



**BRITISH COLUMBIA MINING BACKGROUND REPORT
PREPARED FOR THE WILBURFORCE FOUNDATION 2012**



ENVIRONMENTAL MINING EDUCATION FOUNDATION

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EMEF

The Environmental Mining Education Foundation (EMEF) provides values based, credible technical and strategic guidance to communities, First Nation Leadership groups and political decision-makers with the intention of building capacity to make informed land-use decisions that foster healthy sustainable communities and ecosystems.

We are a charitable foundation who partners with our clients to build their knowledge of mining impacts and benefits so they can fully participate in fair land-use decision making processes that affect their future. We assist communities with reaching their intended outcomes, we don't advocate for a particular outcome.

Preface

The authors would like to thank all of the individuals and organizations that shared information, stories and knowledge about mining in BC. We acknowledge that we have failed to speak with everyone. Most importantly we have been unable to connect with some of the communities and Nations within whose territory these projects lie. The intention of this report is simply to compile information, not to argue for a particular outcome. We acknowledge that much work remains to be done.

This report is intended to provide background information for the Wilburforce Foundation. We hope it will assist staff in more fully understanding the current situation in BC and support initiatives leading to a sustainable future. There is much to add, including more voices and regions. We believe this is a strong starting point.

Executive Summary

British Columbia holds tremendous wilderness and mineral wealth. Finding an equitable balance between environmental conservation and economic development of mineral resources is very challenging in BC. A depressed forestry economy, the need for employment in rural communities and the opportunities that mineral exploration and development create currently outweigh long-term sustainability concerns. Exploration expenditures in BC reached record highs in 2011. The current provincial government has made mine development a central policy initiative. The acts governing mining and mineral tenure need desperate reform to mirror the values of present day society. Currently, the federal government is actively dismantling the very agencies needed to properly evaluate the proposed projects.

Areas of BC, specifically the northwest, have many large-scale mine developments proposed within key wilderness areas and watersheds. Many of the projects are on a massive scale. The cumulative impacts of mining projects, in conjunction with the development of other resources in the region (run-of-the-river power, power line construction, pipelines, coal-bed methane etc.) need to be fully evaluated.

Background: Understanding Canada's political landscape

Federal Jurisdictions

Canada is governed by both a constitutional monarchy and a democratically elected parliament. The Queen of Britain is referred to as Canada's official *Head of State*. Thus in reference to land or matters held by, or administered by the government the word "Crown" is often used. In Canada, the designation "Crown Land" refers to the land that is held in the public trust. The vast majority of the Canadian landmass falls into this category.

In practice, there is little royal "interference" in Canada's day-to-day government. A largely ceremonial *Governor General of Canada* represents the Queen in Canada.

A House of Commons, made up of three hundred and eight Members of Parliament, federally governs Canada. Each Member of Parliament (MP) represents a defined electoral district and is elected to represent their respective riding. The political party with the greatest number of elected MPs forms the governing party with their elected party leader becoming Prime Minister.

The political party with the second most elected MPs is considered the official Opposition Party of Canada.

The House of Commons votes on federal legislation and governance issues; if legislation it is passed to the Senate for final approval. The Senate comprises one hundred and five Senators who are appointed to their positions until mandatory retirement at age seventy-five.

There are five mainstream political parties in Canada:

- The Conservative Party of Canada (the current governing party)
- The New Democratic Party of Canada (the current official opposition)
- The Liberal Party of Canada
- Bloc Quebecois
- The Green Party of Canada (recently won their first seat in parliament)

Elections must be held at minimum every four years, but can also be held sooner if either the ruling party declares an election, or if the ruling party fails to survive a confidence vote in parliament. After many years of Liberal governance, the Conservative Party came to power in 2006, with a minority government in both 2006 and 2008. In

2011, the Conservative Party obtained its first majority government. Currently the Conservative Party holds a strong majority in the House of Commons (165 of 308 seats) and in the Senate (61 of 105) thus the party is able to introduce many aggressive pro-development reforms, virtually unchecked.

The Conservative Party attempted to introduce pro-development reforms prior to 2011 but was unsuccessful due to a lack of parliamentary support. Currently, the Liberal Party is in disarray and suffered a stunning defeat in the 2011 elections. The New Democratic Party (NDP) surprised many by becoming the official Opposition in 2011, then tragically lost their charismatic leader, Jack Layton, to illness shortly after the election.

The Green Party of Canada invested a tremendous amount of resources to win its first seat in parliament in 2011, but fails to hold enough seats to be a strong voice within the House of Commons.

The Conservative Party is openly supportive of many industrial projects in Canada (including the Keystone XL and Enbridge pipelines) and has aggressively sought to reform environmental policies in the name of economic progress. Under the current government, Canada withdrew from the Kyoto Protocol and has sought to undermine international climate change treaties and initiatives.

Provincial Jurisdictions

Canada encompasses ten provinces and three territories. An independently elected Legislative Assembly governs each of these formal regions. The Provincial Legislatures operate similarly to the Federal House of Commons. The leader of the party with the most seats in the provincial legislature becomes the Premier of the province. Currently Christy Clark is the unelected premier of BC. She assumed the role after her predecessor Gordon Campbell resigned in late 2010 following unprecedented low approval ratings and public backlash to a tax program (the HST, harmonized sales tax) his government introduced.

BC currently has three major political parties:

- The BC Liberal Party (current governing party with a majority)
- The New Democratic Party of BC (Opposition Party)
- The Green Party of BC

It is important to note that the BC Liberal Party and the federal Liberal Party of Canada are not related and do not share the same ideology. In fact, the Liberal Party of BC likens itself to the ideology of the federal Conservative Party of Canada.

BC politics have been unsettled over the past two decades with numerous scandals, corruption allegations, and outspoken political leaders. The NDP has historically been a strong political party in BC. While there had been widespread talk of an election in the fall of 2011, the next scheduled election will take place in May 2013.

The current BC Liberal Party came to power in 2001 under the leadership of Gordon Campbell. Cutbacks and staff reductions in social and environmental programs were the hallmarks of the Campbell government. However, Premier Campbell also introduced a Carbon Tax and his government made the Flathead Valley decision. Premier Campbell was an outspoken supporter of the Prosperity Mine Project and mining interests have heavily funded the BC Liberal Party for many years. Premier Campbell's government encouraged the run-of-the-river power production boom. Premier Clark is also an outspoken supporter of the mining industry and mining related careers featured significantly in her "BC Jobs Plan" announced in early 2011.

Jurisdiction over mining related issues in BC is somewhat complex. Under the Canadian Constitution, jurisdictional authority over Crown land is transferred to the provincial government. Therefore, the province administers the distribution of mining claims, leases and permits. Prior to the 1900s a purchaser who purchased a piece of land retained both the surface rights and the subsurface rights to the property. Since the early 1900s, individuals and companies are only able to lease the mineral rights from the Crown but do not own the rights outright. Currently, the Crown owns approximately 90% of the mineral rights in Canada. Therefore, BC on behalf of the Crown, defacto administers all subsurface activities on Crown land. However, federal departments are still required to issue approvals and permits if there is a federal Act that governs the activity.

Federal jurisdiction and the federal environmental assessment process:

Federal departments such as: Fisheries and Oceans Canada (DFO), Environment Canada (EC), Natural Resources Canada (NRCan), Transport Canada (TC) all have respective roles to play in mining issues in BC, but only under the jurisdiction of their respective governing Acts. For example, an infringement on a navigable waterway i.e. routing a power line over a river, or the placing an impediment in a river, would trigger the involvement of Transport Canada. The DFO becomes involved whenever there is the potential for harm to, or destruction of fish habitat. There are also several federal Acts such as the Species at Risk Act (SARA), the Water Act, etc. that also govern federal involvement.

Each of the federal departments is headed by a Minister, who collectively form the Prime Minister's cabinet. Currently, the Ministers of the respective departments are:

- Environment Minister: Peter Kent

- Fisheries and Oceans Minister: Keith Ashfield
- Transport Minister: Denis Lebel
- Natural Resources Minister: Joe Oliver

In 2007, the federal government established a Major Projects Management Office (MPMO) with the purpose of streamlining and coordinating environmental assessment reviews of major resource projects.

Environment Canada is the agency responsible for environmental assessment on a federal level. The Minister of Environment sets the terms of an environmental assessment, and is the decision maker on whether to issue an environmental assessment certificate. The Canadian Environmental Assessment Act (CEAA) is the Act that governs the work of the Canadian Environmental Assessment agency.

There are several ways that an environmental assessment can be triggered in Canada. A federal assessment must take place if:

- A federal department or agency needs to issue a permit, approval or license to allow a project to move forward; i.e. DFO issues a permit for the destruction of fish habitat for a tailings storage area.
- The federal government is the project proponent or financier.
- The federal government transfers project ownership or jurisdiction to another agency.

These terms are referred to as *triggers*.

To determine if a project needs an environmental assessment, it is determined what, if any, triggers exist and who the responsible governmental agencies are. These departments are referred to as responsible authorities. There are provisions under CEAA that allow an environmental assessment to take place even if there are no direct triggers. For example, if the Minister of Environment concludes a project could have significant environmental effects across federal and non-federal lands, and provincial or international boundaries, resulting in a trans-boundary issue.

Once project triggers are determined, the project is scoped to determine the most appropriate form of environmental assessment. There are four types of federal environmental assessment processes. Depending on the project and the agencies involved, differing processes take place. The four types of assessment are:

- Screening Review
- Comprehensive Review
- Panel Review
- Mediation

The screening and comprehensive reviews are referred to as self-directed assessments, meaning that the CEA agency conducts the review in conjunction with their federal counterparts at the relevant agencies. These are essentially “in-house” reviews. The panel review and mediation are referred to as an independent assessment because they are presided over by an independent body appointed by the Minister of Environment specifically for that review. Most projects (~99%) will undergo a screening or comprehensive review process.

Most significant natural resource projects, such as a mine, will undergo a comprehensive review. In select cases, projects are elevated to a panel review based on the project size, degree of public concern, and nature of the predicted environmental and social impacts. The most significant contributing factor to elevating a project to a panel review is impacts that may be unmitigable. Only the Minister of Environment can elevate an environmental assessment to a panel review. The Minister also has the authorization to request a panel review at any point during a project assessment.

There are exceptions to the processes described above, for example, if a project involves the National Energy Board (as in the case of the Enbridge Pipeline) or if the project is related to any nuclear activity. The general environmental assessment (EA) process proceeds as described below; however, there are subtle differences between the timelines and procedures in the four types of EA.

To initiate a review, a proponent submits a project description to the CEA agency. If the project description meets the requirements of the agency, the process begins. The CEA agency, in partnership with the responsible authorities has a defined time limit during which it must determine whether the project can continue to an environmental assessment (in the case of a comprehensive review this is ninety days). If the CEA agency determines that the process can proceed, then an order is given to start an environmental assessment process. Once this order has been issued there is a defined time frame for a comprehensive review to be completed. Panel reviews usually take much longer. Although in the case of the recently revised “New Prosperity” panel review, a one-year timeline has been set by the Crown.

In general there is an initial public comment period on the project description to help the federal agencies determine potential impacts, degree of public concern, and to inform the guidelines for the preparation of the environmental impact assessment documents.

Participant funding is usually allocated to large projects. Participant funding enables the public to defray some of the costs of participating in an environmental assessment process. Once a funding pool has been established, the public, First Nations and special interest groups will be encouraged to apply. There are separate funding pools for First Nation and public/special interest group applicants due to the Crown’s legal obligation

to consult First Nations about activities that could impact Aboriginal rights (i.e. fishing and trapping, treaty rights and land-claims).

Participant funding is one of the critical cornerstones of facilitating public participation in environmental assessments. While funding demands always outstrip funding allocation, an established ENGO or local community group will generally receive \$10,000-\$20,000 to partake in the process. Recent proposed changes to the funding portfolio structure suggest that there will now be restrictions on what type of work this can fund. Such restrictions will severely limit the ability of groups to fund independent expert analyses and testimony.

The proponent, under guidance from the Crown, will prepare a draft Application Information Requirements (AIR) document. The AIR document is the guideline that a proponent uses to develop the Environmental Impact Statement (EIS). The AIR document is also the measure against which the EIS is evaluated for sufficiency.

Following a public comment period on the draft AIR document, the AIR document is finalized and the proponent is directed to prepare the EIS. In practice, a proponent will have completed much of the work within an EIS already, but may be required to fine tune elements or conduct further specified studies.

Concurrent to public environment assessment process, the various governmental agencies on a federal, provincial, and regional/local level will have met with the proponent as members of a working group to share their concerns, express information requirements, and to work through challenges. Once the proponent has submitted the EIS, the various governmental departments critique it and the public is given an opportunity to comment on its sufficiency.

In the case of a comprehensive study, the agency will take all submitted information into consideration and compile a final comprehensive study document. The public and stakeholders will be given one final comment opportunity on the completed comprehensive study prior to the study and associated comments being referred to the appropriate Ministers for a decision. In a panel review, once the EIS has been deemed sufficient the process proceeds to the panel hearings and the impact and benefit assessment will be scrutinized in a transparent public setting.

In great contrast to a comprehensive review, the review panel process undergoes a highly transparent public hearing, during which the proponent, governmental agencies, First Nations, ENGOs, and the public present information to the panel. Groups that have standing are permitted to cross-examine the presenters to the panel. The panel members have the ability to subpoena witnesses to testify at the hearings and to order independent studies.

Following the conclusion of the panel hearings, the panel members close the public record and use the information they have collected during the evaluation of the EIS and the hearings, to author a panel report indicating whether the impacts of the project are mitigable. The report is released to the public, and in conjunction with internal governmental reports from the various agencies, is used by the Minister of Environment to reach a decision on the project.

While the issuance of an Environmental Certificate for a project does not allow the project to immediately proceed, it allows the various governmental agencies that need to issue permits, licenses, or approvals for a project to move forward with those decisions. In practice, if an Environmental Certificate is issued, the needed permits and approvals are almost always granted.

Proposed changes to CEAA and government cut-backs:

The current federal government has enacted numerous severe cutbacks to key regulatory agencies reducing the level of scientific expertise available to review resource development projects, and government capacity to effectively steward the environment. In 2012 budget proposals dictate cutting the CEA agency annual budget by 43%. At the same time the CEA agency is facing an increased demand to review large resource development projects. Elaine Feldman, the current president of CEAA, testified before a parliamentary committee in fall 2011 and stated “I’m told there is up to \$500 billion of potential new investments in Canadian natural resource projects in the coming years, and if that is the right figure the agency is going to be very busy.” She went on to say that it was possible that CEAA would be forced to lay-off a third of its staff and “we simply don’t know what is going to happen.”

Under Canadian law, CEAA is supposed to undergo a review every seven years. Many leading environmental organizations were registered to testify during the review, but in late 2011, the government with little explanation, abruptly canceled the review.

The budget cuts have affected NGOs also. In December 2011, the government announced that it was ending a 34-year funding arrangement through Environment Canada with the Canadian Environmental Network (CEN). CEN is an umbrella agency representing 640 grass-root environmental organizations and works to ensure Canadians have the ability to inform government and partake in policy and legislative changes.

In short, the Canadian environmental assessment system is in crisis, facing tremendous cutbacks and ever increasing numbers of projects to review. The newly imposed limits to the amounts and uses for participant funding, and limited scoping of comprehensive reviews effectively guts the federal process.

The federal government is increasingly delegating more aspects of environmental assessment to BC. As the environmental assessment of the Prosperity Mine shows, reduction of the federal role and deferring to BC will result in a catastrophic failure to protect the integrity of the public process.

Provincial jurisdiction and the provincial environmental assessment process

BC recently reorganized its Ministries. There are three separate Ministries that deal directly with mining issues:

- Ministry of Energy and Mines
- Ministry of Forests, Lands, and Natural Resource Operations
- Ministry of Environment

The current government has sought to streamline permitting, approvals, and make it easier for the public and proponents alike to interact with their government. So called “FrontCounter BC” offices are found in most towns and provide a “one-stop” portal to submit requests for permits, maps, request information, etc.

The Ministry of Energy and Mines oversees all aspects of the Mines Act and is responsible for mine and exploration permitting, Mineral Titles, Coal Titles, and Oil and Gas. The current Minister is Rich Coleman.

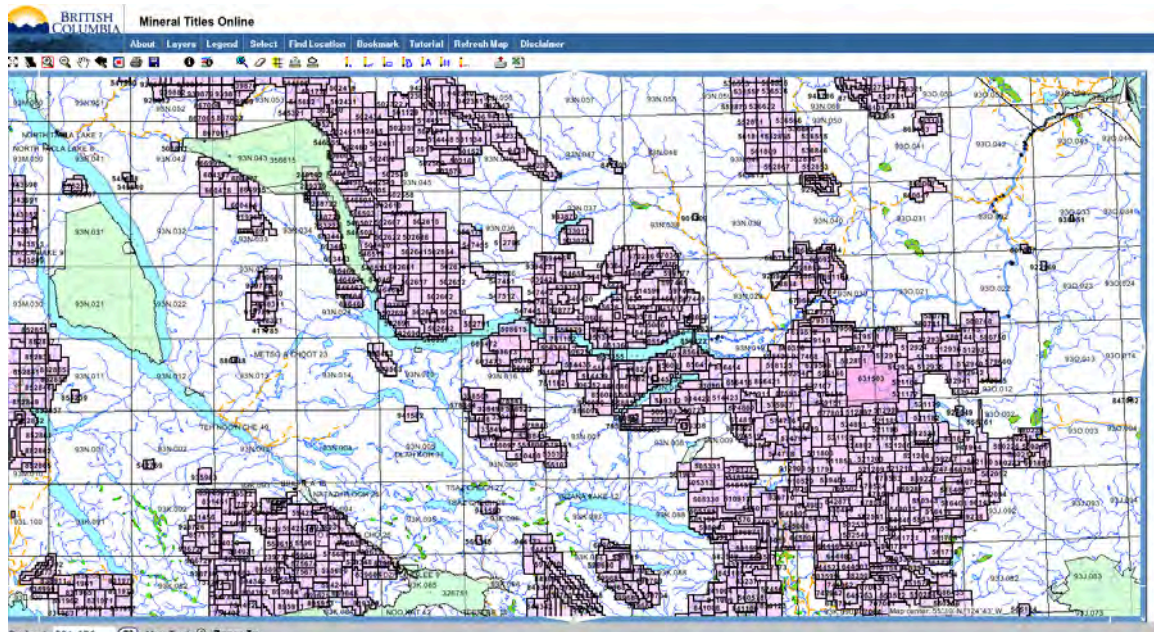
The Ministry of Forests, Lands, and Natural Resource Operations is still largely focused on forestry matters. However, it is also the Ministry that is responsible for land-use planning, abandoned mines initiatives, and mining related issues such as natural resource access roads. The current Minister is Steve Thomson.

The Ministry of Environment is responsible for the BC Environmental Assessment Office (BCEAO) and for providing the expertise to evaluate the environmental impacts of proposed mining projects. The current Minister of Environment is Terry Lake.

Two archaic acts, the Mines Act and Mineral Tenure Act govern mining in BC. Similar to the 1872 Mining Law in the US, BC’s Mining Act and Mineral Tenure Act is a throwback to the last century and was written at a time of colonial conquest, during a time when mining was considered the best use of the land. The Mines Act trumps many other vital environmental protection acts in BC including the Water Act. Central to many issues with the Mineral Tenure Act is the notion of free-entry. Free-entry entitles a claim holder to freely explore and engage in exploration activities with little regard for the surface use of the land or the legal owner of the surface rights.

To engage in exploration activities in BC or to begin the steps to develop a mine, a proponent must first hold title to that area. Title is established by registering a mineral

claim for a defined area. Traditionally, a miner had to visit a government office, look at maps for unclaimed area, survey a claim area in person, leave a claim stake, and later register the claim with the Crown. The cumbersome nature of this system, and the requirement that an individual has to actually set foot on the area being “staked,” protected large tracts of BC wilderness from mineral exploration. In 2005, the BC government announced the introduction of online staking. Today it is possible to “stake” land in BC from anywhere in the world, provided that one has access to the internet and possesses a free-miners certificate. A free-miners certificate can be purchased online for a minimal cost by anyone 18 years or older.



Example of BC MTO online webpage (purple cells are claim areas, green areas are parks and cannot be staked) (Image: BC Gov MTO website)

Since the introduction of online staking, there has been a significant increase in the land area of BC being staked and held as claims. The total area of new claims increased to cover approximately four million hectares annually. The total area held as active claims increased from an average of four to six million hectares to over sixteen million hectares.¹

Claim areas vary greatly in size and can be amalgamated to cover very large areas. Each claim is divided into cells that typically range in size from 16-21 hectares. There is a difference between a placer and a mineral claim. A claim can only be used for its designated purpose i.e. a placer claim cannot be used to conduct mineral exploration. The current costs to register a mineral claim are \$0.40 per hectare, and \$2.00 per hectare for a placer claim.

¹ AME BC: Special Memorandum About Mineral Tenure in B.C., March 15, 2010.

Once a claim is held, annual payment and exploration activities, or payment in lieu thereof, must take place to maintain the claim. Claims to an area can be sold, transferred and exchanged between parties at free market value.

The Role of Chief Gold Commissioner

The office of the Chief Gold Commissioner has its roots in colonial BC history- hence the name. The present day Chief Gold Commissioner can be viewed as an ombuds-person for disputes regarding Mineral Titles. The Chief Gold Commissioner can revoke a free-miners certificate from an individual and they can extinguish title to a claim area if it is found that the proponent has not staked the area for mineral exploration intent. The Chief Gold Commissioner assists in settling disputes between parties concerning claims, or between a proponent and the surface rights holder. The position of Chief Gold Commissioner is not an independent entity as it is a representative of the Crown, housed within the Ministry of Energy and Mines.

The Regulatory Structure for Exploration in BC

To engage in exploration activities in BC, rock sampling, aerial surveys, drilling, etc. a Notice of Work (NOW) must be filed with the Ministry of Forests, Lands, and Resource Operations and approved by the Ministry of Energy and Mines under the direction of the Inspector of Mines. The NOW must document specifics such as the proposed activity, the area that is to be disturbed, describe resources and personnel, safety plans, the exact site setting, access method, and estimated reclamation costs. The Crown then processes the NOW and contacts First Nations on whose territory the activity may take place. In some cases the Crown may also require baseline archeological or environmental information.

In general, the information requirements for preliminary exploration activities are very low. Some exploration activities deemed to be lower impact (induced polarization surveys², or simple soil sampling), require almost no reclamation. Exploration drilling and access road construction require moderate reclamation efforts; however other industries, such as forestry, require much more in comparison. As an exploration project advances and exploration activities become more intensive, a proponent may bulk sample the proposed ore at a site. Under the current regulations, a proponent is allowed to remove up to 10,000 tonnes of ore from a site every five years to understand the metallurgical properties of the ore, testing milling methods, or sending sample shipments to a smelter facility. However, the 10,000 tonnes of ore does

² IP surveys are a process where electrical cables are laid in a grid and the ground is charged with electrical current, the subsequent measurement of charge decay or resistivity/conductivity relates information about the mineralization of the subsurface.

not factor in the volume of waste rock processed or the overburden removed to access the ore. Additionally, a proponent is allowed to remove 1,000 tonnes of ore from each claim cell annually without needing to convert the mineral claim to a lease.

The BC government has recently introduced changes to the Mines Act that permit more aggressive forms of exploration i.e. bulk sampling to be undertaken with less review than in the past. Prior to a proponent advancing an exploration project to a mine development project, the proponent must request that the mineral title be transferred to a mining lease. To construct and operate a mine, many separate permits are needed such as mine site water discharge, health and safety, tree removal, and explosives.

BC environmental assessment

The triggers for an environmental assessment (EA) at the provincial level differ from federal triggers. The BC Environmental Assessment Act (BCEAA) governs a provincial EA. The BCEAA stipulates and defines what constitutes a reviewable project. A project that meets the reviewable project regulations is required to have an approved environmental assessment certificate prior to commencing the desired activity on a site.

The BC EAO has been heavily criticized recently, in part because it conducts the assessments “in-house” under heavy political interference. The BC EAO prepares their recommendation for the relevant Ministers: the Minister of Environment and the Minister of Energy and Mines, to make their decision on whether to issue an environmental certificate. One of the greatest differences between the CEAA and the BCEAA is that the BCEAA evaluates the economic benefits of a project with the environmental impacts of a project. There is much less public participation during a provincial environmental assessment, and while the BC EAO may require “open-houses” and information sessions, they are neither entirely transparent nor comparable with a panel review. Some participant funding is made available to groups participating in a provincial EA, however, the sums are much less than during a CEAA process.

A review commissioned by the Northwest Institute compared the results of the provincial and federal Prosperity Mine reviews. The province issued a certificate for the mine, while the federal process rejected the project as proposed. The study found that there were significant faults in the BC process including: a poor process, a failure to wait for critical information from agencies such as DFO and First Nations, a lack of disclosure of BC EAO staff expertise, a deficiency in determination of the significance of adverse environmental effects, that BC lacks clear mitigation and compensation policies thus leaving the BCEAO “rudderless,” a lack of substantive legislation, a lack of independence and the lack of a clear sustainability object.³

³ Haddock, Mark. Comparison of the British Columbia and Federal Environmental Assessments for the Prosperity Mine, Commissioned by the Northwest Institute for Bioregional Research, July 2011.

Similar to a CEAA process, to initiate an environmental assessment a proponent is required to submit a project description to the BC EAO. If the description meets the requirements and the project is deemed to be a reviewable project, then a Section 11 order is written, starting the environmental assessment process. The BC EAO has 180-days from the time the Section 11 order is issued to submit a report and recommendation to the relevant Ministers for a decision. The 180-day clock can be paused throughout the process, (i.e. for the proponent to author and provide more information in the EIS). Once an environmental assessment report has been referred to the relevant Ministers for a decision, the Ministers have 45 days to make a decision.

The public is provided the opportunity to comment on the EIS prepared by the proponent and some of the comments submitted to the EAO are posted on the online project registry. However, in contrast to the CEAA registry, not all documents are posted.

Once a provincial assessment certificate is issued some permits can be issued by the relevant provincial authorities i.e. forest clearing permits by the Ministry of Forests, Lands and Natural Resource Operation, for the purpose of clearing a mine site- prior to the completion of a federal environmental assessment process. Approximately, 70% of the projects that require a provincial assessment also require a federal environmental assessment.

Harmonized Environmental Assessments

BC and Canada are in the process of “harmonizing” their review processes through a “Joint Review” to reduce redundancy and streamline reviews. During a Joint Review process, the CEAA and the BCEAO share all documents, have joint working groups, and create shared issue tracking tables that cover all jurisdictions. However, each respective agency must still follow their process and make their decisions independently.

Delegation of Environmental Assessment to the Province

Many ENGOs are concerned that the federal government wants to delegate the environmental assessment process to the provinces. As the Prosperity Mine review indicated, such an abdication of responsibility would be disastrous for the environment.

Mine Permitting, Bonding, and Amendments to a Mine Permit

Upon the successful receipt of a provincial environmental certificate and provided that all necessary governing federal authorizations have been received, a company can begin to acquire the permits to construct a mine. A proponent must apply for a Mines Act permit from the province. The Mines Act permit dictates what activities are permitted; it

defines a geographic scope, and indicates what conditions are attached to the permit. Aside from having to comply with mining regulations and ensure that objectives such as water quality objectives are met, a proponent must also ensure that an adequate bond is in place to protect the Crown and the public from financial harm in the event that the proponent is unable to complete operations or declares bankruptcy. Such a process is referred to as bonding and has been criticized in BC. Many critics argue that bonds currently held for mines by the Crown would fail to adequately cover the cost of reclamation and long-term water treatment.

Often a proponent will seek to expand operations, import ore from other sites, or extend the operational life of a mine. Such actions require amendments to the Mines Act Permit, a process that occurs frequently and without the opportunity for public comment. One exception is that First Nations governments are provided with a limited opportunity to consult on matters the Crown is legally obligated to do so.

The ease of permit amendments, and flaws within the cumulative impact assessment of the environmental assessment processes, has given rise to a practice known as “project-splitting.” Whereby a proponent will submit a smaller project or a component of a project for review, and simply seek an amendment at a later date to develop the full project. This is particularly troublesome for projects that will have great cumulative impacts i.e. if ore is trucked from one area to be processed at another mine site and discharged into a TSF, or if the life of the mine will be extended.

Tax Incentives for Mining in BC

BC has aggressively encouraged mining investment within the province through a series of tax incentives. There is a corporate tax credit (Mining Exploration Tax Credit) that entitles companies and individuals conducting grassroots exploration in BC to a credit of 20% of the expenses incurred.

Additionally, companies conducting exploration within BC’s prescribed Mountain Pine Beetle affected areas are entitled to a higher rate of 30%.



Map indicating Pine Beetle exploration tax credit area (in red) (Image: BC Gov. Website, January, 2012).

For British Columbian’s that make more than \$113,000 there is also an investment program to encourage so called “flow-through shares.” This program encourages investment in junior exploration as companies can “flow-through” mining expenditures to an individual in exchange for purchased shares. The current exploration tax regime in BC makes it one of Canada’s most favorable mining investment regions.

Geoscience BC

Geoscience BC is an industry led partnership that provides research to encourage mineral exploration BC. The BC government works in strong partnership with Geoscience BC, including funding some of its programs. It is well-funded and receives strong support from the Crown and companies operating in BC. Its stated purpose is to fund geoscience exploration with the intent of attracting “investment in resource exploration and development in BC.”

Active Industry Associations in BC

There are three major industry associations that are strong voices for the mining and exploration industry in BC:

- Mining Association of British Columbia
- Association for Mineral Exploration British Columbia
- Mining Suppliers Association of British Columbia

The Mining Association of British Columbia

The Mining Association of BC (MABC) represents approximately fifty companies that actively mine in BC, along with several construction and engineering companies and education institutions such as Northwest Community College and UBC's Institute of Mining Engineering. Having been in existence since the 1900s and created by an act of the BC Legislature, the MABC is considered the voice of BC's mining industry. It is a powerful, vocal, and politically connected organization.

The Board of Directors is currently chaired by John McManus (Taseko Mines, Senior VP of Operations [Prosperity, Gibraltar Mines]). Russell Hallbauer (Taseko Mines President and CEO) is a past Chairman of the Board. Representatives of Imperial Metals (*Catface, Red Chris, Mount Polley, Huckleberry, and Rudduck Creek*), Avanti Mining (*Kitsualt*), Thompson Creek Metals (*Mount Milligan, Endako, Berg, Davidson*), Teck Coal, and First Coal- Xstrata etc are also board members.

Keith Clark an industry lawyer with Lang Michener (McMillian LLP), is an independent board member. Mr. Clark has represented various mining companies involved in complex legal disputes with aboriginal groups throughout BC, including Taseko Mines and the Tsilhqot'in Nation, and First Coal and the West Moberly First Nation.

In 2011, the MABC announced a new President and CEO, Karina Brino. This was a controversial announcement as Mrs. Brino left her position as Assistant Deputy Minister, in the Mines and Mineral Resources Division of the BC government. An exception to policies governing the actions of past governmental employees was made to allow Mrs. Brino to accept the position with the MABC, however, she was barred from certain activities for a period of one year following her departure (lobbying the Crown and sharing governmental information about projects). The restrictions will expire in mid-2012. The full impacts of her influence within the organization are yet to be seen. Prior to working within government, Mrs. Brino was a rural social worker in BC. Thus far, Mrs. Brino's public efforts have concentrated on supporting the role of women in the mining industry and focusing on the recent strides the industry has made with regards to safety and health. Zoe Younger, VP of Corporate Affairs, presented arguments on behalf of the MABC at the Mining Forum hosted by FNWARN in October 2011, in Victoria.

The MABC has published several key policy papers and responses to legislative reform initiatives. The MABC is a major supporter of the Northwest Transmission Line. It has expressed concern about the Flathead Valley decision and was concerned with elements of the Wooshtin wudidaa Atlin Taku Land Use Plan.

The MABC remains concerned about the hurdles that aboriginal consultation and permitting create for their members. Certainty of tenure, a clear two-zone system,⁴ streamlined permitting, access to low-cost power, strong government support for industry, and a favorable tax regime are important policy areas for the MABC.

The MABC has steadfastly lobbied for amendments to the Canadian Environmental Assessment Act (CEAA).⁵ Specifically, the MABC sought to expedite the timelines of environmental assessment processes, harmonize provincial and federal efforts, and reduce the authority of individual departments such as the federal Department of Fisheries and Oceans (DFO). The MABC was successful in their lobbying, and a hallmark of the current federal government has been to reduce red tape and fast-track environmental reviews. The CEAA changes effectively place departments such as DFO and Transport Canada in a “supporting rather than lead role.”⁶

From a community and conservation perspective, some of these changes are potentially troubling. While surety of process and reasonable timelines are an understandable and fair goal, the burden of environmental assessments and the rapid timelines for review are very challenging for communities with limited capacity and/or funding. For projects such as the Prosperity Mine, DFO historically voiced tremendous opposition to the project and any effort to minimize their influence on this project is cause for concern.

Perhaps the most troubling policy change that MABC has successfully lobbied for is a series of amendments to the CEAA that allow the Minister of Environment to focus a comprehensive study on a project component rather than the entire project. MABC argues that by allowing the Minister to “scope a project smaller than that which is proposed by the proponent,” a more harmonious federal/provincial process can unfold and duplication can be avoided. However, this type of “project splitting” is problematic as it defies the precautionary principle and avoids assessment of the full cumulative impacts of a project.

The MABC is very active in responding to many initiatives throughout BC related to mining, often reiterating the positive benefits and economic spin-offs of mining and the need for a mining-friendly jurisdiction in BC. Most governmental press releases feature

⁴ The two-zone system clearly delineates “stake” and “no-stake” areas in the province; currently the only areas not available to mining companies are protected areas, municipalities, First Nations reserves and federal lands.

⁵ MABC: *2010 At A Glance*, 2011, p. 27.

⁶ MABC: *2010 At A Glance*, 2011, p. 27.

commentary from the MABC, and they have an active public relations campaign in the news media.

MABC activities are not limited to those directly related to mining. The MABC submitted comments on a proposed private member's bill introduced in parliament that sought to establish a Canadian Environmental Bill of Rights. Bill C-469 intends to protect the right for every Canadian to a "healthy and ecological balanced environment." The bill has passed its second reading but is a private member's bill without support from the Conservative majority, and has little chance of becoming law.

Association for Mineral Exploration British Columbia

The Association for Mineral Exploration British Columbia (AME BC) represents over 4,000 individual and 360 corporate members. The AME BC's members are active in the exploration and mine development industry throughout the world. Members include: exploration companies, suppliers, airlines, analytical labs, engineering firms and regional and national government organizations. The AME BC is an influential voice in BC.

AME BC hosts "Round Up," an annual industry trade-fair in Vancouver that has grown to include over 6,000 participants. The AME BC is currently chaired by Mona Forster, a VP at Entrée Gold Inc. (with exploration projects in Mongolia, USA, and Australia). The past chair is Lena Brommeland (Hunter Dickinson Group, parent company of Taseko and Northern Dynasty). She is the past Project Manager for the Prosperity Project and currently the Director for Site Operations for the Pebble Project in Alaska. The current President and CEO is Gavin Dirom, who spoke on behalf of the AME BC at the mining forum in Victoria, BC, in October 2011. Mr. Dirom previously held various roles within the MABC and with Natural Resources Canada reviewing mining projects.

The AME BC has several key policy areas including: permitting, land access and use, aboriginal relations and consultation, taxation and economic incentives, geoscience, infrastructure, and human resources. While many of the AME BC policy recommendations ask for greater clarity for the benefit of all parties (government, public, First Nations), there is a clear bias towards making changes favorable to industry. The AME BC is very concerned by the "sterilization" of land from future economic development, specifically by the creation of more protected areas and the settling of land claims. In particular, the AME BC is troubled by conservation groups advocating for further protection of areas within BC. The AME BC advocates the quantification of mineral potential and socio-economic benefits of mining in areas prior to their removal from land available for mineral exploration. The AME BC response to the recent Flathead Valley decision is to argue that companies with mineral titles in the Flathead Valley be compensated at a "fair market value." The AME BC has demanded that the Crown abandon further development of "restrictive terminology" in land-use plans.

The AME BC has made significant efforts to involve First Nations in mining, including the publication of an *Aboriginal Engagement Tool Kit*. The toolkit was developed to help industry engage with communities in a more transparent and culturally appropriate manner. It includes templates for letters and advice on protocol. While AME BC seems supportive of funding First Nations participation in land-use planning processes, their focus is to ensure communities are informed of the potential economic benefits that could be realized from mineral development, not other aspects of mining impacts. AME BC works to prevent conflict between First Nations and mining exploration companies.

AME BC is lobbying the Crown to keep the “two-zone” model. AME BC argues that mining has impacted only 0.05% of the land-base in BC, and access to vast areas of land is necessary for the mining industry to succeed. AME BC strongly objects to any activity that could jeopardize industry’s preferential treatment and unfettered access to BC’s land-base. During a recent governmental review of changes to the Natural Resources Road Act, AME BC strongly opposed the proposed deactivation of roads, citing the need for the exploration industry access remote corners of the province in a cost effective manner. Instead, AME BC advocated finding solutions to maintain road networks and transfer limited liability for their use. AME BC argued that industry should only have to pay for road use and maintenance if the mining project reaches the Mines Act Permit threshold.

AME BC strongly supports the electrification of Highway 37, and advocates extending the power line to Alaska and the Yukon, to form part of the North American energy plan and facilitate mine development throughout the entire region.

The Mining Suppliers Association of British Columbia

The Mining Suppliers Association of British Columbia (MSABC) is an industry organization that represents industrial suppliers, engineering and construction companies. While much smaller and less vocal than either the MABC or the AME BC, MSABC is another powerful voice in BC. The MSABC works in close partnership with the MABC and has a representative on the board of the MABC. The current president and CEO of the MSABC is Terry Mulligan.

Summary of Industry Organizations

All three organizations: the MABC, the AME BC, and the MSABC, represent different interests within BC’s mining community. They share many concerns and opinions on mining developments and form a formidable lobby. All of the organizations have voiced strong and vocal support for the electrification of Highway 37, the need to raise the public profile of the mining industry, and present constant messaging on the economic

benefits and positive environmental work of the mining industry. There are targeted efforts within BC's education system to include their perspective of the mining sector in school curriculum, to foster a future workforce and to develop a positive image.

Politically, the weight of the three organizations is very significant. They have dedicated staff to research, represent, and advance the concerns of each organization's respective members. They form a strong pro-industry voice and actively engage in lobbying government and elected officials. Any efforts to reform BC's mining laws will be met with fierce and heavily funded opposition by these groups. However, both the MABC and the AME BC's commitment to partake in the mining forum held in Victoria in October 2011, signal a willingness, or recognition, that industry needs to engage in dialogue with concerned parties.

First Nations Leadership Organizations

While EMEF works extensively with all levels of First Nations leadership, we are not a First Nations organization. One of the greatest lessons we have learned is not to speak for others. Therefore, we respectfully encourage Wilburforce to reach out to the First Nations leadership organizations listed below and hear directly from them what their positions are. Opinions about mining vary greatly and it is important to hear from the people of the land. We are very happy to help with introductions if desired.

- The BC Assembly of First Nations
 - Regional Chief Jody Wilson- Raybould
- Union of BC Indian Chiefs
 - Grand Chief Stewart Phillip- President
- First Nations Summit
 - Grand Chief Edward John, Dan Smith, Chief Douglas White III – Executives
- First Nations Energy and Mining Council
 - Dave Porter- CEO

BC's history with aboriginal people is long and complex. It is not our place to tell the story of First Nations. Much remains to be done to heal the broken trusts and build strong respectful relationships. We strive to contribute to this effort in all aspects of our work.

Mining and Exploration in BC

BC has always been, and will likely continue to be a province whose economy is heavily reliant on developing its natural resources. The mining, fishing and forestry industries have traditionally offered high paying jobs that provide opportunity in rural towns. The forest industry has struggled recently due to decreased US demand, increased tariffs, increased competition from Asian suppliers of pulp and paper products, antiquated mill equipment (geared solely for the north American housing market), and the pine beetle epidemic. Many communities in rural BC are either facing prolonged mill shutdowns or closures. While some communities have faced a short-term boom as the result of increased harvesting in pine beetle affected areas, the long-term prospects of such initiatives are not sustainable. Most of the coastal fishing fleet has collapsed and no longer provides a consistent employment anchor.

The global economic recession and its impacts on the Canadian workforce has forced rural BC communities to seek new employment opportunities. Facing extinction, many communities are embracing mineral development with open arms and strong support.⁷ Both the federal and the provincial government have strongly supported and encouraged a transition from forestry sector jobs, to mining and oil and gas.

The mining exploration, development, and operations industry contributes significantly to the BC economy. While impossible to independently verify, the MABC estimates that in 2010, mineral development and mining contributed \$8.9 billion to BC's economy; ~\$449 million in federal tax revenue, ~\$415 million in provincial tax revenue and ~\$75 million in municipal tax revenue.⁸ The AME BC has estimated that for every tax dollar the government invests in mineral development, \$289 are returned to provincial coffers compared to an \$8 return from investments in the forest sector.⁹

The greatest contributor to the recent BC mining boom is the increase in commodity prices. The soaring price of gold and the rising price of copper have suddenly made marginal projects economically viable, and have triggered an exploration rush among junior mining companies. The rising commodity prices, rural communities desperate for employment, and a mining friendly government have produced the "perfect storm" in BC.

⁷ This is clearly exemplified by the City of Williams Lake, who strongly support the Prosperity Mine project and have sent delegations to Ottawa to lobby for the mine's approval.

⁸ MABC Press Release: *Mining in British Columbia contributes \$8.9 billion to the economy*, October 25th, 2011.

⁹ AME BC: *Governments must reform Canada's EA process*, The Northern Miner, January 24, 2011.

Premier Christy Clark made mining related jobs one of the Liberal government's central platforms by announcing in the Speech from the Throne the opening of 8 new mines, and expansion of 9 others by 2015. To facilitate the necessary infrastructure, the provincial and federal governments are contributing \$242 and \$130 million respectively towards the electrification of Highway 37.

The BC government has also announced a new mine subsidy that provides the "equivalent of 133.3% deduction of capital costs for mines that commence or expand their production by 2016." BC has also led several trade missions to Asia, and published recent investment information in Chinese, in an attempt to further increase Asian investment in mining projects. Chinese investment in BC, in particular in coal projects, is very strong. Recently, the China Investment Corporation invested \$1.74 billion in Teck Resources Limited. Total Chinese investment in major BC mining projects totaled nearly \$2 billion between 2008 and 2010.¹⁰ Investment documents describe shipping times from Prince Rupert to various ports in China and Japan in an attempt to secure further partnerships and investment. The vast majority of the concentrate produced at current and future mines in BC is destined for smelters in Asia.

The global economic downturn in 2008-2009 hit the exploration industry very hard. Published trends for exploration spending are tricky to interpret because they indicate a serious decline during this time period. However, the dip in spending was short lived and exploration expenditures in BC have risen to record highs in 2011. While published statistical trends for 2011 are still being authored, Minister Coleman recently announced that mineral exploration expenditures in 2011 reached \$463 million in BC; this is a 35% increase from 2010 and a staggering 1500% increase from 2001.¹¹

Much of the exploration spending in 2010 and 2011 was concentrated in Northwestern BC. However, central BC, particularly in the region around Wells-Barkerville, and the Omineca region also experienced extensive exploration activity.

¹⁰ BC Government: *Opportunities to Explore: British Columbia Mining and Minerals*. 2011.

¹¹ BC Government Press Release: *BC celebrates soaring exploration expenditures*, January 23rd, 2012.

Historical trends for exploration spending in BC

Calendar Year (January - December)	Exploration Expenditures (\$ in millions)	Calendar Year (January - December)	Exploration Expenditures (\$ in millions)
2011	463	1991	136
2010	322	1990	227
2009	154	1989	187
2008	367	1988	230
2007	416	1987	143
2006	265	1986	84
2005	220	1985	100
2004	130	1984	124
2003	52	1983	108
2002	40	1982	106
2001	32	1981	189
2000	30	1980	158
1999	25	1979	82
1998	38	1978	58
1997	80	1977	83
1996	105	1976	50
1995	78	1975	42
1994	98	1974	34
1993	66	1973	42
1992	72	1972	42
		1971	44

From: <http://www.em.gov.bc.ca/mining/exploration/pages/historicalexpeditures.aspx>
 Ministry of Energy and Mines, 2012

The majority of operating metal mines are located in central BC. The coalmines are all located in southeastern and northeastern BC, with the exception of one mine on Vancouver Island.

Coal is BC's most common mineral commodity, making up approximately 65% of total production. At present Canada is the third largest coal producer in the world, only Australia and the US produce more. Metallurgical coal represented \$5.1 billion in revenue, while thermal coal represented \$101 billion. Current estimates suggest there are over 23 billion tonnes of combined (thermal and metallurgical) coal resources in the province.¹²

Copper is roughly 18% of BC's current annual mineral production, accounting for about 40% of Canada's total production. BC's 2010 copper production was valued at \$1.48 billion. It is estimated that BC has at least 60 million tonnes of copper resources.¹³ The rest of BC's 2010 mineral production was Molybdenum 4% (\$296 million), Gold 3% (\$237 million), Silver 1%.¹⁴

Revenue Sharing

In 2010 BC introduced a new policy to share mineral tax revenues with First Nations who have a mine development on their traditional territory. The agreements only apply to future mines on an individual basis and are negotiated separately with each Nation. Two revenue sharing agreements were signed in 2010. The Stk'emlupsemc of the Secwepemc Nation's agreement resulted in a 37.5 % share of the mineral tax paid by the New Afton mine. The second revenue sharing agreement was made with the McLeod Lake Indian Band concerning the Mount Milligan mine. The McLeod Lake agreement will result in the Crown sharing 15% of the tax revenue with the First Nation.

While the Crown has been quick to herald these agreements as a success, and has aggressively negotiated with other First Nations to reach similar agreements, the process has been divisive. Industry is increasingly engaging in separate revenue sharing agreements with Nations on a project-by-project basis, often in the form of an Impact Benefit Agreement (IBA). The exact amount of revenue shared will fluctuate from year to year, and represents only a very small portion of the true value of the ore being removed.

¹² BC Government: *Opportunities to Explore: British Columbia Mining and Minerals*. 2011.

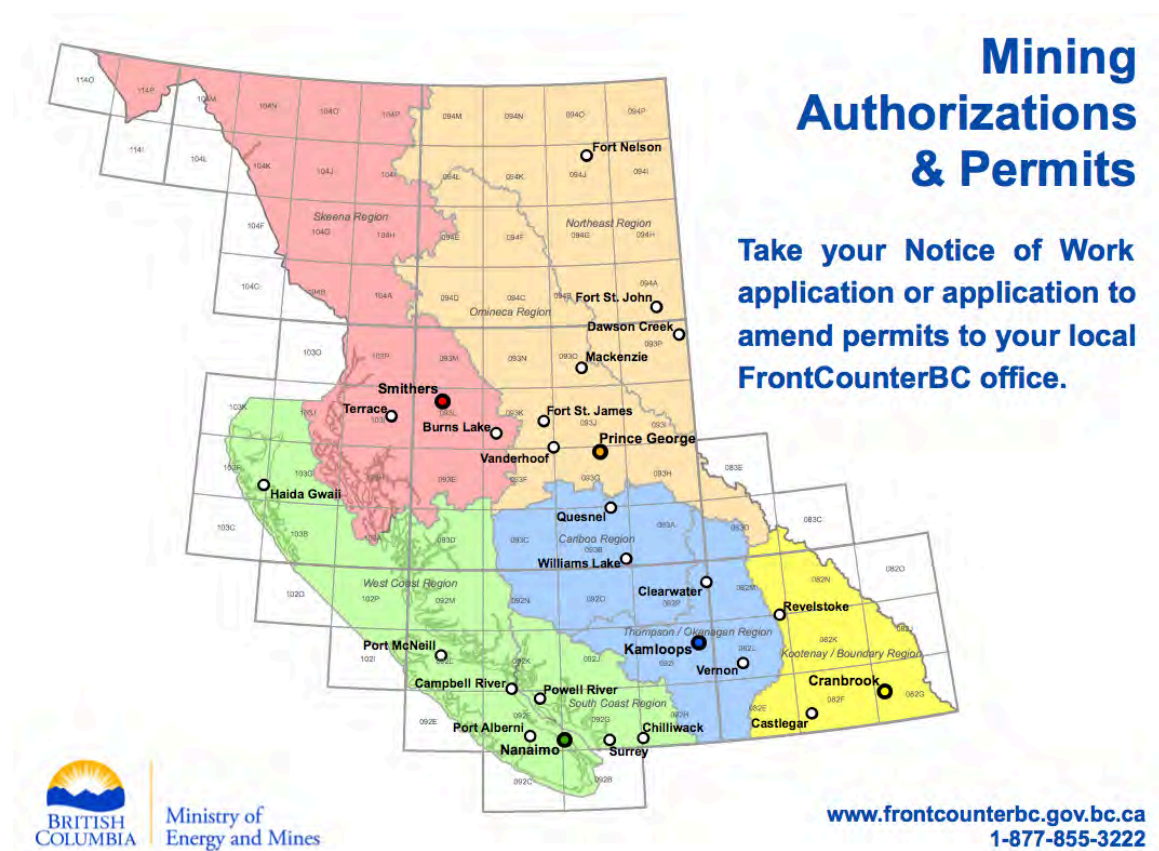
¹³ BC Government: *Opportunities to Explore: British Columbia Mining and Minerals*. 2011.

¹⁴ BC Government: *Opportunities to Explore: British Columbia Mining and Minerals*. 2011

Current Projects in BC:

The BC government has split the province into six mineral development zones:

- Omineca Region: (Central Northern BC from Prince George northward)
- Skeena Region: (NW BC)
- Northeast Area:(NE BC)
- Thompson-Okanagan-Cariboo Region:(Central BC)
- Coast Area:(SW BC and Vancouver Island)
- Kootenay Boundary Region:(SE BC)

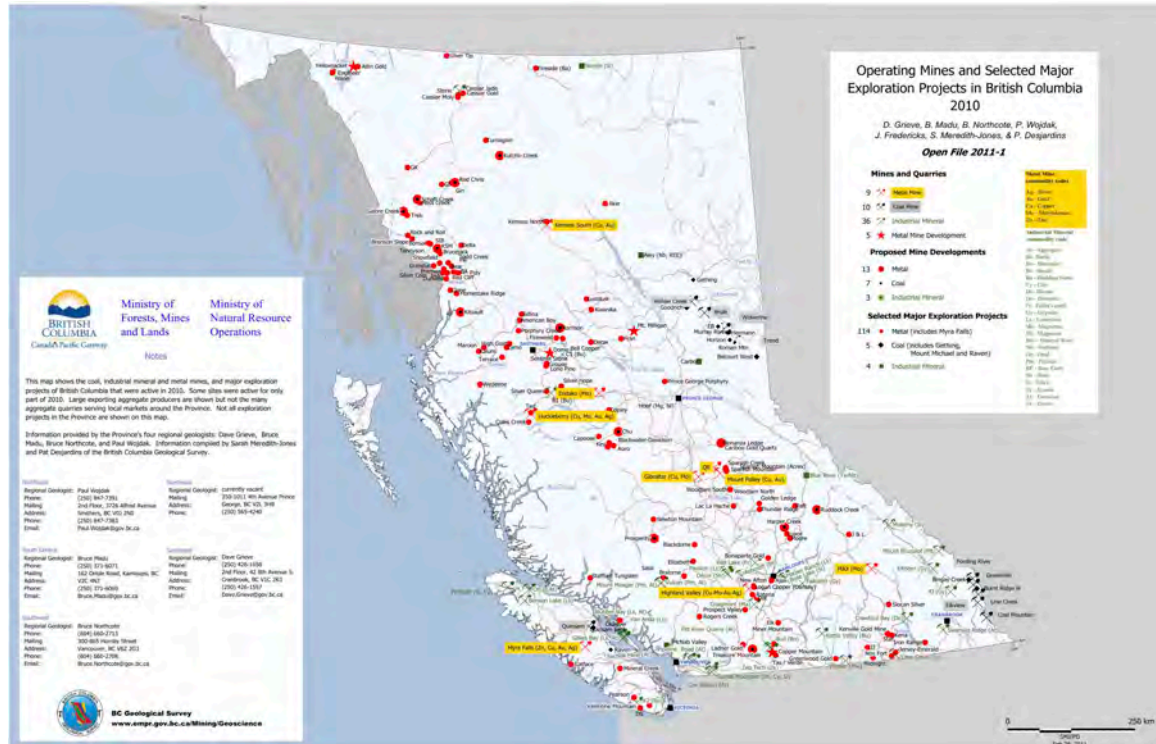


Map of BC Mining Regions (Image: BC Gov. Website)

The most significant recent exploration activity has/ is taking place within the Skeena Region. However, the significance of coal production and future plans within the Kootenay Boundary Region cannot be overlooked.

The majority of the current operating metal mines in BC can be found in the Thompson-Okanagan-Cariboo Region and include mines such as Highland Valley Copper, Mount

Polley, Gibraltar, and QR. Kemess South (currently on care and maintenance), and Mount Milligan (under construction) are located within the Omineca region. Huckleberry and Endako are the two primary operating metal mines within the Skeena Region.

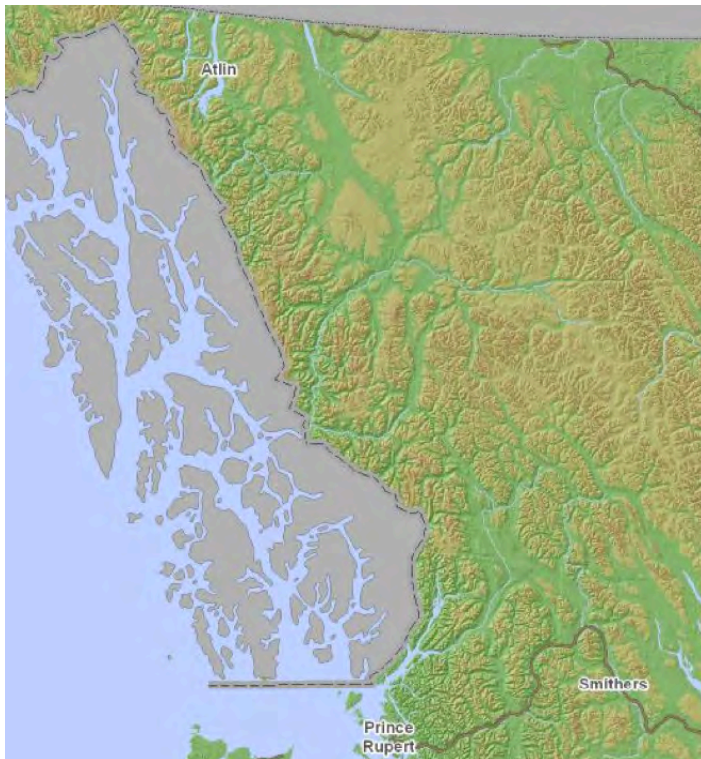


Map of current mineral development and advanced exploration in BC (Image: BC Gov. Website, January, 2012)

Skeena Region:

The Skeena region has long been known to hold great mineral potential. The region south of the Iskut River is referred to as the Golden Triangle. The Skeena region has seen significant mining with several gold rushes in the past. While many of the mines operated at the beginning of the last century, there are significant recent operations such as Eskay Creek. Eskay Creek made history as Canada's highest-grade gold producer until it was closed in 2008.

Historically, mining in the area was limited by the sheer cost of development. Many of the potential mine sites are very remote and companies face challenging physical environments; steep, glaciated topography and massive snow packs. Constructing mine related infrastructure (access roads, cost effective power and shipping ore concentrate to a port facility) has proven cost-prohibitive for many well-known deposits. In 2011 part of these prohibitive costs changed when the Northwest Transmission Line (NTL) received an environmental assessment certificate from the provincial and federal governments.



Map of NW BC, the Skeena administrative region covers much of the area shown. (Image: BC Government iMap BC)

The NTL is a proposed 335km long transmission line from a sub-station near Terrace to Bob Quinn. It is proposed to be a 287 kV line that will likely be expanded and lengthened in the future. Both levels of government argued that the construction of the line is

necessary to reduce the carbon footprint of northern communities who rely on diesel generators for power. The NTL also received very strong backing from many of the mining companies that have advanced projects in the area. Including:

- Copper Fox Metals Inc.,
- Fortune Minerals Limited
- Hard Creek Nickel Corporation
- Hawthorne Gold
- Kutcho Copper Corporation
- Red Chris Developments - Imperial Metals Corporation

The NTL is being developed for the economic opportunities that it will enable.

The Tahltan Central Council held a referendum on the NTL and the project received 82% approval. However, there is the understanding that individual projects enabled by the NTL will still need Tahltan approval.

The availability of low-cost power means that many projects previously deemed uneconomical due to infrastructure construction costs are now a potential reality. The NTL is a selling point for many exploration and project development companies who highlight the proximity to the NTL in their press releases and project websites.

In short, the northwestern part of the province will soon enjoy similar infrastructure opportunities to mines elsewhere in BC. The deep-water port facility in Stewart is aggressively pursuing opportunities to become the regional hub for exporting concentrate to smelting facilities in Asia, and the NW business community is a strong supporter of mining projects.

Mining development is a key opportunity and concern in the Skeena Region. The cumulative impacts of mining and exploration, coal-bed methane, run-of-the-river power production projects, infrastructure development (power lines, roads, etc.), pipelines and forestry are massive and must be assessed as a whole.



Map of proposed NTL route (Image: BC Hydro, BC Government)

Significant Mine Development Projects in the Skeena Region:

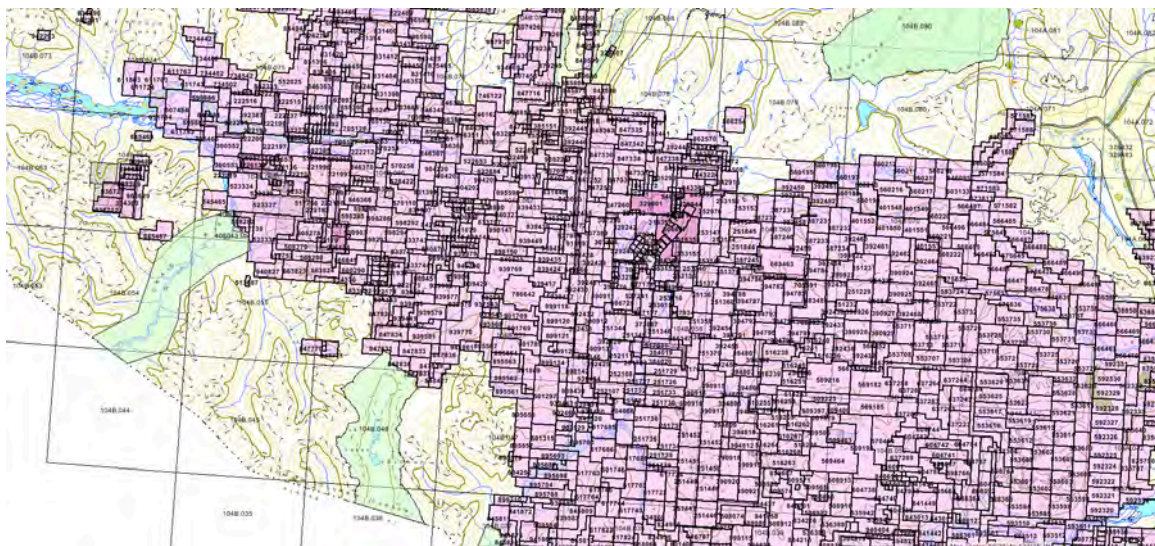
Much of the recent exploration work centers on the area south of the Stikine River. The provincial government is actively dedicating resources to increase the availability of resource mapping and information to encourage further exploration in the entire region.

From an environmental perspective, the greatest concerns arise from projects located within or near the Sacred Headwaters- the birthplace of the Nass, Stikine and the Skeena rivers. Many mining projects are in direct proximity to the rivers, in some areas the sheer scale and number of projects creates a massive environmental footprint. The need for perpetual water treatment, the use of massive tailings impoundment dams and

the challenging environmental conditions in NW BC create liability concerns for key watersheds. Many critical salmon rivers are at risk. The Unuk River watershed faces tremendous future pressures.

Mining provides jobs and opportunities for remote communities, especially First Nation communities with a growing youth population eager for job prospects. Exploration and mining will continue to be a viable and valuable part of the northwest economy. However, the scale of projects, the number of projects proposed, and the cumulative impacts of the projects need to be thoroughly understood, evaluated and carefully weighed against other values.

There were over 73 major exploration projects in the Skeena Region in 2010. The vast majority are gold and copper exploration projects. With the exception of a few small scale-mining projects such as the Yellowjacket Mine (near Atlin, within the territory of the Taku River Tlingit First Nation), all of the proposed and operating projects are substantial in size and scope. Further exploration and development projects in the Skeena Region will be encouraged by increasing gold and copper prices and the NTL with it's associated infrastructure.



Claim map in the Unuk River Watershed (Image: BC government, MTO screen shot)

Sacred Headwaters & Spatsizi Plateau:

Red Chris:

The Red Chris mine, owned by Imperial Metals, is located 18km southeast of Iskut on a sub-alpine plateau. The mine is located near the Sacred Headwaters. The Red Chris project has received the necessary federal and provincial environmental assessments and is currently in the provincial mine permitting process. This is despite a significant court victory by MiningWatch Canada against the federal government before the Supreme Court of Canada challenging the legality of the environmental review. The project has a preliminary agreement with the Tahltan Central Council to work towards developing the project.

The NTL will need to be extended some 120km from Bob Quinn to the mine site. Mine construction is scheduled to coincide with the development of the NTL. Once in production, Red Chris will be a conventional open pit copper/gold mine. Milling is forecast to be 30,000 t/d with a projected operating life of 28 years. There is significant acid generating potential from waste rock, tailings and the mine pit. The dams holding back the tailings and potential acid generating (PAG) rock will need to be in place for perpetuity. There is a strong potential for the need for water treatment post-closure. Fish habitat will be destroyed and thus fish habitat compensation projects will be needed.

The project is close to the Spatsizi Wilderness Plateau Provincial Park to the east and the Stikine River Provincial Park to the north. There are strong wildlife values in the region. The cumulative environmental impacts of the Red Chris mine in conjunction with proposed coal-bed methane drilling and the Mount Klappan coal development in the Sacred Headwaters could be very significant.

Teuton Resources has staked the area directly to the north and south of the Red Chris claims, referred to as the Yellow Chris property and the Red Chris South respectively. Teuton Resources now advertises itself as the largest landholder in the northwest, controlling 25 mineral claims that cover over 300,000 acres.

Mount Klappan (Fortune Minerals):

Fortune Minerals and their South Korean financial backers (POSCO) are proposing to develop an anthracite coal deposit that is very close to the Sacred Headwaters, the Mount Klappan project. Waters flowing from Mount Klappan make their way into both the Stikine and Skeena Rivers. Fortune Minerals is proposing to produce over 3,000,000 tonnes of coal per year. The current proposed mine life is 20 years. The coal would be

processed on site, and then either trucked via a newly constructed short-cut road to Highway 37 or transported via an existing rail line that would be extended to the property. Mining on Mount Klappan has been significantly opposed by some local First Nations groups and has faced great criticism over its potential environmental impacts. The Tahltan Central Council signed an agreement of co-operation and mutual respect regarding the project in 2009. While test mining was conducted at the site in the 1980s with approximately 100,000 tonnes of coal shipped to potential buyers- a coalmine on such a scale has never existed in NW BC.

West of Highway 37 (Stikine Watershed):

Schaft Creek:

Copper Fox Metals Inc.'s Schaft Creek project is one of the bigger projects proposed in the Skeena region. Located on a tributary of the Stikine River (Skeeter, Schaft and Mess Creeks), the project is approximately 80 km south of Telegraph Creek. The copper, gold, molybdenum, and silver operation is proposed to mill 150,000 t/d for 15 years. The project would result in 1.55 billion tonnes of waste rock, 812 million tonnes of tailings and require a workforce of 700 people to operate.

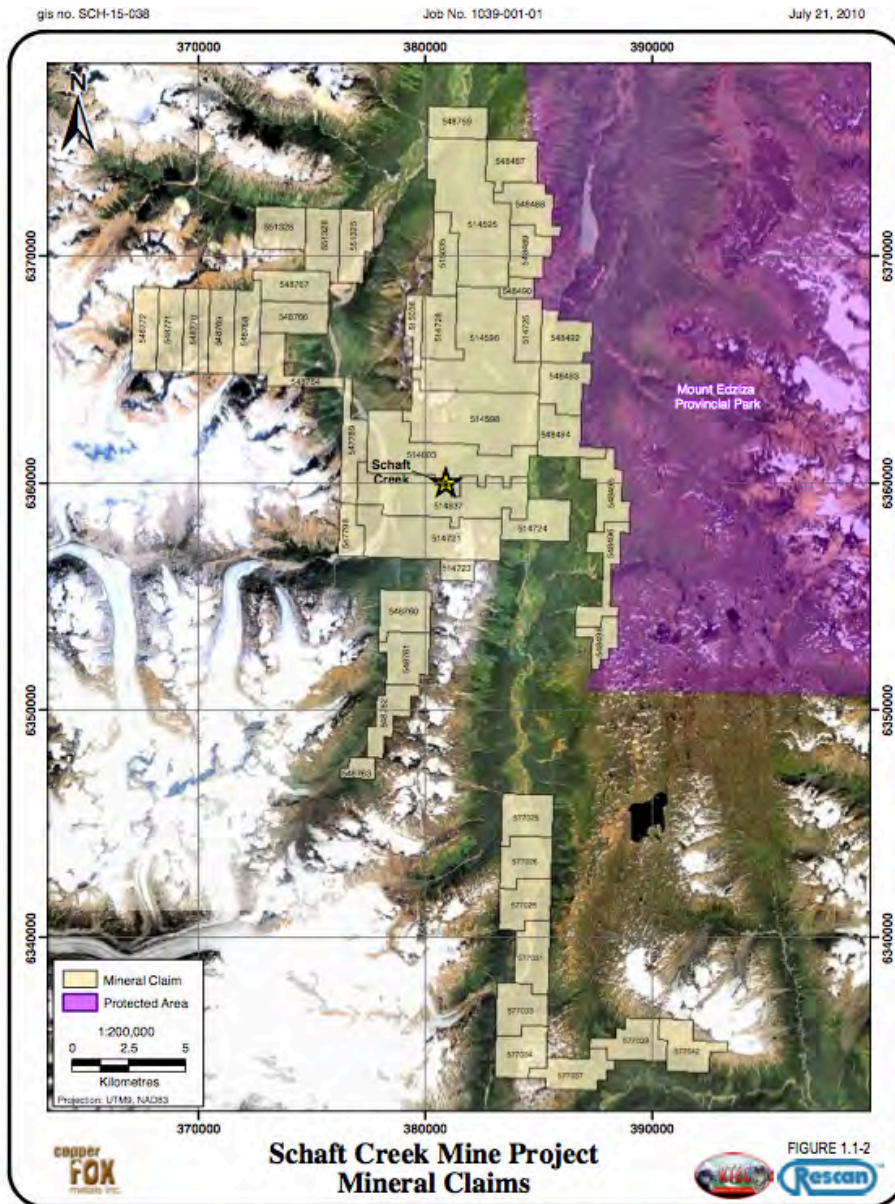
The project would rely on the same road access as the proposed Galore Creek Mine (a westward road from Highway 37, along the southern edge of Mount Edziza Provincial Park). An additional 40km spur northwards following Mess Creek would need to be constructed to reach the mine site. It is anticipated that over a 24 hour period, 96 ore trucks would travel this road, seven days a week, 365 days a year. The company is proposing to construct an airstrip at the mine site to accommodate Boeing 737s to fly in mine personnel.



Location map for Schaft Creek Project (Image: Final AIR/ EIS Guidelines, BCEAO and CEAA, Feb. 7th, 2011, retrieved from BCEAO website Jan. 2012.)

Proponents of the project cite the small footprint of the operation, the lack of destruction of fish habitat and the anticipated minimal PAG rock (less than or equal to 5%) as positive attributes of the project. Copper Fox Metals has been working in close partnership with the Tahltan Central Council regarding the project.

Immediately to the east of the operation is Mount Edziza Provincial Park, the access road would create a new road west from Highway 37 to the south of the park and into the Mess Creek drainage.



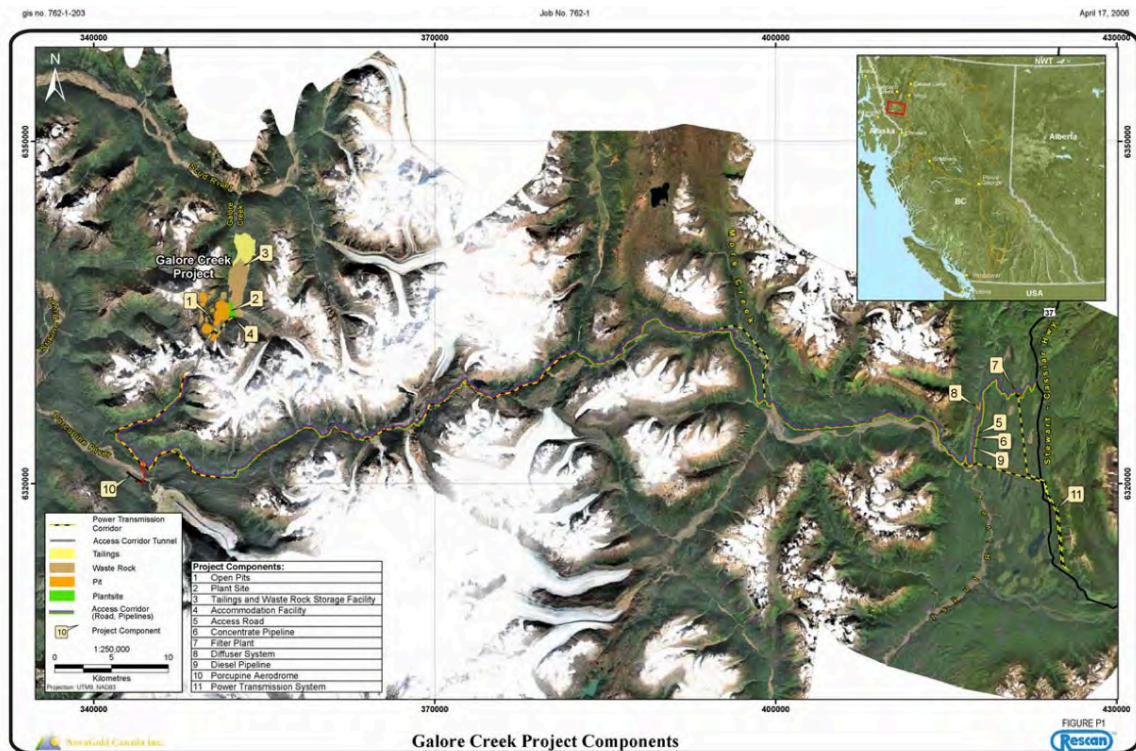
Schaft Creek and proximity to protected areas map (Image: Final AIR/ EIS Guidelines, BCEAO and CEAA, Feb. 7th, 2011, retrieved from BCEAO website Jan. 2012)

The Application Information Requirements (AIR) have been approved for a BCEAO/ CEAA Comprehensive Study Joint Review. Currently, Fox Creek Metals is preparing the EIS. Participant funding has been allocated, the Skeena Watershed Conservation Coalition received \$8,000 to partake.

Galore Creek Project:

The Galore Creek Project, a gold, copper, and silver mine, is being advanced by the Galore Creek Mining Corporation (a partnership between Teck and Novagold Resources).

The project successfully completed both the provincial and federal environmental assessment processes in 2007. The project was subsequently shelved due to escalating costs and falling commodity prices. Galore Creek is one of the largest undeveloped deposits of its kind in the world. The project was reviewed with extensive input from the Tahltan Central Council and Novagold has stated that cooperation with First Nations communities is very important to them.



Galore Creek Project Location Map, minesite located on left side of map, dewatering plant, Iskut River discharge on far right. (Image: Galore Creek Copper Gold Silver Project Comprehensive Report: CEAA/BCEAO Jan. 19th 2007)

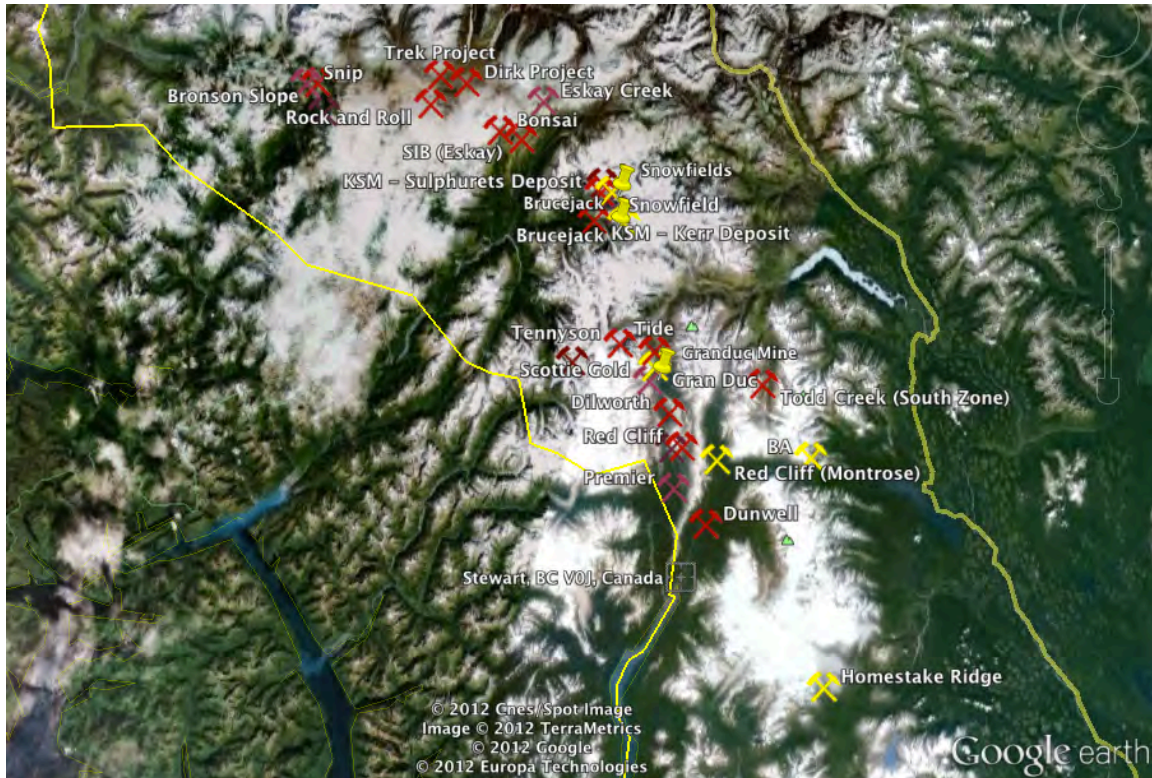
According to the EA documents the majority of the project would be contained within the Galore Creek valley. The project would feature one large pit and four smaller satellite pits. The project is projected to last 20 years. For the purpose of the EA the mill capacity was projected to be 65,000 t/d. However, a current feasibility study and the project website reference a 95,000 t/d mill and a mill located in a separate valley connected by a 14km tunnel. Further research is needed to clarify the exact intentions of the proponent.

The project requires significant infrastructure including an access road from Highway 37, a diesel pipeline, and concentrate slurry pipeline (connecting a dewatering plant just west of Highway 37 to the mine site), a power line, an aerodrome, a concentrate dewatering plant and associated discharge pipeline into the Iskut River, a load-out facility and multiple camps, staging areas and access roads to facilitate construction.

The mine site drains into the Scud River a tributary of the Stikine River. The dewatering plant would discharge directly into the Iskut River. Concern was expressed about the impacts on wildlife during the EA. In particular, impacts to key grizzly bear habitat in the vicinity of the mine and at feeding grounds in the lower reaches of Porcupine Creek were assessed. Porcupine Creek is the planned location of an aerodrome to accommodate flights for personnel during operations and heavy lifting during road construction. The aerodrome and the mine site would be connected by road.

In the fall of 2011 Novagold indicated that it was keen to sell its interest in the project to focus on their Donlin project in Alaska. The construction of the NTL has elevated the project to a realistic possibility. A revised project feasibility study, incorporating a new mine design at present prices is expected to be released shortly. Further review, assessment and research are needed to fully understand potential impacts. However the Tahltan Central Council seemingly addressed many important conservation issues during the comprehensive review.

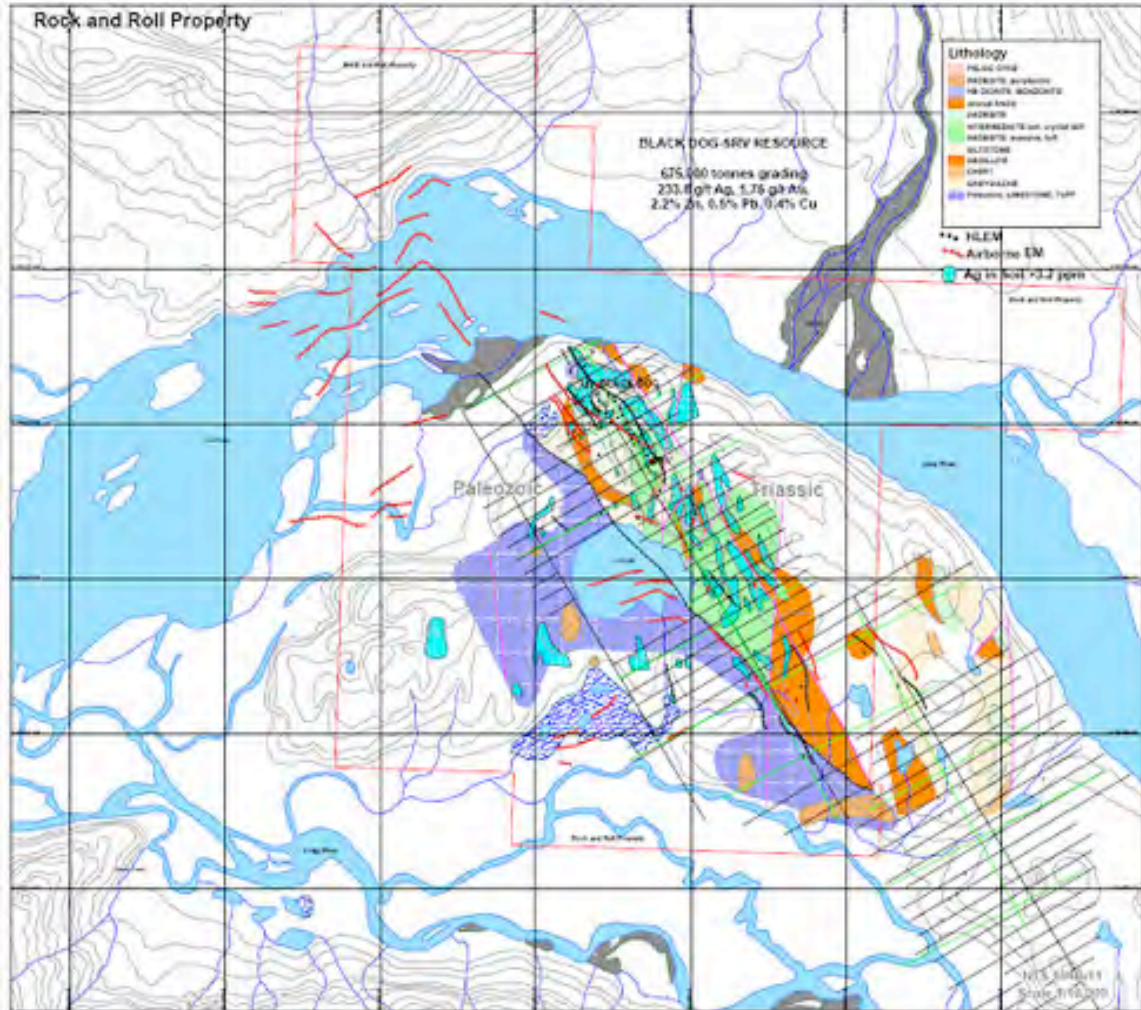
Iskut River Watershed:



Map of projects in the Iskut, Unuk and Nass River watersheds (Image: Screen grab of Unuk River Post-Google Earth mapping project)

Rock and Roll Project:

While still at an early exploration stage with comparatively little drilling done on site, Pacific North West Capital Corp.'s Rock and Roll project is showing promising results and its proximity to the Iskut River deserves further attention. Located just 9km west of the Bronson Slope project, the project's two zones straddle the Iskut River. The cumulative impacts of other mining operations on the Iskut River must be considered, specifically, the concerns related to metal leaching and acid rock drainage (ML/ARD) and long-term liability at the Snip and Johnny Mountain operations immediately to the east.



Map showing location of Rock and Roll Property and Iskut River (Image: from PFN website: <http://www.pfncapital.com>)

Bronson Slope Project

The Bronson Slope Project is owned by Sky Line Gold Cooperation. Sky Line’s Iskut property also contains the closed Snip and Johnny Mountain Mines. Both mines had underground workings and have substantial ML/ARD challenges. The Snip Mine operated as an underground gold mine from 1991-1999. Over 1.3 million tonnes of ore were produced. During closure significant ML/ARD concerns materialized. The mine’s closure plan of flooding the underground workings to limit the development of ARD remains a long-term challenge. Price (2005) identified the remote location of the mine, the challenging environment and lack of on-site staff as significant obstacles to fully addressing future challenges at the mine site. The future drainage chemistry is unknown (there are future concerns about ARD, neutral leaching, and contaminant transport).

already presented by the Snip and Johnny Mountain mine workings raise the stakes of any further development in the region.

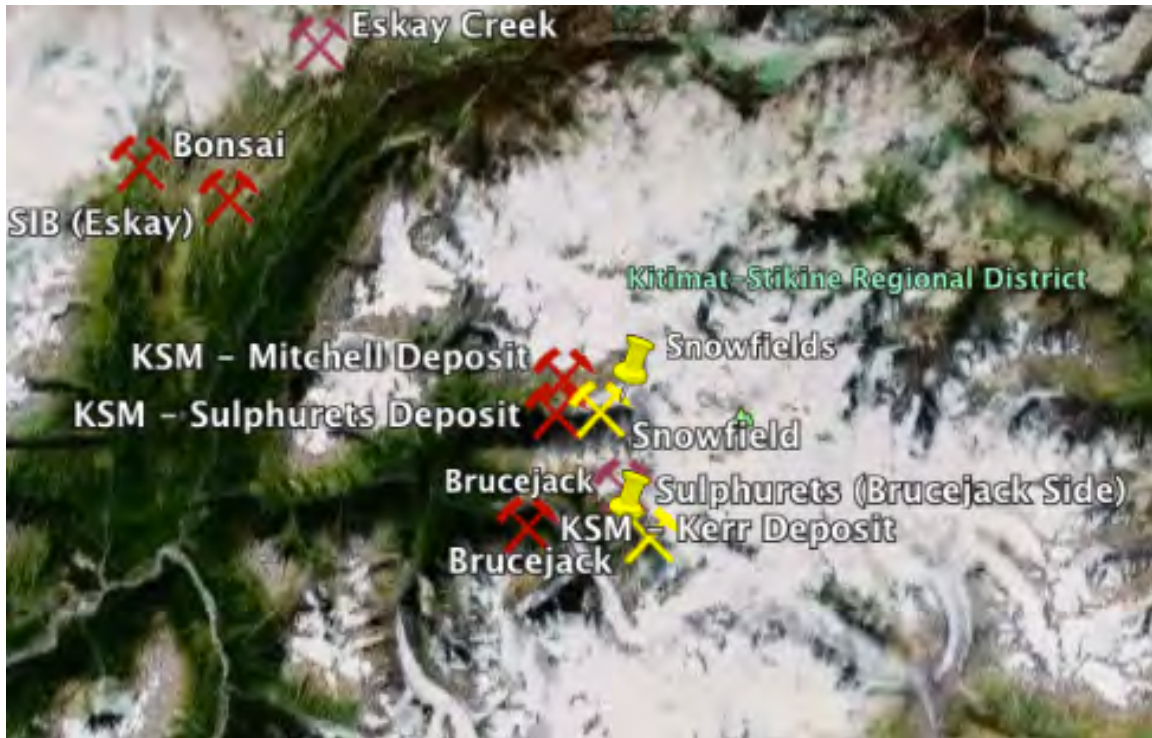
Sky Line has signed an agreement with the Coast Mountain Hydro Corp. regarding a mutual interest in utilizing the Iskut River for hydro production. The agreement expressed mutual interest and shared information on the water license on the Iskut River.

This project and the long-term impacts of Johnny Mountain and Snip Mines deserve a much more detailed analysis than can be provided here. Such a review should include: risks posed to the Iskut River as the result of historical operations, sufficiency of current bonding held, analysis and adequacy of long-term monitoring, site geotechnical and geochemical stability, future responsibility for mine workings, impacts of hydro production on the Iskut River, and the cumulative impacts of three mine operations in the region.

Unuk River Watershed:

New Eskay Creek Project/ Bonsai Project:

Eskay Creek's record gold mine continues to draw companies into the area in the search for "Eskay II." Numerous smaller exploration projects surround the claim area still held by Barrick Gold at Eskay Creek. Many of these companies are hopeful that the geology present at Eskay Creek will be found at their projects. Potential projects include Eskay Creek Mining's SIB project, and Teuton Resource's and Copper Creek Gold Corp.'s- Bonsai Project. These projects will add further to the pressure on the Unuk River watershed.



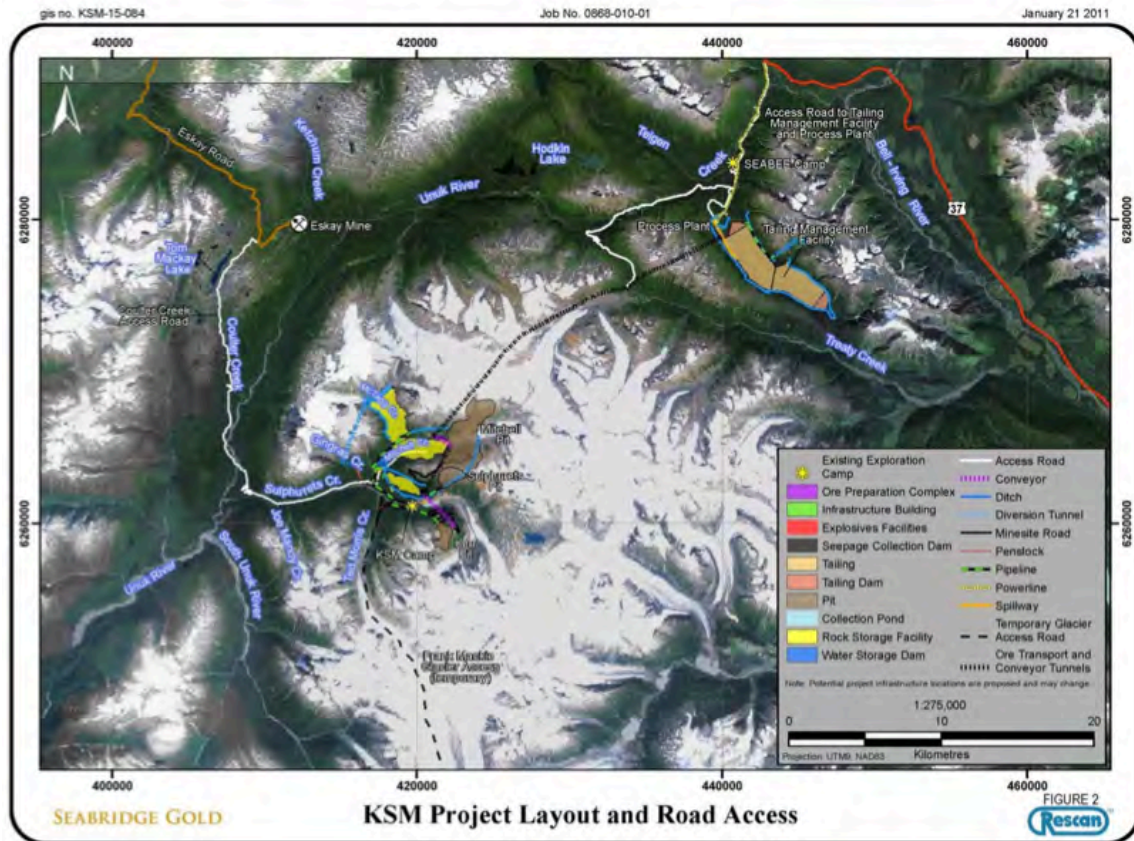
Map of Bonsai, SIB and Eskay Creek in relation to KSM project (Image: Screen grab of Unuk River Post-Google Earth mapping project)

Sulphurates Mining Camp:

The Sulphurates mining camp poses one of the most significant threats to the Unuk and Nass Rivers. Bounded by the Unuk River to north, the most famous deposit in the area is Seabridge Gold's KSM Project. The area is approximately 65km north of Stewart, BC.

KSM Project:

The KSM project (Kerr-Sulphurates-Mitchell) Project covers four distinct mining areas. The Kerr, Sulphurates, Mitchell and Iron Cap deposits represent the largest undeveloped gold deposit in Canada. Current company documents suggest that the mine life will be at least 52 years. The project is massive in scale and requires complex engineering to operate in such a mountainous environment. It is bounded by glaciers on three aspects and is located 30 km from the US border. The project is proposed as an open pit gold/copper/silver/molybdenum mine.



Map showing KSM Project Layout and TSF. (Image: BCEAO/ CEAA KSM project documents)

Primary processing of the ore will take place at the mine site. However, the mountainous nature of the site requires the construction of two 23 km long tunnels to transport ore slurry to a process plant, and TSF located in the Teigen Creek watershed. One tunnel will transport the ore slurry, process return water, diesel, and electrical power, while the second will transport personnel and materials to the mine site.

The required mine site infrastructure is immense. The water diversion systems alone will require multiple tunnels, included two twin 5.6km long tunnels and a water storage area with a 156 m high dam. Two access roads would be constructed; one extending the access road to the Eskay Creek mine and include construction of a new spur up the Mitchell Creek drainage, the second extending the Granduc Mine access road over the Frank Mackie Glacier to the mine site. The Teigen site would require a 12km spur from Highway 37.

The mine site and waste rock dumps drain into the Unuk River watershed, while the process plant and TSF drain into the Teigen and Treaty Creek, which drains into the Bell Irving River- a tributary of the Nass River. Production will start at 120,000 t/d but will be ramped up to 140,000 t/d. Seabridge notes that this could be further increased to 180,000 t/d prior to year ten.

The vast volume of rock mined requires a TSF that can accommodate up to 2.3 billion tonnes and will have a final dam height of 240m. Water treatment plants will be constructed to treat water prior to discharge. The lower reaches of the mine site contain no fish bearing streams, however the creeks are tributaries of the Unuk River- known to support all five species of wild salmon. Water quality analysis of the Unuk River illustrates elevated background metals are already present (consistent with an area of high mineralization), however the small size of the Unuk watershed makes it more susceptible to contamination.

The Bell-Irving River is a large tributary of the Nass River. The Nass River supports a commercially valuable salmon fishery and many tourism operations. Numerous hatcheries and salmon restoration efforts are found along its length. The Nass River is central to the Nisga Nation's way of life. The mine site area is habitat for bear and mountain goats.

Currently, construction is estimated to cost \$4.68 billion, an increase of \$1.3 billion from 2010 (in part because of the addition of the Iron Cap deposit). Using current prices and construction costs it is estimated that construction and development costs will be paid off in 6.6 years.

The project has entered both provincial and federal environmental assessments and is undergoing a comprehensive review. Participant funding was allocated in August 2010. The only non-First Nation group to apply for funding to participate (the Kitimat Terrace Industrial Development Society) received \$6,500. The AIR (terms of reference for the preparation of the EIS) were approved in January, 2011. The BCEAO issued an amendment in September 2011 to address concerns from the Gitanyow Hereditary Chiefs office.

The Tahltan have declared that part of project falls within their territory as have the Gitsxan and Gitanyow. Part of the project area also falls within the Nisga Final Agreement area. Seabridge has contributed extensively to aboriginal mine training and education initiatives and prides itself on its community consultation and sustainability efforts.

A revised Pre-Feasibility Study is due in April 2012, and should include the most recent figures, plans, and timelines for operations. Currently, Seabridge is hoping to conclude the EA in late 2012 and begin construction soon thereafter. Seabridge suggest mine operation will start by 2018.

The possible need for perpetual water treatment, the potential impacts to the Unuk River, the storage of 2.3 billion tonnes of tailings behind a 240 m high dam in the headwaters of the Nass River, the need for significant infrastructure to be left in place to maintain and monitor in perpetuity, and the geological risks of a steep mountain

environment all contribute to a strong need to fully evaluate the risks and benefits of the project.

Bruce Jack Project:

Pretium Resources is the current owner of the Bruce Jack project. This site has a troubled past, and the consequences of mining economics, corporate sales, and a lack of enforceable regulations mean the impacts from historical mining (1980s) are still present.

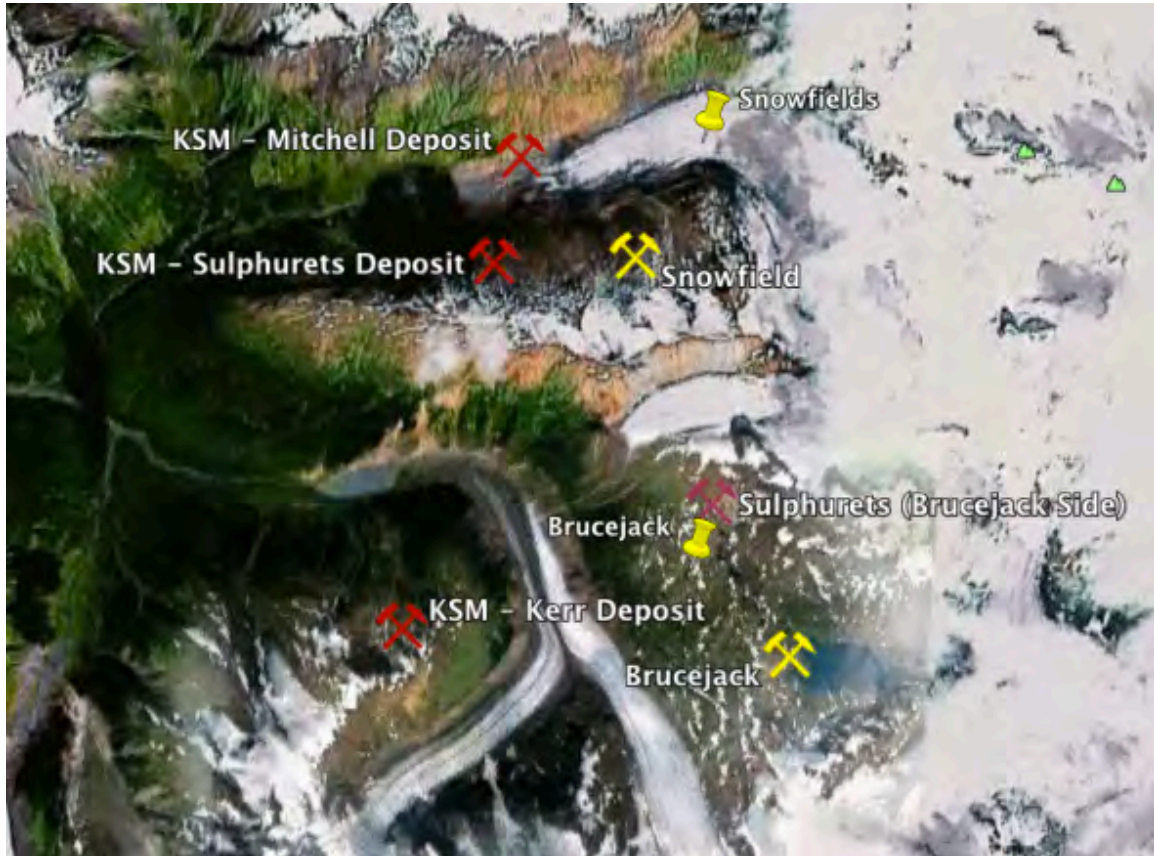
First explored and developed by a joint venture by Newhawk Gold Resources from 1896-1991, the project was a small-scale underground operation (totaling approximately 5 km of tunnels). However, the project was unviable and operations ceased in 1991. Waste rock and low-grade ore were stockpiled but not properly disposed of. Facing governmental pressure, Newhawk disposed of the ore and waste rock in Bruce Jack Lake in 1998-1999. Subsequently, Silver Standard Resources purchased the property. Little information is available about the abandoned mine workings and infrastructure. Company reports fail to mention anything other than the underground adit and the costs of pumping out flooded underground operations. Images found on the web show much reclamation still needs to be done, including removing equipment, machinery, a mine camp. Further research is required into the level of reclamation needed at the site.

Pertium Resouces purchased the Bruce Jack and the neighboring Snowfield property from Silver Standard Resources in 2010. The former CEO of Silver Standard Resources is now the CEO of Pertium Resouces. The company is actively developing both projects. The Bruce Jack deposit is being explored as a high-grade underground operation; while the Snowfield deposit is being explored as a low grade, bulk tonnage porphyry gold/copper / molybdenum deposit.

Pretium has announced that it has entered into an agreement with Seabridge to explore the economics of developing the Snowfield project in conjunction with the KSM project. The Snowfield deposit is immediately adjacent to the Mitchell deposit. At present Pretium is constructing an access road from Highway 37 to the mine site. The road is subject to a CEAA review and a screening level assessment conducted by Transport Canada is ongoing.

In the fall of 2011, Pretium announced that it had fully expanded and winterized its camp to accommodate up to 150 personnel for exploration and that the resource at Bruce Jack had significantly increased. In January 2012, Pretium was officially listed on the NYSE.

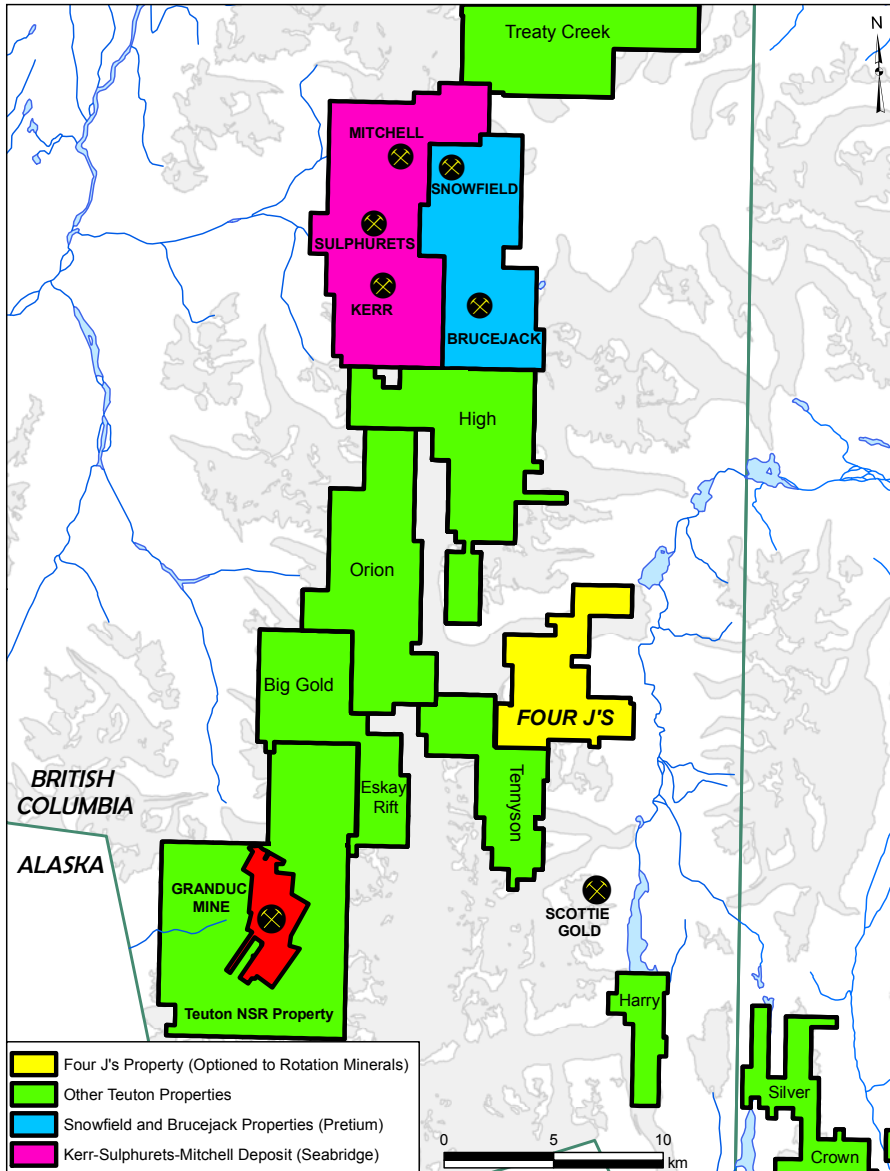
The Bruce Jack project is challenging to fully evaluate given the limited information about the future mine design and past site issues. However, further research is strongly warranted. The dewatering of the mine workings and subsequent discharge, as well as the bonding of any future works deserves careful attention. The cumulative impacts of the KSM- Snowfield and Bruce Jack operations and their impacts on the Unuk watershed must be fully evaluated to understand the potential impacts. It is concerning that the government has already had to step in to order a site clean-up and there is little transfer of liability or responsibility to the subsequent purchasing parties.



Map of proximity of Brucejack and Snowfields project to KSM (Image: Screen grab of Unuk River Post-Google Earth mapping project)

KSM Vicinity:

Teuton Resources has many projects in the immediate vicinity of the KSM and Brucejack projects, including the High and Treaty Creek projects, and the Tennyson project to the south. Teuton continues to amass claims in the northwest and attempts to increase the value of each claim area prior to optioning it to other exploration companies.



Map of Teuton Resources claims in KSM area (Image: Teuton Resources website)

Granduc Copper Mine:

The underground Granduc Copper Mine operated from 1964 to 1984. The mine site is located south of the Sulphurates mining camp. The project was recently fully acquired by Castle Resources. Castle seeks to revive much of the Granduc mine infrastructure- including a 17 km tunnel that was rehabilitated in late 2011, and a gravel access road to Stewart (estimated to be worth at least \$100 million at present construction costs). Production is estimated to be 5,000 t/d. Castle Resources is advertising the project as a “ low risk, high-grade, long-life past producer restart” and states that it only needs

provincial governmental approval, not federal. The current plans for tailings management and mill site require further research.

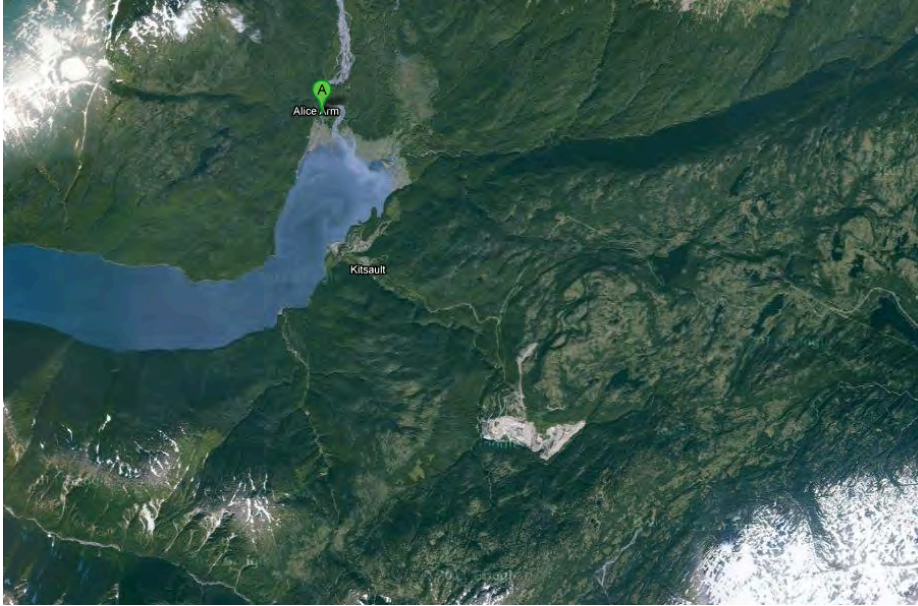
Coastal Projects:

Kitsault Project:

The Kitsault project seeks to redevelop a past producing molybdenum mine. Operations ran from 1967 and 1972. It is located at the end of Alice Arm, an inlet from the Pacific Ocean.

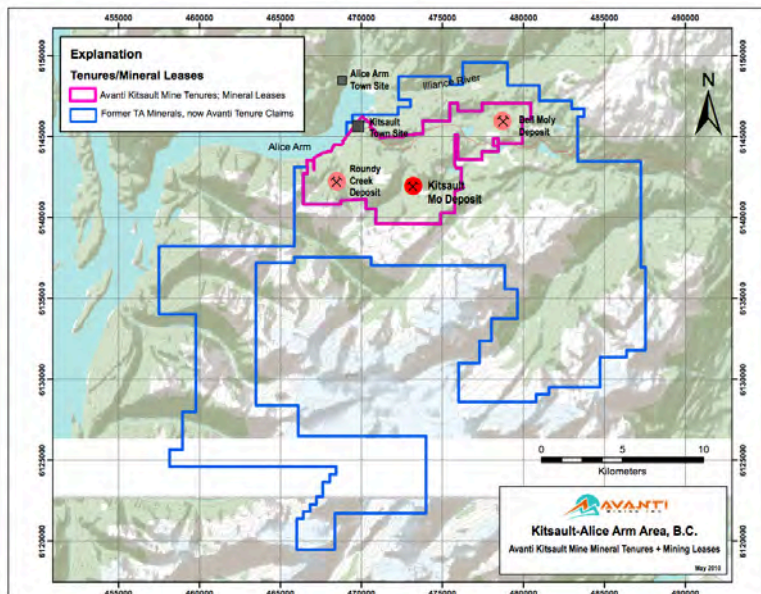


Kitsault Project is located near the green marker in the centre of the image. Alice Arm is a tidal arm of the Pacific Ocean. (Image: Google Earth, 2012)



The closed mining operations are visible in the centre of the image along with the road to Kitsault and the access road/power line from the east. The proposed mine will be centered east of the previous location (see map), while the new TSF will occupy the area NE of the current mine workings. (Image: Google Earth, 2012)

Avanti Mining Inc, based in Colorado, is developing the Kitsault project. They are a small exploration/development company and this is their only project. However, Avanti has formed a partnership with SeAH Holdings Corp (the largest steel producer in Korea) to help finance mine development. Avanti Mining has extensive claims surrounding the mine site area and is actively exploring these to find additional resources.



Map shows mineral lease area held by Avanti and the tenure claims Avanti has recently secured for further exploration. (Image: Avanti Mining Inc website: www.avantimining.com)

The company has recently submitted their environmental assessment documents (some 7,000+ pages) for preliminary screening by the BCEAO and CEAA. A decision on the sufficiency of the EIS and whether to proceed with the next steps in the comprehensive review study is expected in late January, 2012. Participant funding has been awarded to First Nations groups and the Nisga Nation. It would appear that no ENGOS or other non-First Nation groups applied for participant funding by the 2010 deadline.

The mine design has been laid out to optimize production and to ensure that mine workings do not sterilize other surrounding deposits. The tailings storage facility will be located to the northeast of the pit and bounded by a dam on its northern and southern sides. Avanti suggests that this area (the upper reaches of Patsy Creek, within the Lime Creek watershed) is non-fish bearing. The watershed drains into Alice Arm. Contingencies for water treatment are being made and the pit will be below the TSF. Avanti has committed to posting at least a \$31 million bond within its first few years of operation.

The mine will utilize existing road access and power line infrastructure. Current estimates indicate the mine will run for 16 years and produce upwards of 5% of the world's molybdenum supply.

As the mine will be developed in an area that has already seen extensive mining activity and modern operations, impacts will be more benign than elsewhere. Critical factors that deserve further exploration include the need for water treatment and the associated costs, and the consequences of off-site pollution migration into Alice Arm. If metals and other contaminants seep untreated into Alice Arm, there is the potential for harm to marine species in the Pacific Ocean. Reports indicate that there is a healthy grizzly bear population in the area and that tributaries of Alice Arm are important salmon streams. Mine construction and operation will lead to an increase in truck traffic on the access road from Highway 37.

General Skeena Region:

The Skeena Region includes many other advanced projects, including the Turnagain (Hard Creek Nickel Corp) nickel- cobalt deposit, and the Kutcho (Capstone Mining Corp.) high-grade copper, zinc, gold, and silver deposit, located north of the Stikine River and east of Highway 37. Both of these projects show promise and would benefit from the NTL. To the east, the Mount Morrison project located near Babine Lake is currently undergoing an environmental assessment.

Regulatory processes are underway to re-start the Tulsequah Chief Mine on the banks of the Taku River. It is hoped that any site activities will lead to long-term water treatment for the significant ML/ARD issues associated with past mining activities at the site.

There are several projects in the Smithers region including the Berg and Davidson projects. To include their information here would only further overwhelm the reader. However, it is clear that exploration and staking in northwest BC will continue to expand.

Omineca and other priority BC regions:

The overlap between the priority areas of Wilburforce and other regions in BC is less distinct than that of the Skeena Region. Therefore, the following overview of projects is less detailed. EMEF has much more information available about each area, but in the interest of focusing the attention on the regions where it is needed most, we have omitted the majority of the major project details for the rest of BC. However, we would be neglectful if we did not include a brief summary of activities within Wilburforce's other priority areas.

Central to all mining activity in BC is the construction of the new Mt. Milligan Copper-Gold Mine. Owned by Thompson Creek Metals it is the first new metal mine in BC in 15 years. Located just north of Fort St. James (NW of Prince George) the mine received a controversial CEAA approval in 2010. Some members of the Nak'azdli First Nation and the ENGO community feel that the environmental assessment process was deeply flawed. In particular, key evidence submitted by the Nak'azdli First Nation was not reviewed prior to the federal departments issuing their decision.

Mt. Milligan is currently under construction and it is hoped that the mine will begin production in late 2013. Mine life is estimated to be 20 years. The mill will process 60,000 t/d. The mine site and TSF are important habitat for numerous species and fish. An extensive TSF is being constructed.

The Mt. Milligan project has been divisive between the surrounding First Nations. The McLeod Lake First Nation accepted a revenue sharing agreement with the province, while the Nak'azdli First Nation has refused to sign such an agreement citing opposition to the project.

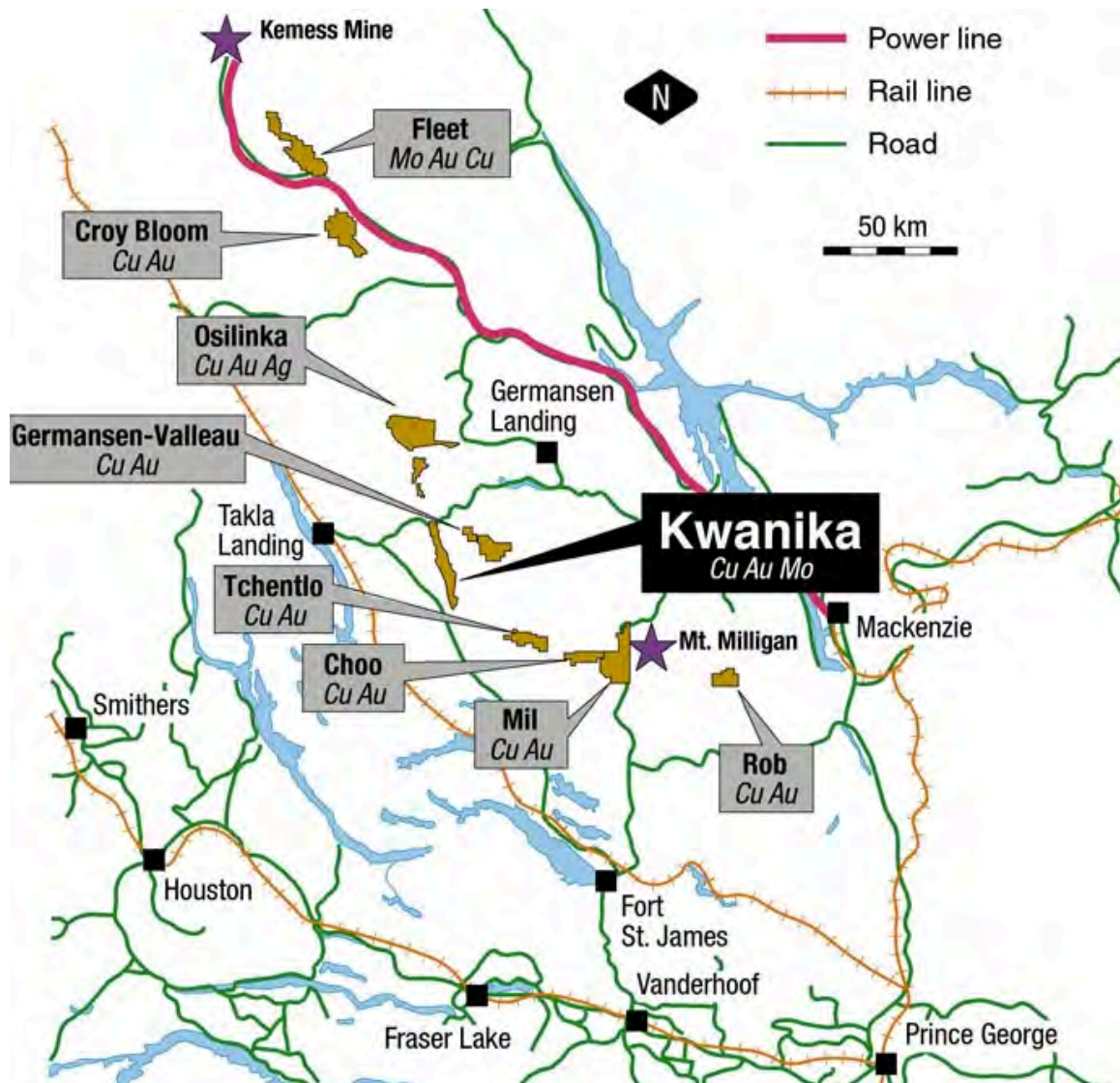
Southwest of Mt. Milligan, Thompson Creek also owns the fully operating Endako Molybdenum mine. Endako has recently upgraded its mill facility to increase production to 55,000 t/p and intends to create a super pit out of its three existing pits.

The controversial Kemess North project (Amazay Lake) is currently being explored in a revamped form. The owners, AuRico Gold, are proposing an underground mine. This mine design will avoid the previously highly controversial and rejected project that sought to turn Amazay Lake into a tailings impoundment. The Kemess North project will use the existing TSF at the Kemess South mine site. The revised project has the preliminary support of several surrounding First Nations and IBA discussions are ongoing.

The Omineca region around the Kemess site has recently hosted extensive exploration programs. One of the primary concerns in this area is the extent of road construction to reach exploration sites. Furthermore, many of the past abandoned mining operations in the region still await reclamation and clean-up.

Recent interest by major international players such as Freeport-McMoRan Copper Gold, Xstrata and Teck in the area has led to larger scale exploration projects. Teck recently “earned-in” to the Lorraine project, a large copper/ gold exploration project approximately 100km NW of the current Mount Milligan project.

One of the primary exploration projects in the region is the Kwanika project owned by Serengeti Resources and recently optioned to Freeport-McMoRan Copper-Gold. Serengeti has signed an access agreement with the Takla Lake First Nation and further discussions are ongoing.



Map showing location of the Kwanika project in relation to Prince George (Image: www.serengetiresources.com)

The construction of Mount Milligan, the known prospects in the Kemess region and ease of access in the area due to forestry infrastructure have led to an exploration boom. Harvard's Human Rights Report: Bearing the Burden, focused on the experience of the Takla Lake First Nation.

An area referred to as the Quesnel Trough stretches from the Kemess mine in the north to Mount Polley in the south in a northwest to southwest line. Traditionally a placer mining region, this area has recently attracted great interest from mineral exploration companies. Much of the area has been heavily logged, but small parts are critical wildlife habitat for caribou. Many of the rivers in the area are tributaries to the Fraser River and support critical salmon spawning areas.

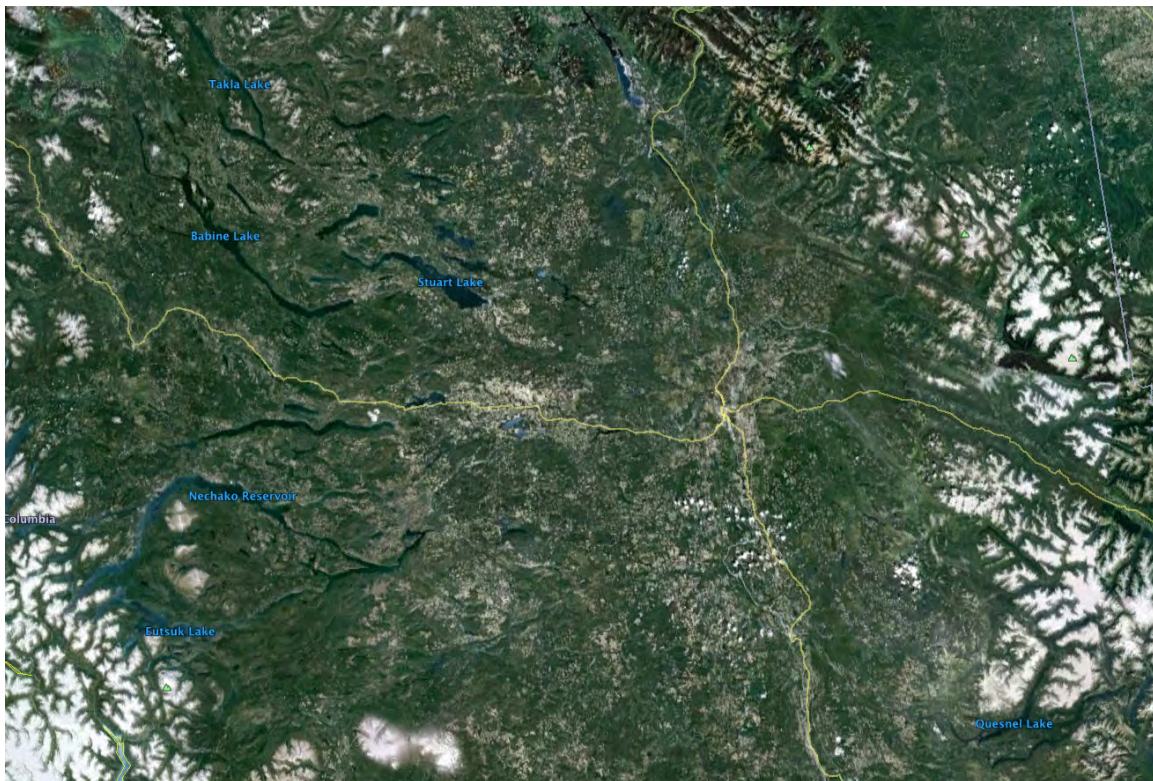
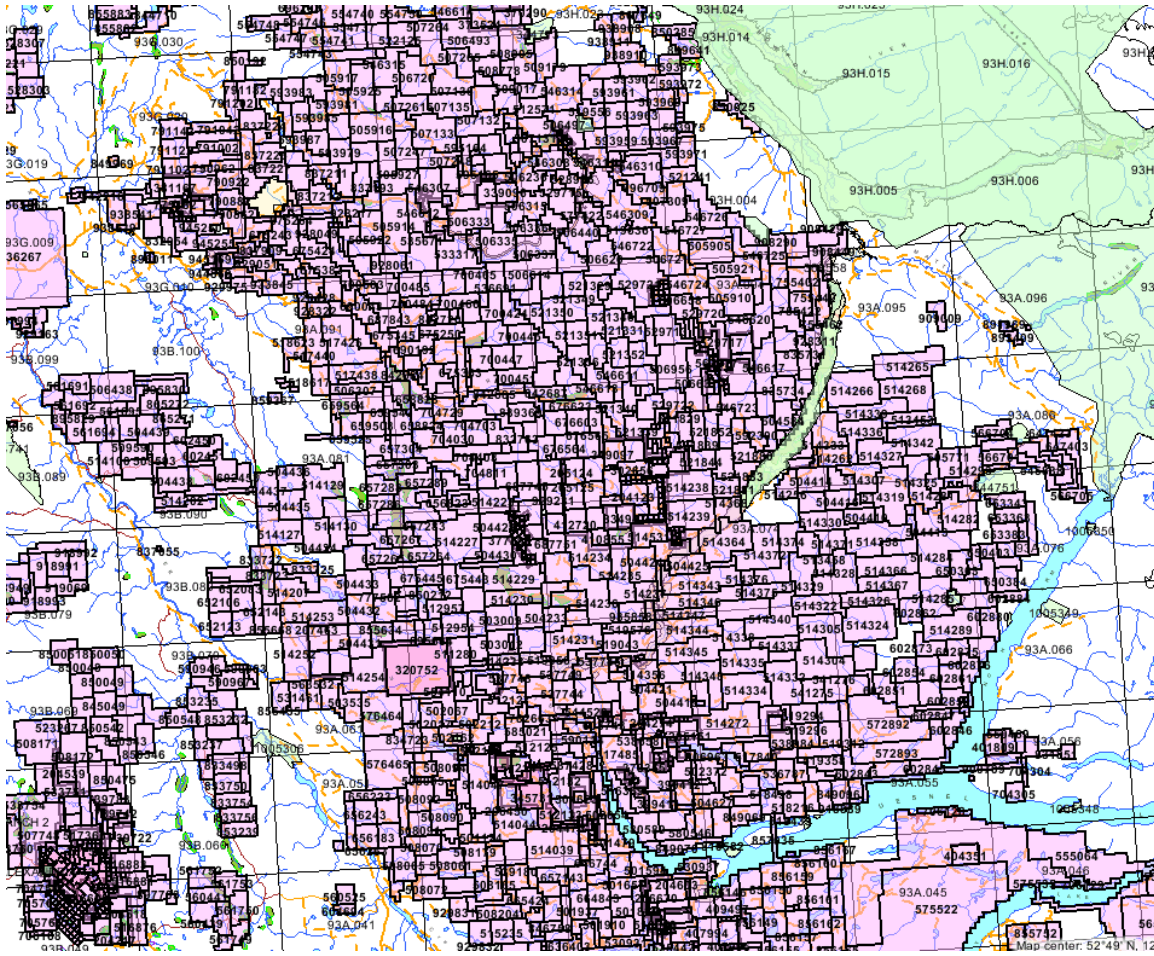


Image of the Quesnel Trough, the road junction in the centre of the image is Prince George, BC. The Quesnel Trough extends from the top left corner to the bottom right. (Image: Google Earth, 2012).



Map of claims in the Quesnel Lake area, in the middle of the Quesnel Trough (Image: BC Gov. MTO Screen Capture).

Current expansion at the Mount Polley and Gibraltar mines, the development of a regional processing hub at the QR mine, and the environmental assessment of the Spanish Mountain Gold Mine, indicate a strong mining interest in the area.

The region west of the Fraser River on the Nechako-Chilcotin Plateau faced an “online staking rush” in 2010 according to government geologists.¹⁶

This area, to the south of Highway 16 and to the west of Highway 97 has recently attracted the interest of many junior mining companies. Central to this is the Prosperity Mine region (more in separate chapter).

In the Kamloops area several mines are currently proposed or under construction, including the Ajax Mine, Harper Creek and the soon to be producing New Gold- New

¹⁶ The Northern Miner: Emerging gold belt lures juniors to Yukon, Alaska and BC. Vol. 97.3: 2011.

Afton Mine. Exploration projects in the Ruddock Creek area are controversial with some neighboring First Nations.

The Roca MAX molybdenum mine close to Trout Lake, BC is currently under care and maintenance.

As previously mentioned the coal mining pressures in southeastern BC are the dominant mining concerns in that region. Although, limited mineral exploration is also taking place. Organizations such as Wildsight have done much work on individual project assessments in that region and we encourage Wilburforce to follow-up with those parties directly as coal mining is currently out of the purview of EMEF. However, as previously noted, the volume of coal removed dwarfs all other mining initiatives in BC.

Similarly, coal mining and exploration activities are the dominate mining interests in the northeastern area of BC. In particular, the region around the Peace River coalfield deserves further assessment. There are currently four major coal operations. Numerous companies, including Teck, are completing further feasibility studies to assess the potential of additional projects in the area. An extensive legal battle between local First Nations and a coal development company centred on the need for increased protection for caribou. A concerted research effort focusing specifically on coal production within BC is warranted.

The Chilcotin:

Much of EMEF's work over the last few years has focused on efforts surrounding the Prosperity Mine. Thus the following has been prepared as a stand alone section.

The Prosperity Project and Surrounding Area

Dasiqox-Taseko Wilderness Conservancy Concept Paper

Overview

The proposed Dasiqox Conservancy is located in the Coast Range of British Columbia, the traditional territory of the Xeni Gwet'in Nation. This remote mountain and foothills ecosystem, known as the "Nepal of Canada", is one of the rarest and most unique intact rain shadow mountain ecosystems left in North America. The Xeni Gwet'in and Yunesit'in, two of the six communities within the Tsilhqot'in Nation, have been caretakers of Dasiqox for thousands of years. They have an established ecosystem based management plan which protects the ecological integrity of their traditional lands for future generations, while encouraging compatible economic opportunities for Tsilhqot'in members and their non-Native neighbors (eco-tourism, small scale logging, hunting & fishing).

The Dasiqox wilderness conservancy will connect five provincially protected areas: Ts'il?os Park, Big Creek Park, South Chilcotin Mountains Park, Nunsti Park, and possibly Upper Lillooet Park (figure 1) resulting in over 240,000 hectares of intact wilderness. Connecting these lands will protect vital habitat for a wide range of wildlife, including the endangered (blue-listed) interior dry-land grizzly bear and the Taseko and Chilco watersheds, home of some of the last health populations of Sockeye, Chinook and salmon and Steelhead, and headwaters of the Fraser River.

The Dasiqox wilderness conservancy will enable the Tsilhqot'in people to continue their traditional subsistence, spiritual, and sustainable economic development activities into the future. It is anticipated that other First Nations, especially the St'at'imc of the Lil'wat First Nation whose lands encompass the Upper Lillooet Park, are interested in becoming signatories to a Dasiqox Wilderness Conservancy agreement. There is a unique opportunity right now to conserve this critical area and time is of the essence.

The Threats

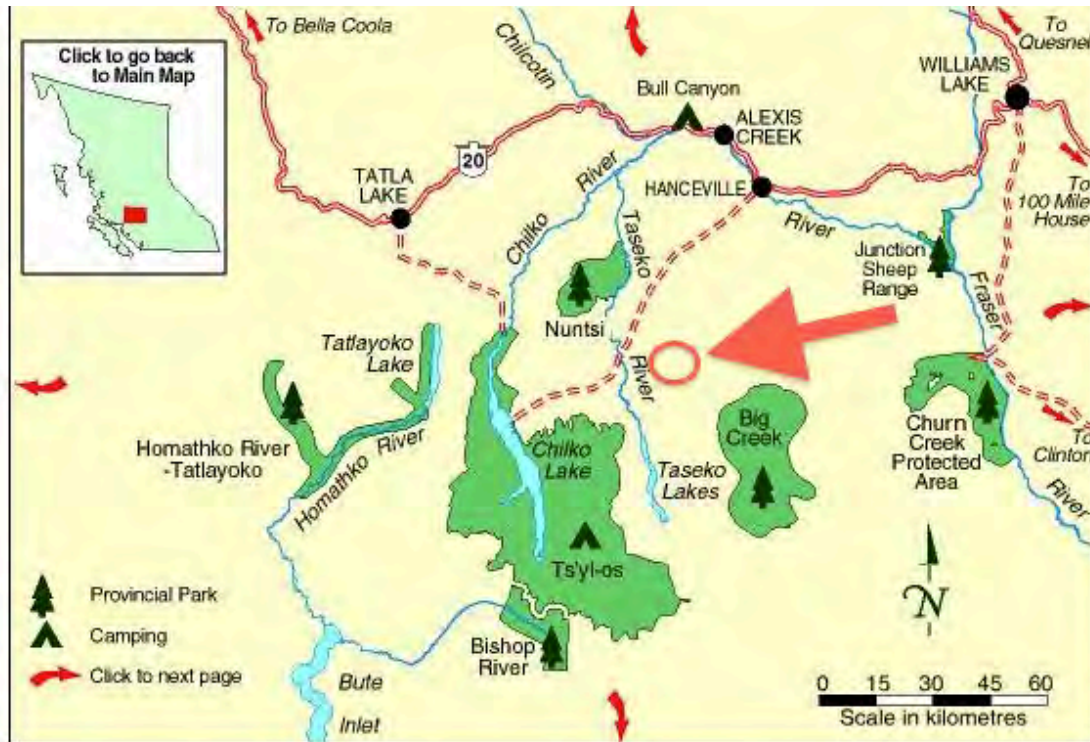
Mineral interests go back to the discovery of placer gold on the Fraser River in the 1860s and discovery and development of base metal mines across the mountain ranges southward at Gold River and Bralorne. Extensive mineral exploration of the Dasiqox area shows world-class low-grade copper porphyry ore deposits with a high sulphide content (large potential to generate acid rock drainage).

Imminent threats to the ecological integrity of the area from mining (Taseko Mines' proposed Prosperity Mine and mineral exploration throughout the Dasiqox area by Amarc), and logging (as indicated on figure 1) are looming. The entire area is staked and holds the biggest remaining undeveloped copper porphyry ore deposit in Canada. These massive industrial projects will destroy the ecological integrity of the area, cause overwhelming cultural loss to Tsilhqot'in people, bring destructive social forces into local First nations communities recovering from colonization, and cause economic devastation to a sustainable and fast developing local wilderness tourism industry.

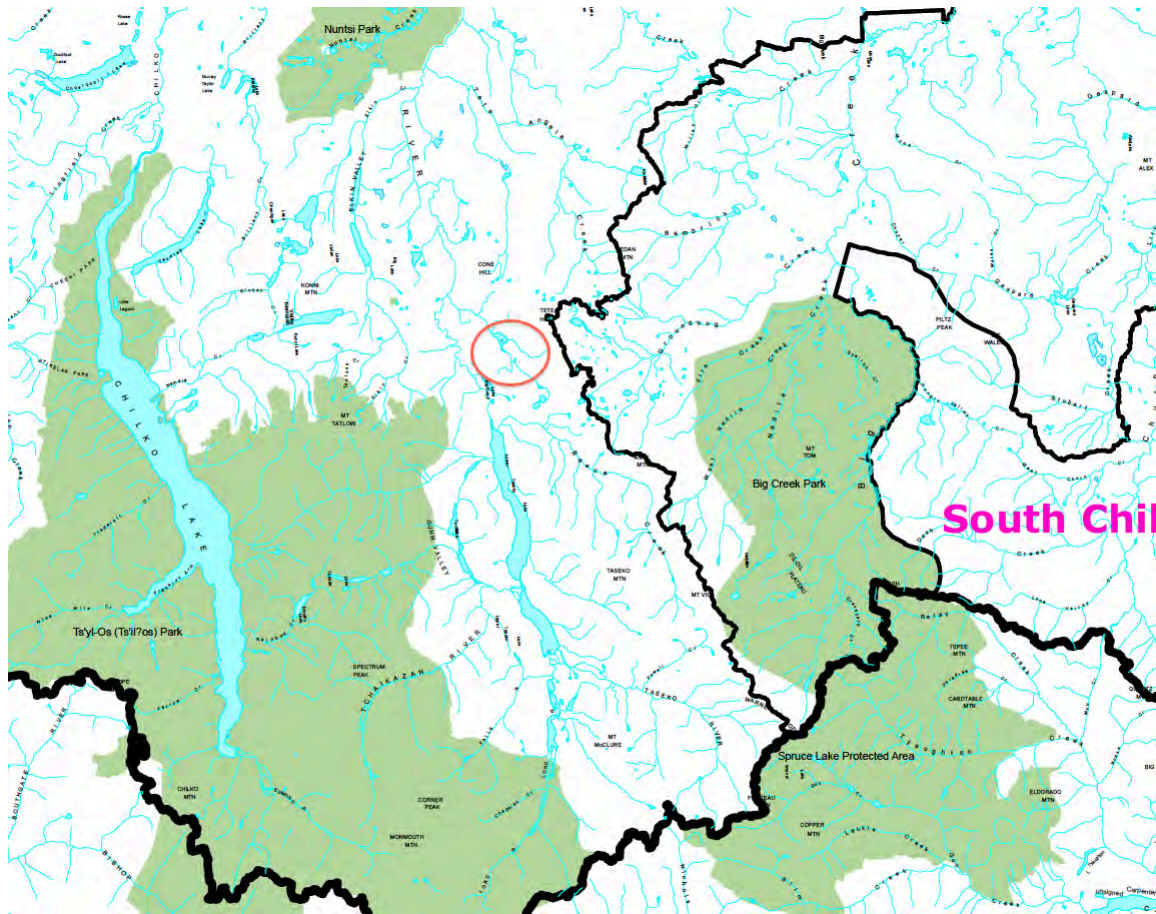
Mining exploration activities in the 1950s and 60s resulted in an extensive primitive road network. Many of these old poorly developed roads have fallen into disrepair and need deactivation. Others have become access for all-terrain vehicles, which increases hunting activities.

Taseko Mines Ltd. has been pursuing a large open pit, low-grade copper/gold mine since the mid-80s. There have been three environmental assessments of the project and all have been rejected. In 2011 the Federal Environmental Review Panel rejected the proposed mine due to unmitigatable impacts to the ecology, local tourism values and Xeni Gwet'in traditional and sacred uses of the area. Taseko has been granted another EA review by the federal government that is currently underway. The Xeni Gwet'in, other First Nations, conservation organizations and individuals around the world are united in opposition to the proposed mine(s).

Geographic Location Maps



Approximate location of Teztan Biny is indicated by red circle and arrow. Note: Spruce Lake Provincial Park is missing from this map as BC Parks has yet to update their maps to include this recent addition. (Image: BC Gov. Parks Website January 2012).



Teztan Biny (red circle) is surrounded by four provincial parks (Image: BC Gov. Parks Website)

- Ts'yl-Os Park to the west
- Big Creek Park to the East
- Nuntsi to the North
- Spruce Lake Park to the Southeast

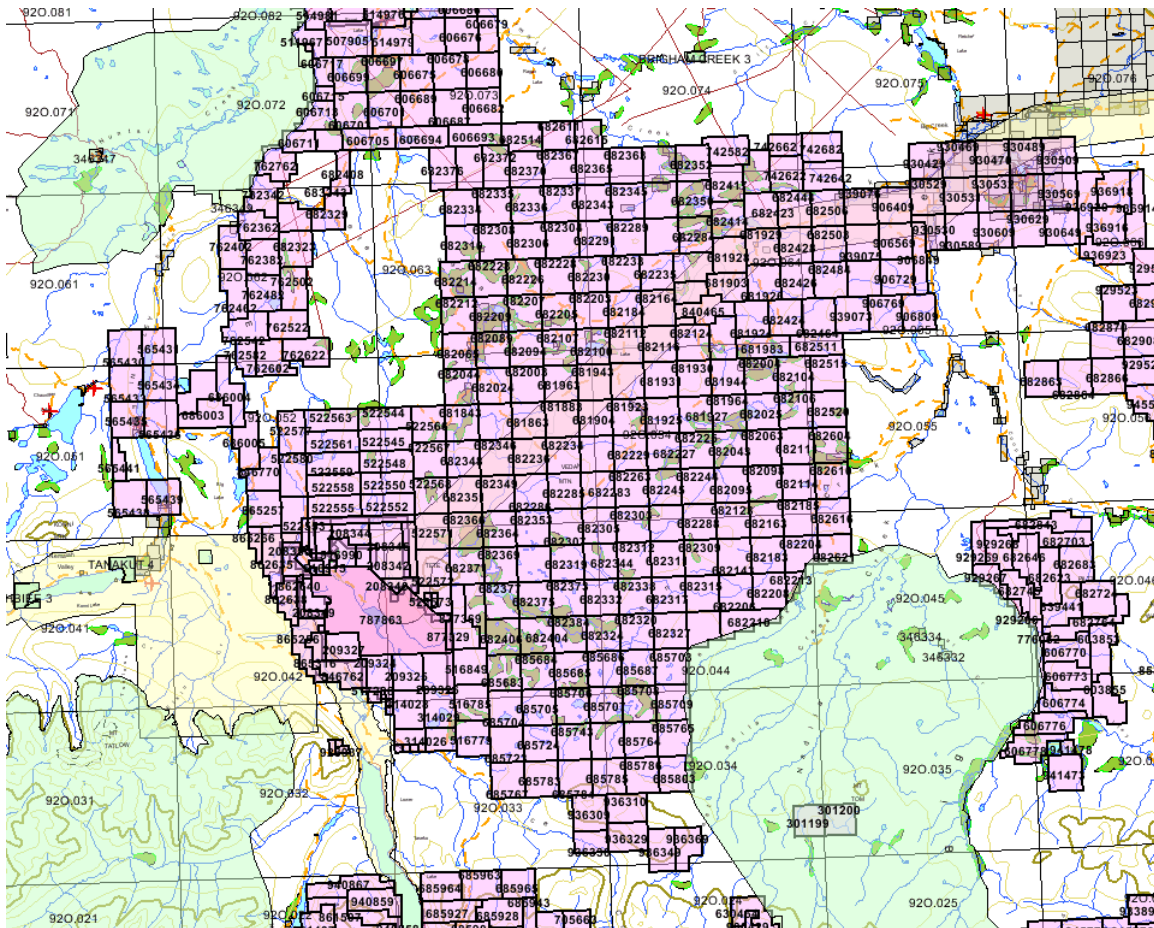
Land Use Planning History

Teztan Biny falls within the Cariboo-Chilcotin Land Use Plan area (CCLUP). The heavy black line at the bottom of the map above indicates the boundary to the Lillooet Land Use Plan area. The Tsilhqot'in National Government (TNG) was involved in the early stages of the CCLUP, but withdrew because only one seat was given to all the First Nations within the land use plan area.

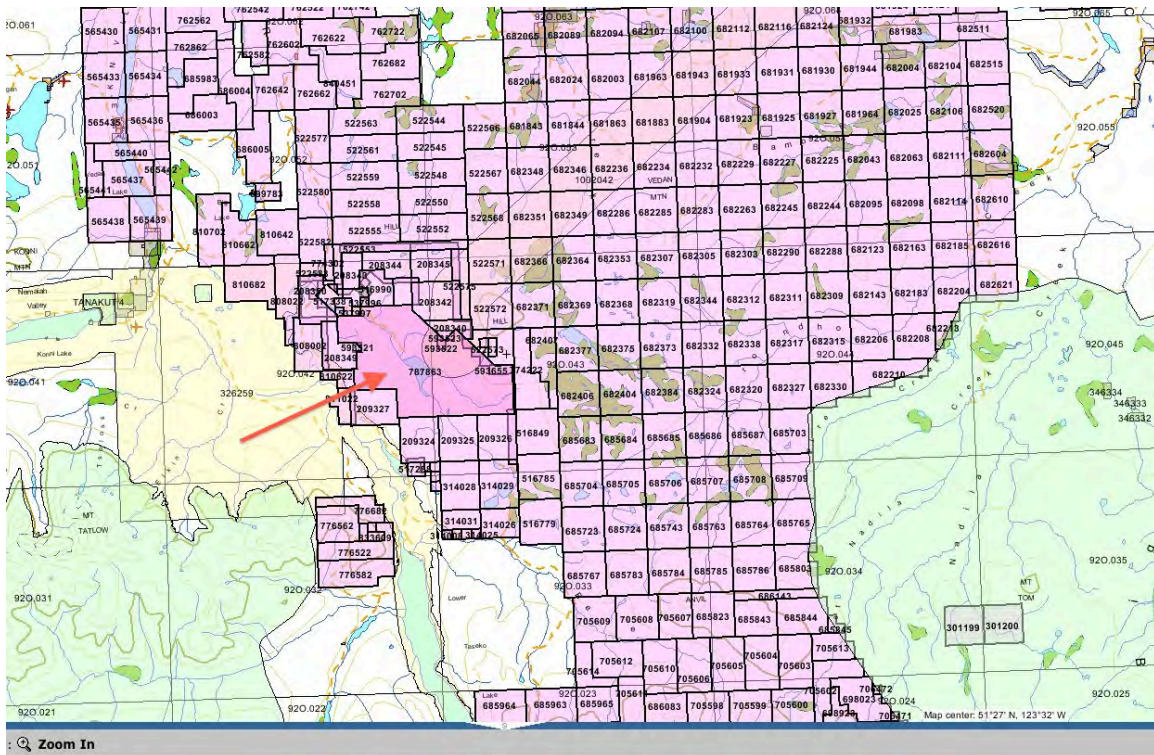
The outstanding wilderness values of the Dasiqox area were recognized during the land use plan. In the 1980s, mountaineering groups proposed the whole Taseko Watershed area be protected as part of the South Chilcotin Wilderness Park. BC placed a 12% ceiling on the amount of total protection that could be accomplished in the Cariboo-

Chilcotin land resource management plan (1994), thus only some of the west side of the middle and upper Taseko were protected as part of Ts'il'os Provincial Park. The remainder of the Taseko was designated as a "Special Management Area" where mining and logging would be allowed, but with extra constraints to protect the high wildlife, First Nations, fisheries and other values. The Xenigwet'in were signatories to the government land-use plan with the understanding it would not compromise their aboriginal rights and Title.

The Dasigox area has tremendous habitat and wildlife values and members of the CCLUP planning table recommended this area remain intact. None of the conservation measures or guidelines for special management were ever implemented. The Xenigwet'in have never been adequately consulted on these industrial incursions.



Map of Mining Claims staked surrounding Teztan Biny (large area on bottom left corner). Note power line transmission corridor for Prosperity Mine on right. (Image: BC Gov. MTO website, January 2012).



Areas Staked in immediate vicinity of Teztan Biny (note mostly by AMARC) (Image: BC Gov. MTO website)

The Xení Gwet'in realize that their traditional lands and cultural values are deeply threatened and have taken action to protect their interests. In the early 90's the Xení Gwet'in and other Tsilhqot'in communities set up a road block at Henry's Crossing to stop clear cut logging on their land. In 1989 the Xení Gwet'in Elders enacted the Neduwh Jid Guzitin Declaration.

The declaration reads:

***Neduwh Jid Guzitin Declaration
Nemiah Aboriginal Wilderness Preserve***

Let it be known that:

Within the Nemiah Aboriginal Wilderness Preserve:

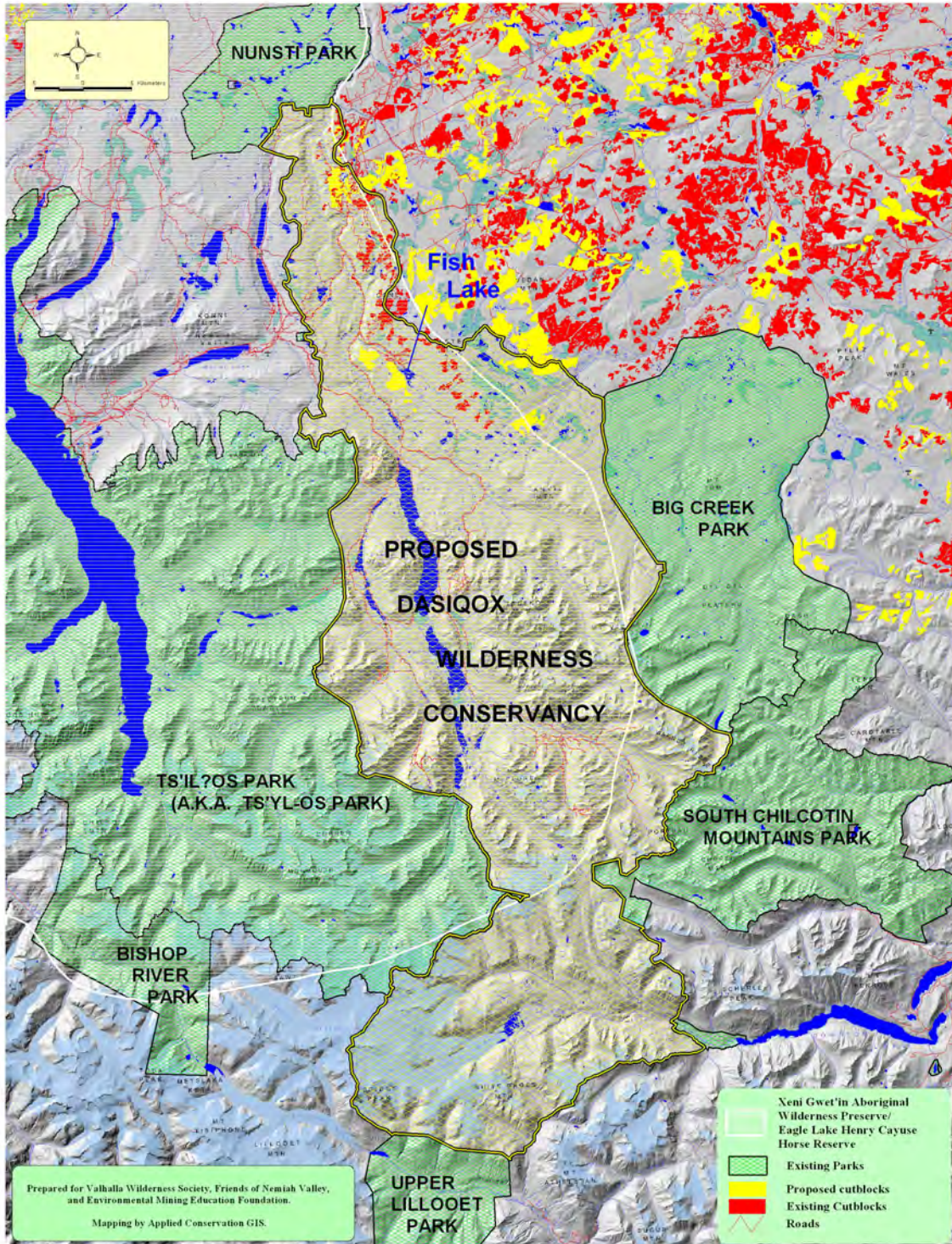
- *There shall be no commercial logging. Only local cutting of trees for our own needs. i.e. firewood, housing, fencing, native uses, etc.*
- *There shall be no mining or mining explorations.*
- *There shall be no commercial road building.*
- *All terrain vehicles and skidoos shall only be permitted for trapping purposes.*
- *There shall be no flooding or dam construction on Chilko, Taseko, and Tatlayoko Lakes.*

- *This is the spiritual and economic homeland of our people. We will continue in perpetuity:*
 - *To have and exercise our traditional rights of hunting, fishing, trapping, gathering, and natural resources.*
 - *To carry on our traditional ranching way of life.*
 - *To practice our traditional native medicine, religion, sacred, and spiritual ways.*
- *That we are prepared to SHARE our Nemaiah Aboriginal Wilderness Preserve with non-natives in the following ways:*
 - *With our permission visitors may come and view and photograph our beautiful land.*
 - *We will issue permits, subject to our conservation rules, for hunting and fishing within our Preserve.*
 - *The respectful use of our Preserve by canoeists, hikers, light campers, and other visitors is encouraged subject to our system of permits.*
- *We are prepared to enforce and defend our Aboriginal rights in any way we are able.*

In 2002 the Xenigwet'in Elders created the ?Elegesi Qayus Wild Horse Declaration and established the Nemaiah Aboriginal Wilderness Preserve (<http://www.xeni.ca>). Neither of these conservation areas are recognized by the Governments of B.C. or Canada.

The Opportunity

The Xenigwet'in First Nation Government (XGFNG) has requested assistance from the Environmental Mining Education Foundation (EMEF), Friends of the Nemaiah Valley (FONV), and the Valhalla Wilderness Society (VWS) to create the Dasiqox wilderness conservancy to protect the Upper Taseko watershed and that area known as Nabas, including Teztan Biny (fish Lake), Little Fish Lake, and Fish Creek. We have entered into a joint Protocol Agreement to collaborate on this project. The XGFNG will direct all aspects of this effort and the three collaborating organizations will assist. After considerable research and consultation by all parties, the result is 242,000 ha conservancy proposal that connects established protected areas and results in tremendous ecosystem protection. We have agreement from the Xenigwet'in leadership and community and support from the rest of the Tsilhqot'in Nation to protect the area shown below.



Map of Proposed Dasiqox Conservancy Area

Conservation Values

A North American study (Carroll et al. 2002) identified the Cariboo-Chilcotin as having some of the best remaining habitat for large carnivores in North America. For his Cariboo-Chilcotin study, Carroll (2005) modeled carnivore habitat connectivity needs as a surrogate for retention planning for the Cariboo-Chilcotin pine beetle management strategy. He suggested that the eight large carnivores in the region, including grizzly bear, black bear, mountain lion, gray wolf, wolverine, coyote, fisher and pine marten are indicators for a suite of other species and landscape/local level ecosystem processes.

Dr. Lance Craighead and Wayne McCrory have done decades of research on the Disquiox area and its tremendous habitat values for large carnivores, in particular the threatened dry land Grizzly bear. They believe protected areas in isolation become “Islands of extinction”, thus connectivity is essential if we are to protect the large carnivores like grizzly bears that are indicator species. A Conservancy model should be compatible with the exercise of traditional FN activities and practices, and with the need for economic activities that are congruent with Tsilhqot'in and other FN cultural traditions.

The Friends of Nemiah Valley have supported decades of scientific research on the wild horses in the area and funded the wild horse ranger, a Xeni Gwet'in member whom is responsible for traveling the area to monitor activity and wildlife.

The Taseko and Chilko River watersheds support some of the last remaining health populations of salmon in the Fraser River system, along with other important species. Recent research on the Sockeye salmon in the Chilko River has documented them as unique sub-species of “super fish” due to their large hearts and robust cardiorespiratory systems. The conclusion is that this sub-species is better adapted to survive climate change.

The Taseko River sockeye escapement to the spawning grounds has declined dramatically in recent years, and is a great cause for concern. Fisheries and Oceans Canada reports that the Taseko escapement in 1963 was as high as 31,667, in 2008 the escapement reported 60 spawners, and the 2009 data shows an escapement of 40. This once great run of sockeye salmon nourished Xeni Gwet'in villages and wildlife such as the grizzly bear in the Upper Taseko River, and is in need of strict conservation measures to ensure its sustainability and indeed, its survival. The Xeni Gwet'in First Nation Government is committed to the management of the Taseko River fishery resource and they have undertaken their own fish and fish habitat projects in the watershed.