mineral tenures	Should the Project proceed to the next phase of the MRB process, the Proponent will engage with other tenure holders to discuss opportunities for shared use or disposition; Discussions with road tenure holders have started
Permits and licenses	Need to obtain all water and other licences prior to starting construction	The Proponent will work with permitting agencies and will continue to conduct studies and analysis and secure all required permits
Coordination with local and regional governments	Governance structure, servicing agreements and zoning approvals	The Proponent will collaborate with MRB, provincial agencies and FVRD to understand governance options, then develop a proposed preliminary model and risk assessment in the Formal Proposal stage; The Proponent only supports governance options that have an Indigenous interest, to ensure our values are appropriately reflected
Effects of climate change	Concern about long-term viability of skiing as a recreational activity	The proposed Project is an all-season resort, with a vertical higher than that of Whistler/Blackcomb; Should climate conditions change, the variety of recreational activities will be adjusted so that all-season use can continue

Theme	Potential Issue or Concern Raised	Response/Action
Financial feasibility	Questions about the feasibility of the Project, given the amount of new infrastructure required	The Proponent is aware of the financial risks and remains committed to ongoing planning, with a full business case to be developed as part of the Formal Proposal to MRB and subsequent Master Plan development
Impact on other mountain resorts	The Project has the potential to alter (positively or negatively) use of other mountains and affect the associated financial returns for owners of these resorts	The Proponent will work collaboratively with BC Parks to understand current use of this area and engage with interested groups that use this area; Market analysis of potential impacts to other resorts and parks will be conducted in preparing a Formal Proposal as a future step in the MRB approval process
Opinions about the Project	Support for and opposition to the Project as proposed	Support is noted and appreciated, and opposition is noted; The Proponent will continue to develop the Project, considering potential environmental and economic feasibility

8 Public and Environmental Safety

The potential for an accident or malfunction related to the Project to affect public safety and or the environment is managed through a variety of legislative requirements. In addition to legislative requirements, the land tenure issued to the Project allows the Project owner to put safety restrictions in place and enforce compliance with such restrictions through the issuance of access tickets that clearly define the users' rights and responsibilities.

Key in safety management is the identification of potential effects and related mitigation with a process to address risks. For this Project, the design of and plans for its operation will include:

- Compliance with design standards (Canadian Standards Association, Engineers and Geoscientists BC, *Professional Governance Act*, Canadian Ski Association)
- Adherence to safety planning (Canadian Ski Association, *Workers Compensation Act*)
- Compliance with operational health and safety (*BC Health Act*, *Workers Compensation Act*)

Safe design and construction of infrastructure is provided by a multi-phase process where the proposed design is peer reviewed, and in the case of high-risk structures, independently checked. Design standards for elements of the design are provided in various national (Canadian Standards Association) or provincial (Engineers and Geoscientists BC) guidance documents. Construction progress is regularly checked for compliance with the design, and the as-built structure is checked before completion.

Worker safety in construction and operations in BC is managed through mandatory requirements for compliance with the *Workers Compensation Act*. Among other purposes, this Act addresses:

- The rights and responsibilities of employers and workers with respect to occupational health and safety
- The setting and enforcing of occupational health and safety regulations and standards, and inspecting workplaces, issuing orders and imposing penalties

Project owners must provide a safe environment, and the CRA / land tenure issued allows owners to provide restrictions on activities to provide for visitor safety and environmental protection. The following potential accidents and malfunctions with mitigation management tools have been identified. As the Project design advances, these and other risks will continue to be evaluated and assessed, and mitigation will be designed.

- Geotechnical risk (Engineers and Geoscientists BC design standards)
- Avalanche safety (Canadian Avalanche Association)
- Building, structure and infrastructure safety (*Professional Governance Act*, Engineers and Geoscientists BC design standards, Canadian Standards Association design standards, Ministry of Transportation and Transit design standards)
- Public health and the provision of potable water and sanitation (*Health Act* permits)
- Visitor safety (*Workers Compensation Act* and Canadian Ski Association) legislative requirements and guidance
- Spills and hazardous material transport and storage (*Environmental Management Act* and the Hazardous Waste Regulation)

9 Effects of the Environment on the Project

9.1 Climate Change

Climate changes that affect the environment and the landscape require that proposed projects are designed to be resilient to climate induced stresses. The Project design and location takes advantage of natural conditions, for example the long and reliable snowpacks (for winter snow sports) and available ground and surface water supplies. The Project's all-season design plan provides a climate-resilient design that accommodates summer and winter activities and locates much of the resort village in an existing area that has been recently clear-cut by forestry harvesting.

Resilience to and adaptability for climate induced changes will be further factored into design and construction of the Project to meet possible future stresses. Climate scenarios for the region predict:

- More extreme and frequent storm events, particularly unpredictable precipitation (e.g., flooding, heavy snowfall)
- Longer and hotter spring and summer seasons, including extreme temperatures and lower precipitation (i.e., prolonged drought)
- Shorter and warmer winter seasons
- More frequent and intense wildfires induced by the above climate changes

Resiliency to these scenarios will be designed into the Project using engineering design standards for roads and culverts (BC Ministry of Forests and Engineers and Geoscientists BC design standards). Resort buildings and infrastructure will be setback from the forest for wildfire resiliency, and water supply predictions are being tested with ongoing field-based hydrology studies, with hydrogeological studies planned for the future to test groundwater availability. Artificial snowmaking to increase the reliability of the snow sport season is expected to be necessary for the Project.

9.2 Natural Hazards

Design and construction of the Project will meet the required standards for geotechnical and, where applicable, seismic risk mitigation as required by BC Building Code and applicable parts of Canadian Standards Association CAN/CSA-c61400. In addition to these requirements, the design and construction of the Project will be assured through:

- The mandatory involvement of BC registered engineers and geoscientists and their obligations for standards of care under the *Professional Governance Act*. This includes design and independent signoff, field checks or construction, and final sign-off of the as-built Project.
- Financing for the Project requiring proof of standards of care for design and construction.
- Engagement of an Independent Engineer to review and sign off on the overall design and construction schedule for the Project to ensure that it meets public and environmental safety requirements, as well as any design constraints imposed by the provincial authorizations.

Assurances provided by these standards and other legislation provide a robust means of managing the natural geoscience risks such as those from terrain, substrate competence and seismicity.

Geohazards and risks review corresponds to mainly mass movement processes, which are described further below:

- Snow Movements: A snow avalanche is a volume of snow that moves downslope under the effect of gravity. Avalanches may also contain rock, broken trees, soil or ice in addition to snow.
- Soil and Rock Mass Movements:
- Rockfalls: Small scale and typically frequent material accumulating in the slope downslope of the rocky outcrop.
- Landslides: Instabilities in slopes that are initiated by triggers such as a significant seismic event or initiation in slopes already on the verge of movement by rainfall, snowmelt, changes in groundwater level, stream erosion, changes in groundwater quality, earthquakes, volcanic activity, disturbance by human activities or any combination of these factors.
- Debris flow: Debris fluidified generally by water with downward sloping movements, which generally occur in existing canals or streams forming discharge fans, although open slope flows may occur. More frequent during periods of thaw and heavy rains. The behaviour and associated deposits of debris flows vary due to the nature of the entrained material in the water content. When caused by melting snow influencing the natural slope and dragging debris within the avalanche material, it is called an avalanche of wet snow.

Glacial Moraine: These deposits consist of thick loose material that may create foundation problems that can create shear strength, settlement and permeability concerns.

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