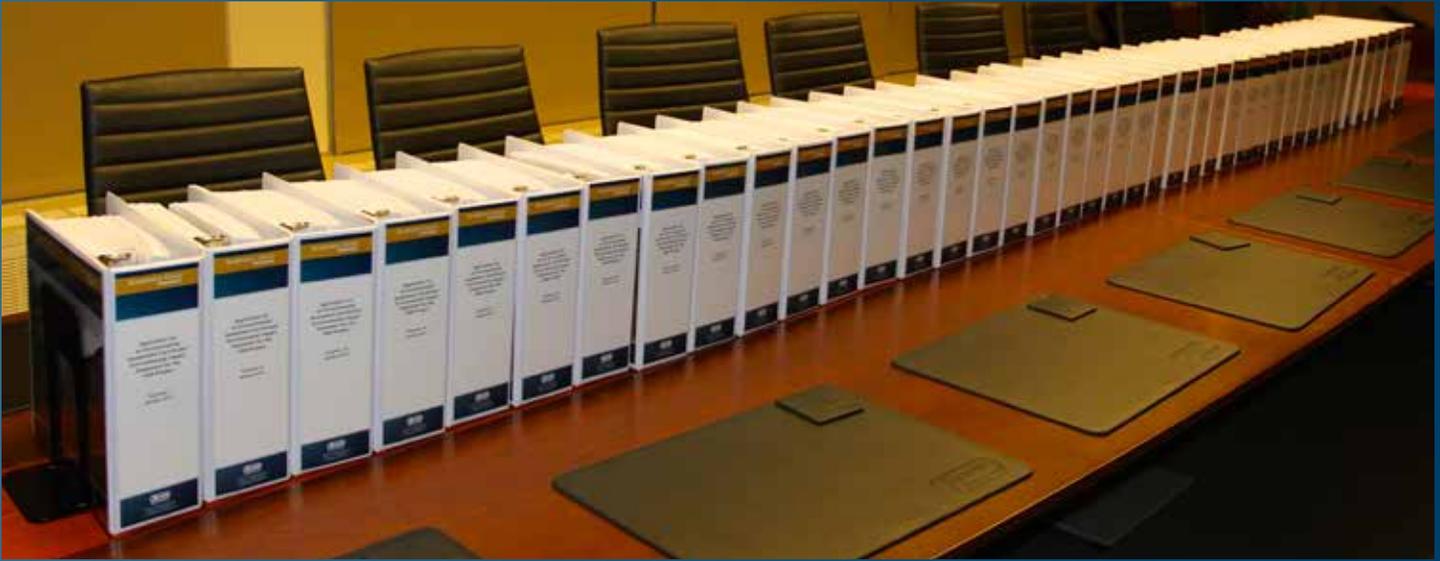


Application for an Environmental Assessment Certificate/ Environmental Impact Statement for the KSM Project

Executive Summary





SEABRIDGE GOLD

KSM PROJECT

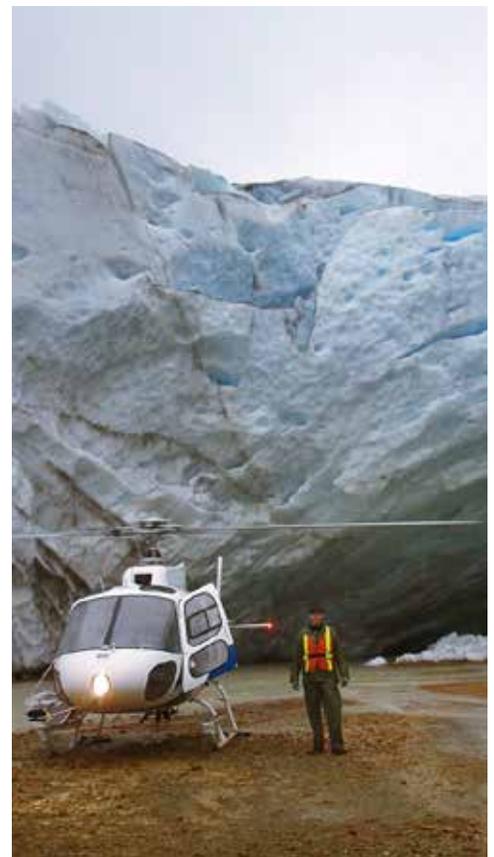
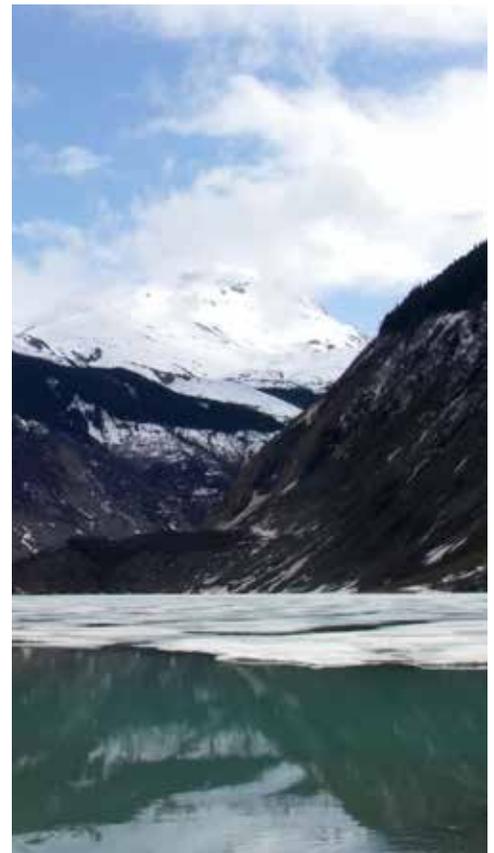
This booklet contains an abbreviated, pictorial Executive Summary of the *Application for an Environmental Assessment Certificate / Environmental Impact Statement for the KSM Project*. This summary is designed to provide information about the KSM Project to readers who are not familiar with technical terminology.

For greater detail about any of the topics covered in this document, please consult the complete technical report, which may be obtained electronically by contacting:

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1. Introduction

Overview

The proposed KSM Project will develop a large gold reserve in the coastal mountains of northwestern British Columbia. The project, proposed by Seabridge Gold Inc., will extract about 130,000 tonnes of gold, copper, silver, and molybdenum ore per day from four mineral deposits known as Kerr, Sulphurets, Mitchell, and Iron Cap.

As required by the *Canadian Environmental Assessment Act*, British Columbia's *Environmental Assessment Act*, and portions of the *Nisga'a Final Agreement*, Seabridge Gold Inc. has prepared an Application for an Environmental Assessment Certificate (known under federal regulations as an Environmental Impact Statement) for the KSM Project. The purpose of this abbreviated, pictorial Executive Summary is to give interested readers a non-technical overview of the Application, including a description of the KSM Project and highlights of its key environmental effects and economic benefits.

Proponent

Seabridge Gold Inc. (Seabridge) is a publicly traded company with common shares on Canada's TSX Exchange and the New York Stock Exchange. Seabridge intends the KSM Project to be a technically and economically sound and environmentally responsible operation, with measures in place to monitor, mitigate, and manage potential environmental effects while providing social and economic benefits to local communities, other British Columbians, and Canadians at large.



SEABRIDGE GOLD



Communications regarding Seabridge's Application should be directed to either of the following addresses:

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History

Mining has a long history in the KSM Project area. The first prospectors arrived in the 1800s, and modern exploration began in the 1960s. In the half-century that followed, several mining companies explored the area for gold and other resources.

In 2000, Seabridge acquired a 100% interest in the Kerr and Sulphurets properties from Placer Dome Mining Corporation. Noranda Incorporated optioned the property in 2002, and further explored the area between 2003 and 2005. Seabridge reacquired the property in 2006 and continued exploration drilling in the area, discovering the Mitchell deposit in 2006 and the Iron Cap deposit in 2011.



Environmental Assessment Process

HARMONIZED PROVINCIAL AND FEDERAL PROCESS

In British Columbia, before certain large-scale projects can proceed, project proponents must apply for and receive an Environmental Assessment Certificate from the provincial government under British Columbia's *Environmental Assessment Act*. Under this Act, the proponent of a new mineral mine with a production capacity of greater than 75,000 tonnes of mineral ore per year must obtain an Environmental Assessment Certificate. The KSM Project will have an annual mill throughput of 43,800,000 tonnes per year, which substantially exceeds this threshold. For this reason, Seabridge initiated the provincial regulatory process for the KSM Project in April of 2008.

Projects that meet additional criteria must also receive approval at the federal level under the *Canadian Environmental Assessment Act*. The KSM Project's proposed daily ore mill feed—130,000 tonnes per day—makes it reviewable under the federal Act. Certain dam structures proposed for the KSM Project also exceed the Act's threshold for water diversions. Seabridge initiated the federal regulatory process for the KSM Project in July of 2009.

The governments of Canada and British Columbia have a harmonized process for conducting environmental assessments that fall under both jurisdictions. These joint reviews provide opportunities for all interested parties—including Aboriginal people, the public, stakeholders and government agencies—to identify issues and provide input. Proponents must complete technical assessments of the potential environmental, social, economic, heritage, and health effects of their projects. They must also propose measures to avoid, minimize, control, or compensate for



Nisga'a Museum



Coulter Falls



potential adverse project effects. The joint process considers issues and comments raised by interested parties when evaluating the significance of proposed projects' effects, and then recommends whether or not the projects should proceed.

The federal and provincial governments have directed Seabridge to ensure that the KSM Project complies with relevant Nisga'a treaty rights under the *Nisga'a Final Agreement* during each stage of the environmental assessment process.

NISGA'A FINAL AGREEMENT

The *Nisga'a Final Agreement* is a treaty between the Nisga'a Nation, the government of Canada, and the government of British Columbia. Under this Agreement, this Nisga'a Nation makes laws relating to environmental assessments for projects on Nisga'a Lands. The Agreement provides explicitly for Nisga'a participation in federal or provincial environmental assessments of projects sited anywhere within the outer Nass Area boundary. No KSM Project components will physically occupy any portion of the Nisga'a Lands, but Seabridge proposes to develop some components within the Nass Area boundary. Thus, Seabridge is required to provide for meaningful Nisga'a participation in the environmental assessment process through effective coordination, timely notice and provision of information and studies, and a clear focus on assessment of potential adverse KSM Project effects on Nisga'a interests.

PRE-APPLICATION STAGE

Throughout the pre-Application stage of the environmental assessment process, Seabridge consulted with the various parties to the review: the Nisga'a Nation, potentially affected First Nations, public and stakeholder groups, and relevant local, provincial and federal government agencies.

Timeline for the pre-Application stage of the environmental assessment process

Early Project Definition	April 2008 – Seabridge submits a Project Description for the KSM Project, initiating the regulatory process under the British Columbia <i>Environmental Assessment Act</i> .
	June 2008 – The governments of Canada and British Columbia establish a Working Group of Aboriginal groups and key federal, provincial, local and American federal and state agencies to discuss issues and documentation during the environmental assessment process.
	May 2009 - Seabridge submits a first draft of the Application Information Requirements, a document that sets out the proposed terms of reference for the KSM Project’s environmental assessment.
	July 2009 – The Canadian Environmental Assessment Agency posts a Notice of Commencement on its website, announcing that its review of the KSM Project will be conducted at the comprehensive study level of assessment.
Definition of Project Scope, Issues, and Assessment	November 2009 – The British Columbia Environmental Assessment Agency issues an order under Section 11 of the <i>British Columbia Environmental Assessment Act</i> , prescribing the scope, procedures, and methods for the provincial environmental assessment.
	June/July 2010 – The British Columbia Environmental Assessment Office invites public comment on the draft Application Information Requirements.
	July 2011 – The Application Information Requirements are finalized, incorporating public and Working Group feedback on the draft document.
	September 2011 – The British Columbia Environmental Assessment Agency issues an order under Section 13 of the <i>British Columbia Environmental Assessment Act</i> , amending both its original Section 11 order and, with federal concurrence, the finalized Application Information requirements, in order to address concerns raised by Wilp Wiltsx-Txawokw of Gitanyow First Nation about the scope of the environmental assessment.
	November 2012 – The British Columbia Environmental Assessment Agency issues another order under Section 13 of the <i>British Columbia Environmental Assessment Act</i> , amending both its original Section 11 order and, with federal concurrence, the finalized Application Information requirements, modifying the dates by which Seabridge must submit applications for other authorizations on behalf of the KSM Project.

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APPLICATION REVIEW STAGE

The graphic below presents the timeline for the Application review stage. Seabridge will continue to consult with stakeholder parties throughout the remainder of the environmental assessment process.

Timeline for the Application review stage of the environmental assessment process

Application Preparation and Review	Seabridge prepares and submits its Application to the British Columbia Environmental Assessment Agency for screening and compliance with the approved Application Information Requirements.
	In consultation with review participants, the British Columbia Environmental Assessment Agency screens the Application and, if acceptable, Seabridge distributes copies. The formal review is initiated and must be completed within 180 days.
Definition of Project Scope, Issues, and Assessment	The British Columbia Environmental Assessment Agency prepares an Assessment Report and referral documents with recommendations to the Minister of Environment and Responsible Minister.
	The Ministers determine whether to issue an Environmental Assessment Certificate within 45 days.

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Native gold



2. Project Description

Location

The KSM Project is a proposed gold, copper, silver, and molybdenum mine located in the coastal mountains of northwestern BC, approximately 950 kilometres northwest of Vancouver, 65 kilometres northwest of Stewart and 35 kilometres northeast of British Columbia's border with Alaska.

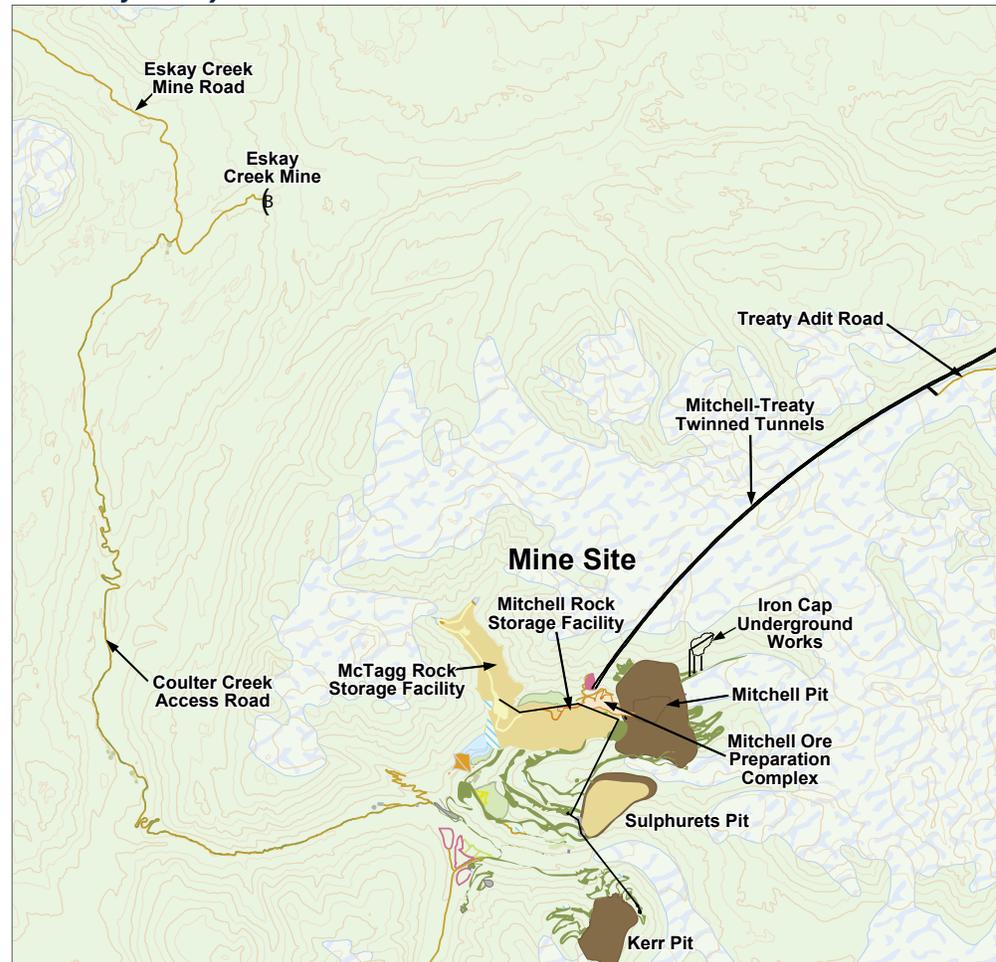
Components

The KSM Project will have two main development areas: (1) the Mine Site, and (2) the Processing and Tailing Management Area, or PTMA.

Native copper

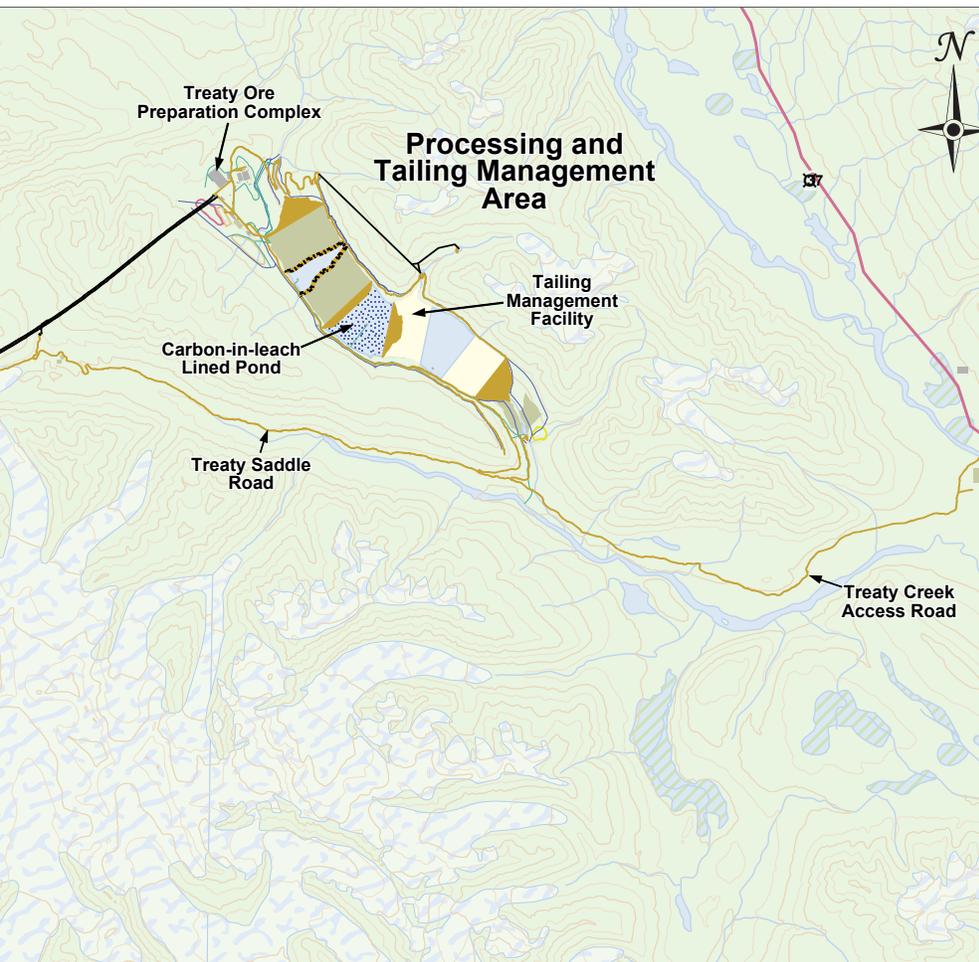


KSM Project Layout





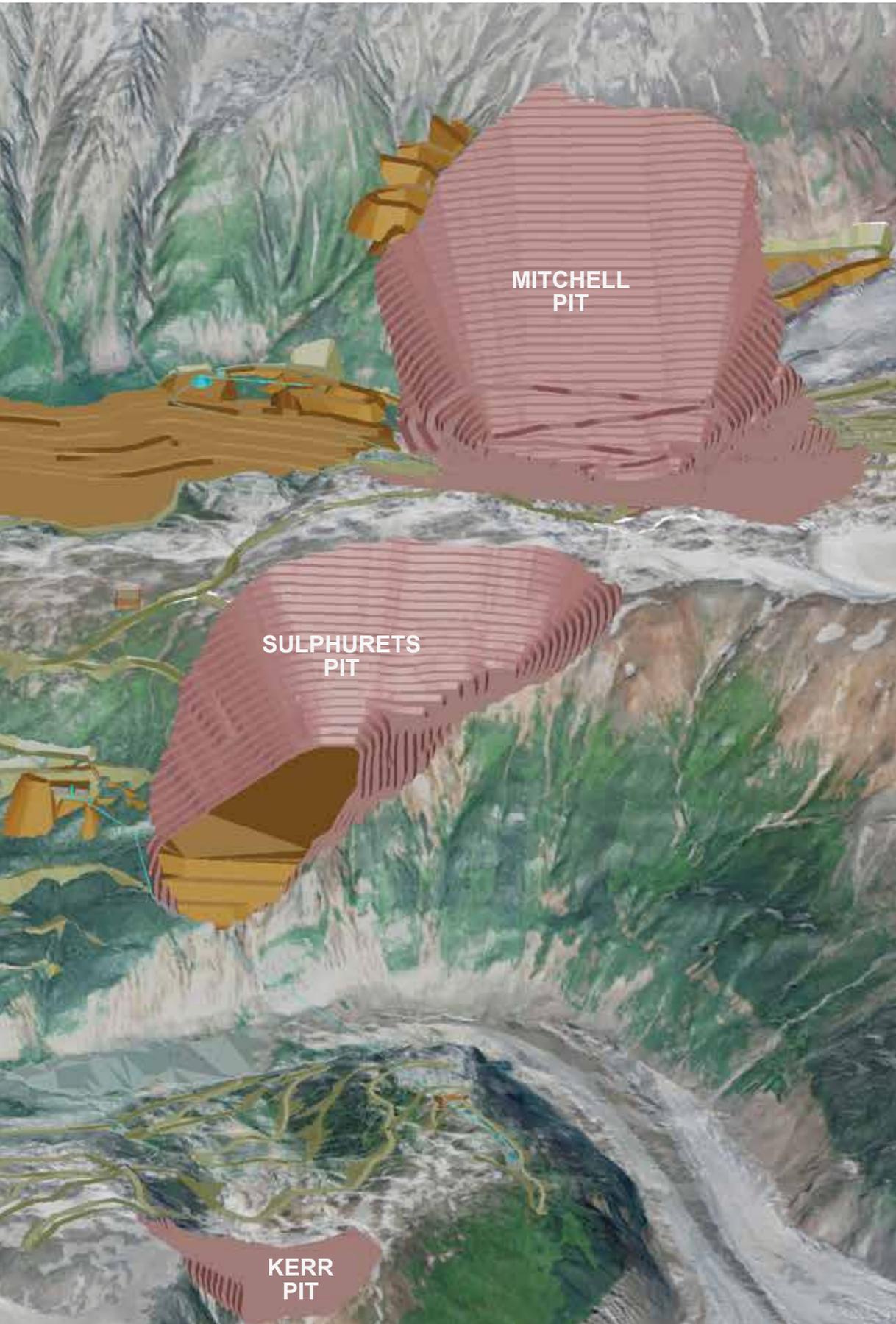
Silver



Molybdenum





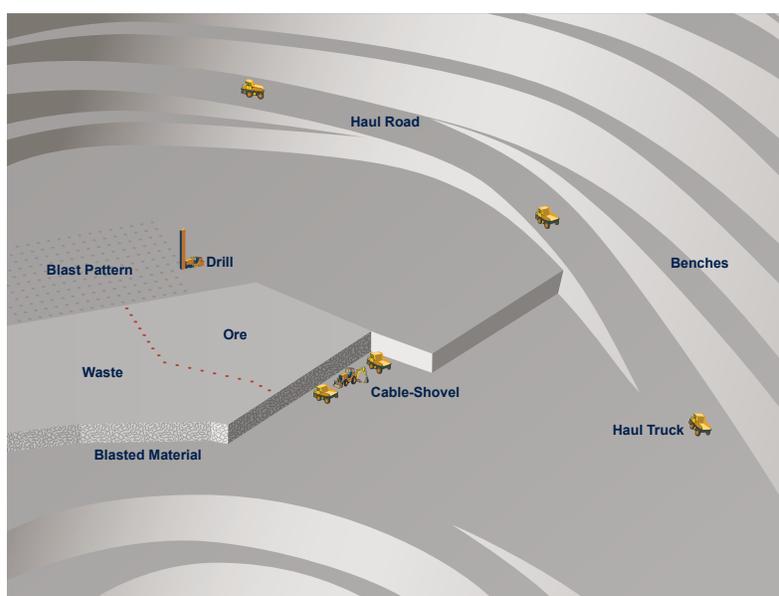


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MINE SITE

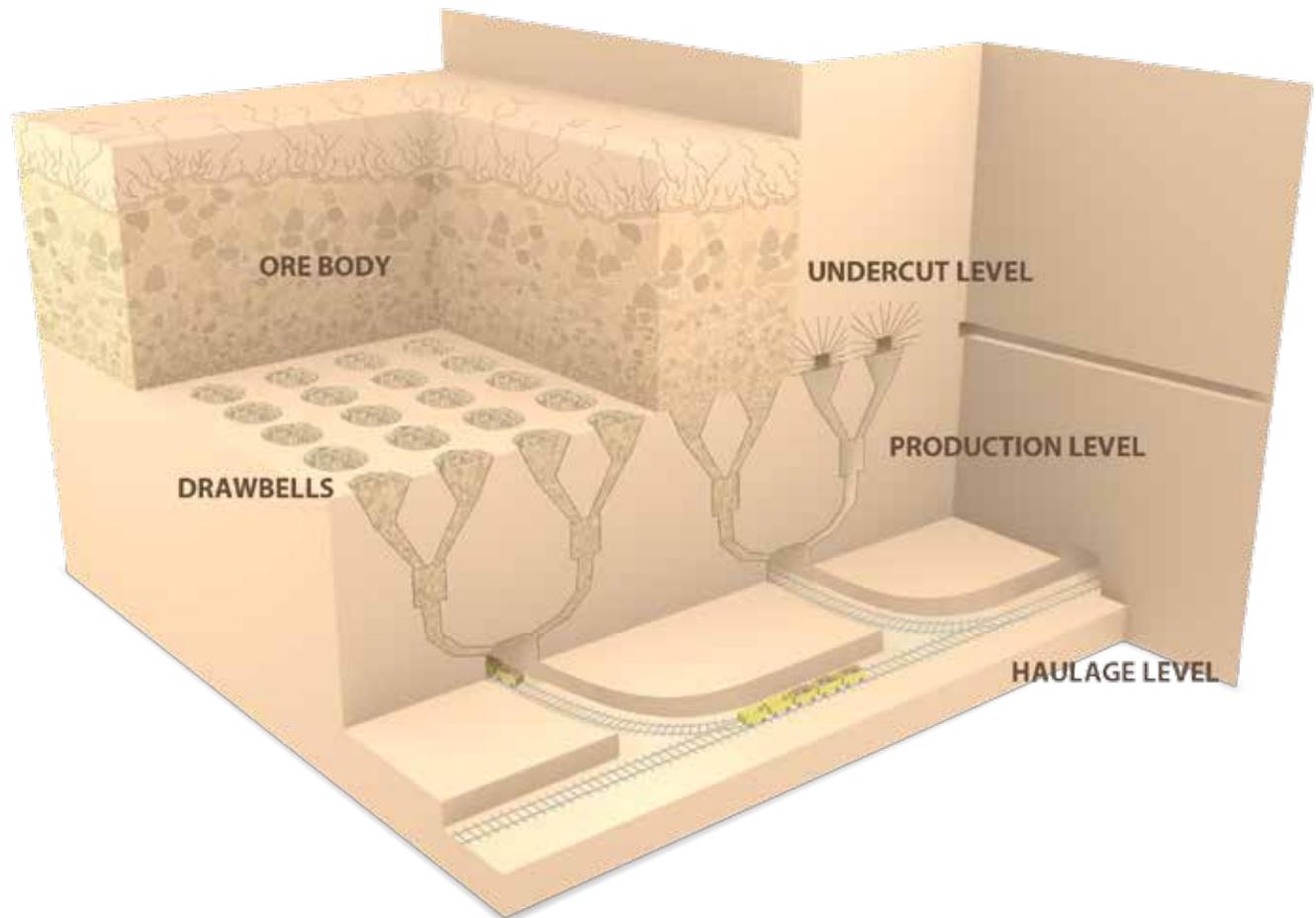
At the Mine Site, the Kerr and Sulphurets deposits, together with parts of the Mitchell deposits, will be mined using open pit mining methods. The three pits will be developed using conventional drilling-and-blasting to break rock into pieces small enough to be removed with mining equipment. The sides of the pits will be excavated in wide steps called benches, with gradual ramps for haul trucks to transport ore and waste rock from the mine.

Open Pit Mining Method



The Iron Cap Deposit and the remainder of the Mitchell deposit will be developed using an underground mining method known as block caving. Block caving is a technique where gravity, in combination with internal rock stresses, is used to fracture and break rock into pieces small enough to be handled by miners. The ore body is divided into large sections, called blocks. A slice of rock, called an undercut, is removed from directly beneath the block, and the overlying rock is fractured by blasting. The broken pieces of the block cave in, falling into funnel-shaped structures called drawbells. As mining vehicles remove material from the bottom of the drawbells, the loose rock above drops down

Block Caving Underground Mining Method



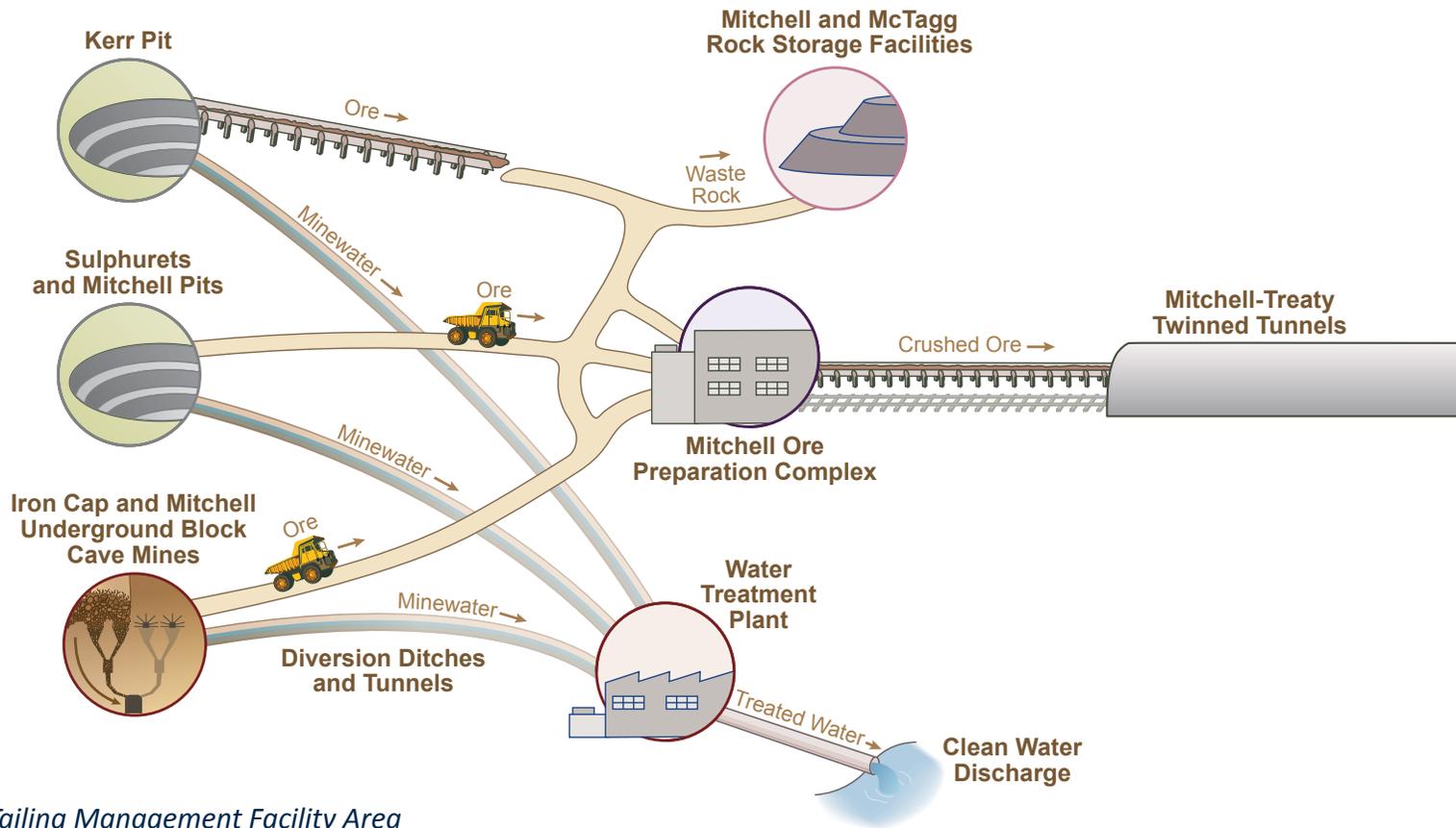
into place, providing a steady supply of fractured ore that can then be transported out of the mine.

Waste rock from the open pits and underground mines will be stored in rock storage facilities in the Mitchell and McTagg creek valleys, or placed back inside the Sulphurets Pit.

Surface water that comes into contact with disturbed areas at the Mine Site may be affected by Acid Rock Drainage, or ARD. ARD occurs when certain minerals are exposed to the weathering effects of oxygen and water. Although this is a natural process, it can be accelerated by large disturbances like mines. For this reason, most water at the Mine Site will be diverted around disturbed areas. Any surface water that has been exposed to disturbed areas will be collected, stored, and treated to meet water quality guidelines before being released back into the environment.

Conceptual Flow of KSM Project

Mine Site



Tailing Management Facility Area



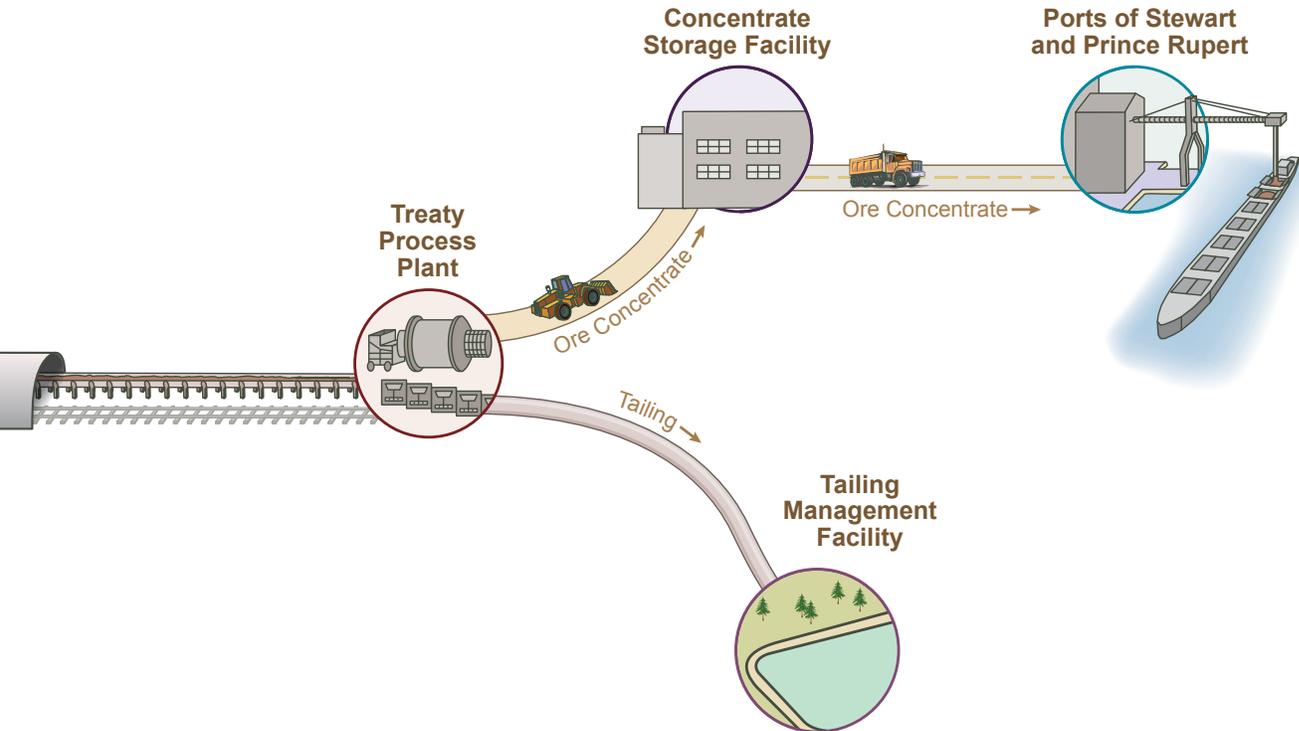
Ore from the mine will be crushed and conveyed through one of two parallel 23 kilometre long tunnels to the PTMA. These tunnels—called the Mitchell-Treaty Twinned Tunnels—will also transport electricity, personnel, and supplies from the PTMA to the Mine Site.

PROCESSING AND TAILING MANAGEMENT AREA (PTMA)

The PTMA is located near the upper tributaries of Teigen and Treaty creeks, about 19 kilometres southwest of Bell II on Highway 37. The key components of the PTMA are:

- the Treaty Ore Preparation Complex;
- the Treaty Process Plant;

Processing and Tailing Management Area



Treaty Creek Plant Site Area

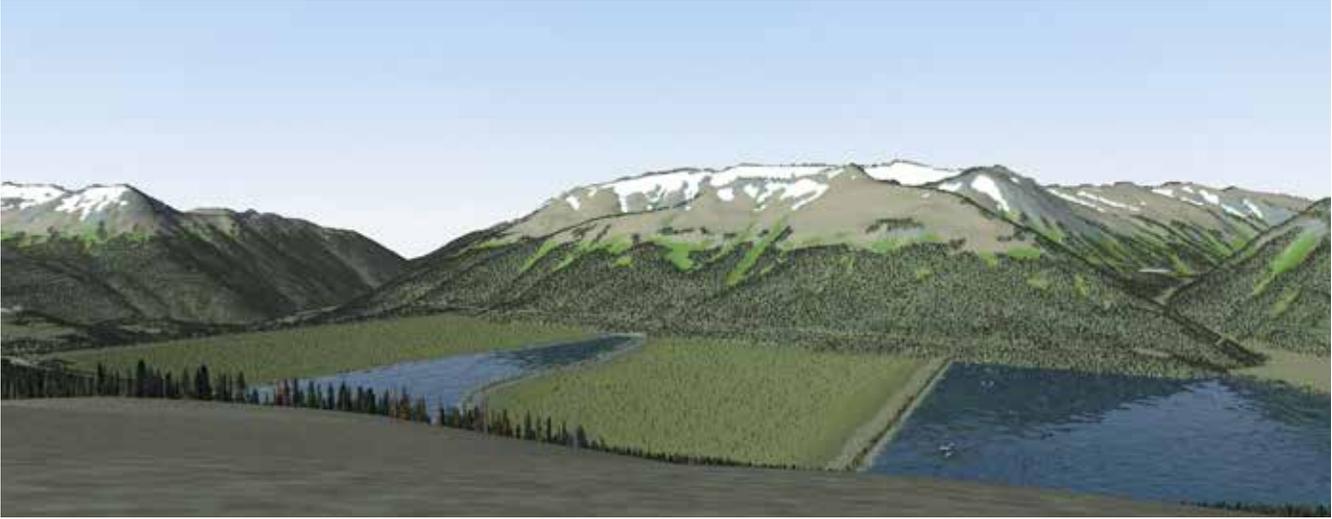
- the Carbon-in Leach Plant; and
- the Tailing Management Facility.

At the Treaty Ore Preparation Complex, the Treaty Process Plant will process ore from the Mine Site to produce an estimated average of 820 tonnes per day of both gold-copper and molybdenum concentrate. After the concentrate has been removed, the remaining materials (known as tailing) will be pumped to the Tailing Management Facility for storage.

Gold-copper concentrate from the PTMA will be trucked on highways 37 and 37A to the Port of Stewart for shipping to overseas markets. Molybdenum concentrate will travel via highways 37 and 16 to the Port of Prince Rupert for shipping.



Visual rendering of the proposed Tailing Management Facility



ACCESS ROADS AND ELECTRICITY

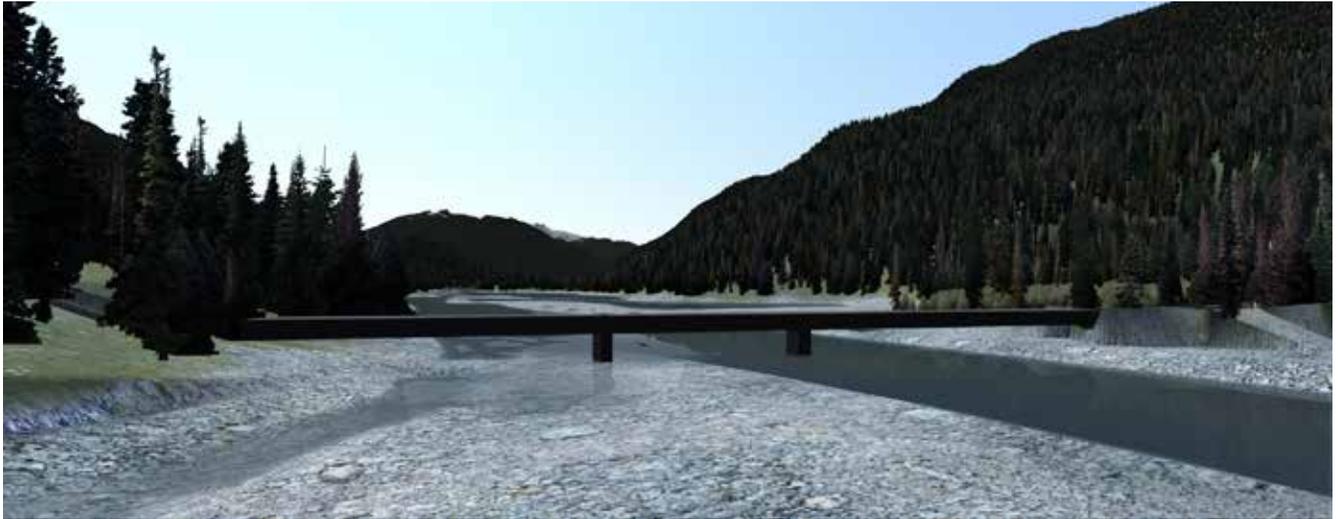
The Mine Site and PTMA are currently only accessible by helicopter. To bring equipment, materials, personnel, and supplies to the KSM Project, two new access roads will be built:

- the Coulter Creek Access Road, which will follow Coulter Creek and Sulphurets Creek to the Mine Site before joining the existing Eskay Creek Mine Access Road, which connects to Highway 37 at Bob Quinn Lake; and
- the Treaty Creek Access Road will provide access to the PTMA from Highway 37 via a three kilometre segment of Forest Service Road off Highway 37, then paralleling Treaty Creek.

The KSM Project will require about 177 megawatts of electricity; 171 megawatts will be provided by the Northwest Transmission Line, which is currently under construction. This electricity will travel through a 28.5 kilometre spur line, along the Treaty Creek corridor, to the Treaty Process Plant. Three small local hydroelectric power projects will generate the remaining 5.5 megawatts of energy.



Visual rendering of the proposed Unuk River Bridge



Schedule

The Project schedule comprises four phases, as shown below:



During the Construction Phase, twelve temporary camps, each accommodating from 40 to 800 people, will be set up at both the Mine Site, PTMA, and associated access roads.

During the Operation Phase, the Treaty Operating Camp, housing up to 250 people, will be established in the PTMA. The Mitchell Operating Camp, accommodating a further 350 people, will be built at the Mine Site.

Reclamation will be an ongoing activity over the life of the mine, with the greatest portion of work occurring during the Closure Phase.



Water storage and treatment facilities will continue to operate into the Post-closure Phase, until water quality is good enough to be discharged without treatment. Diversion ditches, hydroelectric plants, and support infrastructure for the water facilities (such as tunnels, access roads, transmission line, and camps) will be maintained as long as required.

Environment and Safety

All activities associated with the KSM Project will conform with all applicable laws and regulations, as well as with two Seabridge policies: the Environmental Policy and the Health and Safety Policy. Both policies are reproduced at the end of this booklet.

Economic Benefits

The Project will provide economic benefits nationally and provincially, and especially in northwestern British Columbia. The Project will increase economic and community stability by boosting government tax revenues, providing well-paying jobs, and reducing local unemployment levels. Highlights of these benefits include:

- **Project life** – The KSM Project will generate approximately 57 years of economic activity;
- **Capital cost** – The KSM Project’s capital cost is estimated at \$5.3 billion over the five-year construction period, with approximately 65% of construction expenditures being made within British Columbia, including an estimated \$230 million in the northwest;
- **Employment** – The five-year Construction Phase will create an estimated 55,000 person-years of direct, indirect and induced employment for Canadians, with 56% of jobs taken by British Columbia residents,

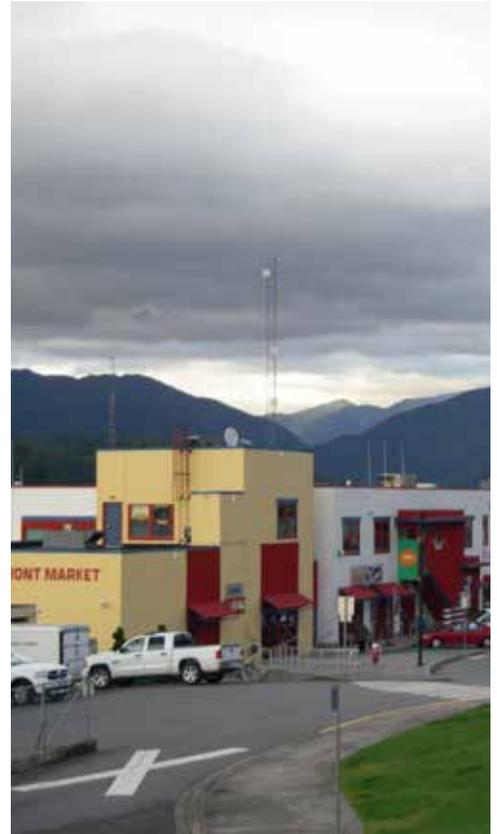


while the 51.5-year Operation Phase will create approximately 396,000 person-years of employment, with nearly half of those jobs taken by British Columbia residents;

- **Annual Gross Domestic Product contribution** – The KSM Project’s contribution to the Gross Domestic Product during the Operation Phase will average approximately \$809 million annually across Canada, with \$405 million generated in British Columbia, including \$51 million within the region;
- **Federal tax revenues** – The KSM Project will generate about \$732 million in federal revenues during the Construction Phase and approximately \$5.4 billion during the Operation Phase;
- **Provincial tax revenues** – The KSM Project will generate about \$183 million in tax revenues for British Columbia during the Construction Phase and approximately \$1.3 billion during the Operation Phase, as well as an estimated additional average of \$39.2 million annually (for a total of approximately \$2.35 billion) in British Columbia Mineral Tax, paid directly by Seabridge over the life of the mine; and
- **Local government tax revenues** – Regional taxes will amount to an average of approximately \$1.55 million per year, for a total of approximately \$85 million, paid directly by Seabridge over the life of the KSM Project.

During the Construction and Operation phases, skills training and on-the-job experience will provide important local and regional benefits. Local and regional workforce skills are expected to increase as the KSM Project proceeds. This will provide an ongoing benefit after mining activity has ceased by helping local and regional workers to obtain other employment.

Prince Rupert





Need for Project

The purpose of the KSM Project is to supply gold, copper, silver, and molybdenum to global markets; create jobs; and strengthen the local, provincial, and national economies.

The mining industry is an important part of the British Columbian economy, particularly in the current period of economic stagnation and uncertainty. In 2012, both our federal and provincial governments identified mining as having great potential for growth and underscored their continued commitment to the sector in Canada's 2012 *Economic Action Plan* and British Columbia's 2012 *Mineral Exploration and Mining Strategy*.

As discussed in the previous section of this summary, the KSM Project will contribute significantly to this strategic endeavour, adding billions of dollars to provincial and federal gross domestic products and tax revenues. In addition to revenues, the KSM Project will provide multigenerational benefits of job creation, training, and investment in services, including significant opportunities for local Aboriginal groups.



3. Consultation

The proposed KSM Project’s location overlaps with the asserted traditional territories of several Aboriginal groups: the Nisga’a Nation, the Tahltan Nation, the Gitanyow, the Gitksan, and the Skii km Lax Ha. Since 2008, Seabridge has organized and participated in extensive consultation activities with the Nisga’a Nation; potentially affected First Nations; federal, provincial, and local government agencies; the public; and other stakeholder groups. This consultation has included events hosted and led by Seabridge and other activities arranged by government agencies as part of the environmental assessment process. A summary of these activities is provided in the following sections.

In addition, Seabridge participated in all government agency-led meetings of the working group of Aboriginal groups and regulators, responding to Nisga’a Lisims Government comments on proposed studies, potential KSM Project effects, mitigation measures, and various KSM Project-related reports. Reports summarizing all of Seabridge’s information distribution and consultation efforts during the pre-Application stage of the environmental assessment process were prepared in January 2013 and are provided as appendices to the technical Application.

Consultation with the Nisga’a Nation

Seabridge held meetings with the Nisga’a Lisims Government in February 2008 to introduce both the company and the KSM Project. Seabridge employed Nisga’a citizens to conduct baseline field studies for the KSM Project between 2008 and 2011, and arranged a helicopter site visit to the Project area for Nisga’a representatives in September 2011.

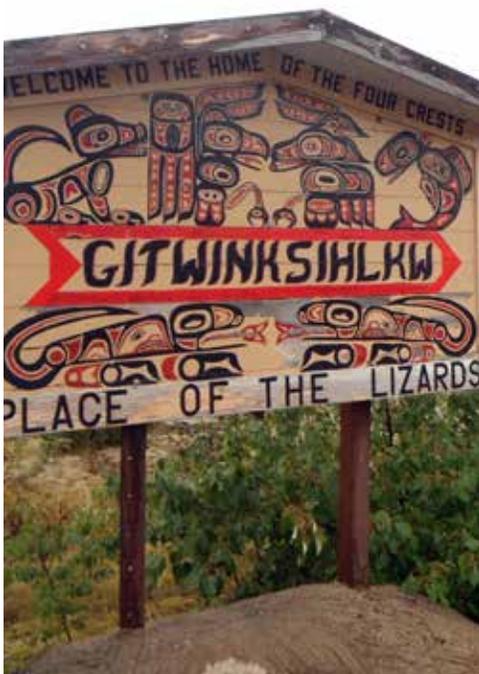
In 2009, Seabridge arranged for a “Mining 101: Mining for Non-miners” workshop for the Nisga’a Nation, and contributed



Carving in Nisga'a Museum



Gitwinksihlkw welcome sign



financially to the BC Aboriginal Mine Training Association, a portion of which was made available for Nisga'a related training initiatives focused on mining; and made donations to several Nisga'a cultural and business-oriented events.

Based on guidelines set out by the Nisga'a Lisims Government, Seabridge completed a Nisga'a Economic, Social, and Cultural Impact Assessment during the summer of 2011. Seabridge and the Nisga'a Lisims Government co-hosted community meetings in all four Nisga'a Villages in June 2011; and the company participated in the Nisga'a Prosperity Forum in Laxgalts'ap in March of 2012.

As part of an agreement made in October 2012, Seabridge has provided the Nisga'a Nation with funding to participate in the environmental assessment process.

Consultation with First Nations

In February and March of 2008, Seabridge held meetings with First Nations to introduce the company and the KSM Project. Seabridge also provided notice of opportunities for employment of First Nations members in baseline field studies for the KSM Project, and several First Nations members were employed between 2008 and 2011.

Seabridge offered environmental assessment process participant funding to First Nations, leading to funding agreements with the Tahltan Central Council, Gitanyow Hereditary Chiefs' Office and the Gitksan Chiefs' Office. In addition, Seabridge provided funds to the Skii km Lax Ha to participate in the environmental assessment process.

Seabridge arranged for three sessions of a "Mining 101: Mining for Non-miners" workshop for First Nations in 2010, as well as an Occupational First Aid course for Gitksan members in 2011, and made a financial contribution to the BC Aboriginal Mine Training Association, a portion of which was made available for First Nations training initiatives focused on mining. Between 2008 and

2011, Seabridge arranged for First Nations representatives to take part in helicopter site visits to the Project area.

Consultation with Regulatory Agencies

As part of information distribution and consultation activities for Canadian and American government agencies, Seabridge arranged helicopter site visits to the Project area for working group members, including government agencies, at various times between 2008 and 2012, as well as tours of an operating mine and a closed mine near Kamloops in 2011.

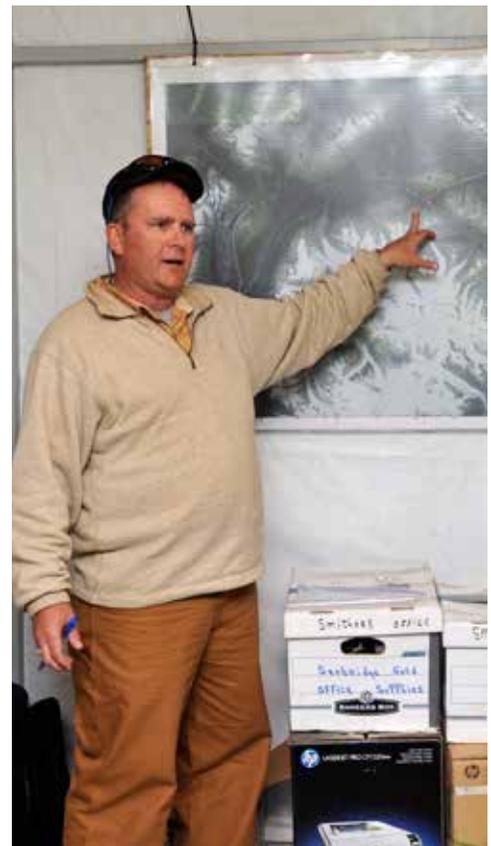
Seabridge also provided responses to agency comments with respect to the draft Application Information Requirements (i.e., the terms of reference for the Application) in 2009 before they were finalized in January 2011.

Consultation with Public

Seabridge participated in open houses held by the British Columbia Environmental Assessment Office in Terrace, Smithers, Stewart, and Dease Lake in June and July of 2010, and hosted additional KSM Project update open houses in Smithers, Terrace, and Stewart in September and October of 2012. The company also hosted an open house for the KSM Project in Ketchikan, Alaska in October 2011.

In addition, Seabridge participated in numerous conferences and panel discussions to provide information on the Project and respond to questions and concerns. The company conducted several radio interviews and placed numerous advertisements, advertorials, meeting notices and articles in newspapers to provide information on the KSM Project.

Seabridge also made several donations to local and provincial organizations, and sponsored programs in local communities as part of its community outreach efforts. The company opened an office in Smithers in 2011 so that the public could obtain information on the KSM Project and meet face-to-face with Seabridge personnel.



4. Project Setting

Environmental Setting



The landscape surrounding the KSM Project is very rugged, with steep slopes rising to more than 2,300 metres above sea level at the highest peak. Glaciers and icefields dominate the terrain to the north, east, and south; these glaciers have been receding for the last several decades. A large portion of the KSM property is either at or above the treeline and in alpine areas. Avalanches and landslides are most common at these higher elevations. Avalanche season typically begins in early October at the higher elevations, and often extends until late June or early July. In valley bottoms, avalanches may occur between late October and late May.

The climate of the KSM Project area is influenced by both maritime and continental climate zones. Lower elevations typically experience mild, wet conditions, while the climate in higher elevations is cold and dry. As elsewhere in northwest British Columbia, air quality is largely unaffected by human activities, due to the region's remoteness and the relative scarcity of development.



The regional geological setting for the KSM Project is Stikinia: a geological structure composed of Triassic and Jurassic volcanic arcs on top of the Paleozoic rocks of the western North American continental margin. Within these geological formations are several precious and base metal deposits. Rock in these zones tends to be rich in sulphide minerals, such as pyrite. As noted earlier in this summary, when these minerals are exposed to air and water, ARD can result. Water monitoring conducted near the mineralized zones in the region confirms the presence of naturally occurring ARD.

The region's topography, climate, and geological history, together with its vegetation, contribute to soil conditions. Weathered volcanic rocks provide coarse-textured, acidic parent materials for soils. The steep terrain hinders soil development, and most soils accumulate at the base of slopes.

The north and west areas of the KSM Project are within the Unuk River watershed, which crosses into Alaska and discharges into Burroughs Bay and eventually the Pacific Ocean. The eastern area of the KSM Project is within the Bell-Irving River watershed, which discharges into the Nass River.

Flows in regional waterbodies tend to be at their highest between May and October, with less than 20% of annual flow occurring between November and April. The beginning of the high flow period depends on the timing of freshet, while the volume of water released depends on the amount of fall precipitation and summer glacial melt. Metal concentrations in Mitchell and Sulphurets creek results in naturally occurring ARD, which is frequently higher than the British Columbia water quality guidelines for the protection of freshwater aquatic life. These high concentrations of metals, together with high sediments and low concentrations of nutrients, produce fewer fish and other aquatic organisms in Mitchell and Sulphurets creeks, Unuk River, and streams around the Mine Site. Conversely, low concentrations of metals and sediments and increased concentrations of nutrients in the Snowbank, Teigen, Treaty, and Bell-Irving watersheds, as well as in PTMA area streams, result in greater productive capacity.

Groundwater conditions are characteristic of the mountainous, wet environment, and are driven by heavy rainfall at higher mountain elevations in the mountains. Like water on the surface, groundwater is also heavily influenced by the region's sulphide-rich rock. Other metals—such as



Mitchell-Sulphurets Creek



iron, aluminum, copper, chromium, lead, manganese, and zinc—are found at elevated concentrations in Mitchell Valley groundwater, which is not suitable for human consumption or the sustenance of fresh water aquatic life. Groundwater discharges at valley bottoms and along valley walls, where seeps of acidic water have been observed. Groundwater runs deeper (up to 33 metres below the ground’s surface) at higher elevations, but is relatively shallow (as little as one metre below the surface) at valley bottoms.

Approximately 500 metres upstream of its confluence with the Unuk River, Sulphurets Creek plunges down a 200 metre-long cascade. Dolly Varden are present below the cascade, but no fish were found above the cascade or in areas around the Mine Site, and no salmon species were found in either area.

Dolly Varden are also found in the North Treaty and South Teigen creeks within the footprint of the KSM Project’s Tailing Management Facility. Outside the Tailing Management Facility footprint, and downstream of a 2.5-metre falls, Dolly Varden are by far the most common resident fish species, with bull trout, mountain whitefish, and rainbow trout also present. No salmon species were observed in South Teigen, North Treaty, or Tumbling creeks.



The KSM Project location is within the Boundary Ranges Ecoregion, the Skeena Mountains Ecoregion, and the Nass Ranges Ecoregion. Toward the coast, the Boundary Ranges consist of extensive ice fields capping granite geological formations and dissected by several major river valleys, including the Nass River. Inland and east of the Boundary Ranges lies the Skeena Mountains Ecoregion, which consists of high rugged mountains and a moist coast/interior transition climate, supporting many glaciers. The Nass Ranges Ecoregion is a mountainous area situated west of the Kitimat Ranges, located to the south of the Project.

A wide range of vegetation types can be found in and around the KSM property. These include low elevation wetland and shrub-dominated riparian and floodplain ecosystems, low and intermediate-elevation forests, subalpine and alpine meadows and sparsely- to non-vegetated rocky and glaciated terrain. Many of these ecosystems provide valuable habitat for wildlife, as well as economically important forest and non-timber forest resources.

Forest harvesting within the region has been minimal compared to many other areas in BC, leaving wildlife habitats largely undisturbed. Forests, wetlands, and alpine areas provide valuable habitat to a diverse wildlife community, including moose, mountain goat, grizzly bears, black bears, wolves, marten, wolverine, bats, birds, frogs, and toads.

Forty wildlife species listed on Schedule 1 of the *Species at Risk Act* (the official list of species at risk in Canada) live in the region surrounding the KSM Property. Western toad and olive-sided flycatcher were spotted during baseline surveys conducted for the KSM Project, while rusty blackbird, common nighthawk, and a listed subspecies of northern goshawk are likely also present. Important wildlife habitats include riparian wetlands and old growth forests, as well as high-quality habitats and features such as salmon spawning areas, mineral licks, and movement corridors.

Economic, Social and Cultural Setting

The region surrounding the proposed KSM Project has been economically dependent upon timber and minerals for well over a century. Most non-Aboriginal communities were initially established to serve natural resource activities such as the mines near Cassiar, Stewart, Smithers and Bob Quinn Lake. To date, the region's economic and social diversity has been constrained by limited access and infrastructure, with lengthy distances, remote and small communities providing



Building in Prince Rupert



limited labour or services, and long winters. Investment within the region has fluctuated based on the strength of the forestry and mining industries, global commodity prices, and the value of the Canadian dollar.

Forestry, fishing, and coal mining were key economic drivers of northwestern British Columbia from the 1950s to the 1980s. The provincial government pursued a policy of industrial resource development that saw rapid community growth. Within the region, this helped establish local economies and an experienced, if modest, labour force focused on natural resource extraction. The region's communities tend not to be economically diverse and are sensitive to resource demand fluctuations. With the downturn in the forestry industry over the past decade, the majority of sawmills and pulp mills in the region are currently closed. Closures of mines in the area, such as Eskay Creek and Golden Bear, have also affected the resource sector. Nonetheless, the economies of local communities continue to be largely resource-based.

Street in New Aiyansh



Overall, the economy in northwestern BC is gradually becoming more diversified. Newer industries have become important to the region in recent years, such as hydroelectric power generation and tourism. Employment sectors in local Aboriginal communities now include significant sales and service, mineral exploration, labour and government administration components. There are recent signs that the population decline may be reversing.

Today, the mining industry continues to provide an important source of employment in the region, supplying an estimated 30% of jobs for communities along Highway 37 in recent years. There is currently one operating mine in the region—the Huckleberry Mine—which produces copper, gold, silver and molybdenum, and which is expected to operate until 2021.

Recent economic changes have led to a general decline in the region's population over the past decade or more, largely due to the loss of jobs, particularly among non-Aboriginal communities. This decline is especially evident in Stewart.

Transportation challenges throughout northwestern BC include the mountainous topography, which restricts development of transportation networks primarily to valley bottoms. The existing transportation network, including road, rail, and port facilities, supports an economy focused on exporting its natural resource to southern and international markets. Highways 16, 37, and 37A act as the primary transportation corridors. Terrace and Smithers have major airports capable of handling jets, while Stewart, Bob Quinn, Dease Lake, Iskut, and Telegraph Creek have smaller airstrips. The CN Rail line connects the Port of Prince Rupert to the rest of North America via Prince George, running along the Highway 16 corridor through the communities of Terrace, Hazelton, New Hazelton, and Smithers.

The considerable distances between communities exert a key influence on the social, economic, and cultural environment of regional residents. It is common to travel two or more hours between communities. Isolation may also be exacerbated by weather-related road closures. The larger centres of Smithers and Terrace, located in the south of the region, provide much of the region's goods and services. Transportation and communication options are limited, and long travel distances are often required to reach service centres. The sense of isolation in northern BC is further accentuated by the location of BC's major urban centres in the extreme south of the province.

Services vary considerably, depending on the size of the community, with smaller communities providing limited services and accommodations. Smithers, Terrace, and to a lesser extent Stewart, provide a broad range of services and supplies, including accommodation and support for

Kincolth Village Government building



Core samples from the KSM Project





mining and forestry activities. The number of recreational, health, social, and educational services available within communities has dropped in parallel with the population. Regional hospitals are located in Terrace and Smithers, and there are well-equipped health clinics in both Dease Lake and Stewart, although existing services are contingent on stable populations. Primary and secondary education facilities exist in many communities, while educational facilities within certain Aboriginal communities do not extend beyond elementary school. Northwest Community College and Northern Lights College also offer facilities and programs for regional residents.

Aboriginal people have a significant physical, cultural, and historical presence within the region. In 2006, approximately 32% of the population of Regional District of Kitimat-Stikine was reportedly Aboriginal. Furthermore, the populations of most of the region's smaller communities, notably those located along highway 37 and 16, are predominantly Aboriginal. The decline in the forestry and fishing industries since the 1980s has negatively impacted Aboriginal communities, as reflected by high unemployment rates. The current socio-economic setting of the region's Aboriginal communities is evolving again in response to new opportunities provided by the mineral industry and tourism.



Several Aboriginal groups may be potentially affected by the Project. The PTMA is situated within the Nass Area, as defined by the Nisga'a Final Agreement. The Tahltan First Nation asserts a claim over part of the KSM Project footprint. Both the Gitanyow First Nation and the Gitksan Nation, including wilp Skii km Lax Ha, which is representing itself separately in the environmental assessment process, have identified potentially affected interests within the broader region, notably downstream of the PTMA.

Parts of the region have been used by local First Nations for traditional hunting activities since before European contact. Subsistence and resident hunting and fishing has continually occurred through to modern times, with modern focus being on moose, black bear, and grizzly bear. Trapping for fur-bearing animals has also historically influenced land use by both Aboriginal and non-Aboriginal trappers. Cabins associated with trapping activities are located along the Unuk and Bell-Irving River valleys, and are also used for hunting and fishing purposes.

Commercial and private recreation, such as guided mountaineering, guided river rafting and heli-skiing, has occurred in various areas within the region. Difficult access to these areas due to the rugged terrain means that encounters with other individuals is infrequent, and the sense of isolation is an important part of the experience offered to clients. Areas near the Bell-Irving River (such as the Snowslide Range and Treaty Creek) see higher use because they are easier to access from Highway 37. Additionally, the Unuk River is used for commercial rafting adventures, and is accessible from the Eskay Creek road or upstream from Alaska. Recreational activities, particularly fishing and heli-skiing, have contributed to the establishment of outdoor lodges, including Bell II and Spey / Boundary Lodge. Such activities, however, are seasonal and of short duration, so there are no formal recreational trails, roads, or other infrastructure outside of the aforementioned lodges.



KEY TERMS:

Valued Components

(VCs) are parts of the environment considered important by the proponent, Aboriginal groups, public, scientists or government involved in the assessment process. Importance may be determined on the basis of cultural values or scientific concern. VCs incorporate both the natural and human environments.

The concept of **cumulative effects** acknowledges that while a single project may not cause serious environmental impacts on its own, its effects may combine with those of other projects to produce a significant collective impact. These cumulative effects may extend over large geographic areas or occur over significant temporal periods.

5. Environmental Assessment

An environmental assessment is a systematic way to identify and evaluate the potential effects of a proposed major project and to anticipate and manage any of its adverse environmental effects. Evaluation of the potential environmental effects of the KSM Project began with selection of Valued Components, or VCs.

The appropriate VCs were formally identified based on stipulations of provincial and federal regulators pre-Application stakeholder consultations, land use interviews, information gleaned from Aboriginal consultations and information sources, and the professional judgment of the discipline specialists who are members of the KSM technical team. Each VC selected for KSM Project assessment meets the following three criteria:

- It overlaps both temporally and spatially with the KSM Project, making interactions between them possible.
- There is a suitable knowledge base for the VC and/or parameters are measurable for the VC, so that Project interactions can be meaningfully characterized and can serve as the basis for assessing the potential effects of the KSM Project.
- There is a perceived, reasonable likelihood that the VC could be affected by the KSM Project.

In the environmental assessment conducted for the KSM Project, scientists considered effects on the following VCs:

Air Quality and Climate Change
Greenhouse gases
Ambient air quality
Terrain and Soils
Soil quantity
Soil quality
Terrain stability
Water
Groundwater quality
Groundwater quantity
Stream flows within the Processing and Tailing Management Area
Stream flows within the Mine Site
Stream flows on the Bell-Irving River
Stream flows on the Unuk River
Surface water quality
Fish and Aquatic Habitat
Bull trout
Dolly Varden
Rainbow trout/Steelhead
Pacific salmon (coho, sockeye, chinook)
Aquatic habitat
Wetlands
Wetland extent
Wetland function
Vegetation
Potential pine mushroom habitat
Avalanche track ecosystems
Listed ecosystems
Riparian and floodplain ecosystems
Alpine and parkland ecosystems
Old forests
Other terrestrial ecosystems
Wildlife
Moose
Mountain goat
Grizzly bear
Black bear
American marten
Hoary marmot
Bat species at risk and silverhaired bat
Wetland birds
Forest and alpine birds
Raptors
Western toad

Noise
Noise
Heritage
Archaeological Sites
Social
Community demographics and infrastructure
Education, skills development, and training
Community well-being
Land Use
Transportation and access
Commercial recreation, hunting, and trapping
Subsistence
Traditional/heritage value of land
Mining and mineral exploration
Navigable waters protection
Visual and Aesthetic Resources
Visual quality for river rafting tours
Visual quality for heli-skiing tours
Visual quality for guided backcountry expeditions
Visual quality for angling trips
Visual quality for visitors to the Treaty Creek Site
Visual quality for Highway 37 users
Human Health
Health effects from surface water quality
Health effects from air quality
Health effects from the consumption of country foods
Health effects from noise

The following sections describe the KSM Project's key effects on VCs.



Key Environment Effects

Despite planning efforts to avoid adverse effects, the environmental assessment identified the following key environmental issues:

- potential effects on surface water quality;
- potential effects on groundwater quantity;
- potential effects on fish and aquatic habitat;
- potential effects on wetlands;
- potential effects on moose;
- potential effects on mountain goats;
- traffic issues; and
- potential effects of geohazards on the KSM Project.

POTENTIAL EFFECTS ON SURFACE WATER QUALITY

As noted earlier in this summary, higher concentrations of metals naturally occur in surface waters around the KSM Project, particularly in Mitchell and Sulphurets creeks. Mining activity would increase the potential for metal leaching and ARD at the Mine Site by exposing sulphide-rich rock. For this reason, it is important that Seabridge manage not only water that has been in contact with mining activities, but other naturally poor water quality in the mine site area.

An extensive water management system will divert clean water away from the mine site, and collect contact water to be stored and treated. Seabridge has built several other safeguards into the KSM project design, such as eliminating the originally proposed Sulphurets rock storage facility, draining water from Sulphurets pit to an ion-exchange treatment plant for selenium removal, and constructing a

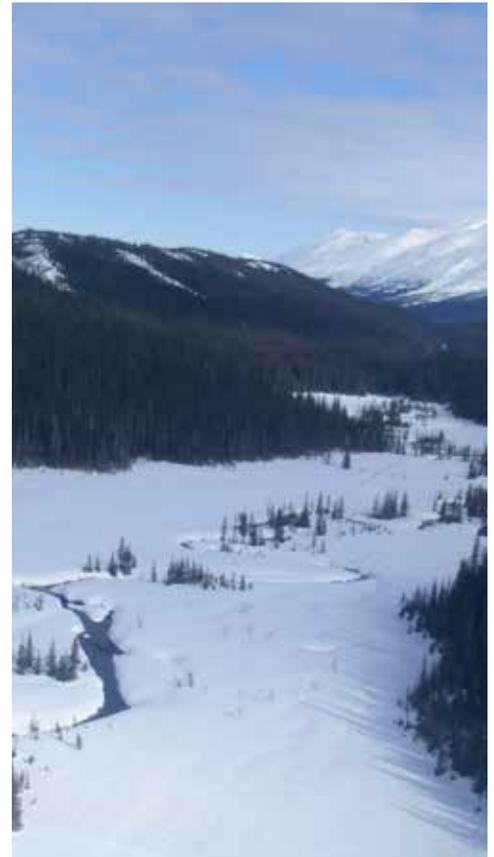


central cell in the Tailing Management Facility to prevent cyanide seepage from entering the receiving environment.

With the incorporation of these and other mitigation measures, surface water quality concentrations are expected to meet receiving environment water quality standards at a regional scale, including at the British Columbia / Alaska border, 35 kilometres downstream of the Mine Site. Selenium concentrations are predicted to be above water quality guidelines in a localized, non-fish bearing area immediately downstream of the Mine Site in Sulphurets Creek, and extending 1.5 km downstream to a monitoring site in the Unuk River. Selenium concentrations are predicted to meet aquatic life guidelines in the PTMA. While the KSM Project's effects cannot be entirely eliminated through the proposed mitigation, the overall effect on water quality was determined not to be significant. Seabridge will establish a follow-up program to confirm the predictions of the environmental assessment and to ensure water treatment mitigation measures are performing effectively. No cumulative residual effects on water quality were identified.

POTENTIAL EFFECTS ON GROUNDWATER QUALITY

Excavation will affect groundwater quantity throughout the life of the KSM Project and beyond. Modelling done as part of the environmental assessment shows that groundwater levels and flow patterns will change significantly in and around the open pits and underground mines, the Water Storage Facility, and the Tailing Management Facility. This will occur as water is removed from the mines during the Operation Phase, during management of pit lake water levels during the Post-closure Phase, and when artificial lakes with seepage control mechanisms are constructed for the Water Storage Facility and Tailing Management Facility. Flow patterns will change around KSM Project tunnels, but water levels are not predicted to be affected.





The Tailing Management Facility Management and Monitoring Plan will allow for facility water to be safely discharged during the Post-closure Phase, allowing water levels around the Tailing Management Facility to return to close to current conditions. However, effects on groundwater levels and flow patterns in the Mitchell Pit and Block Cave Mine, the Sulphurets Pit, the Kerr Pit, and the Water Storage Facility will be permanent. These effects would be confined to the immediate vicinity of the mine. Thus, effects on groundwater quantity will not have corresponding effects on downstream surface water quantity, nor on the aquatic life and habitat that these streams support.

POTENTIAL EFFECTS ON FISH AND AQUATIC HABITAT

The KSM Project is expected to have minor effects on Dolly Varden, pacific salmon, bull trout, cutthroat trout and rainbow trout/steelhead and fish habitat. Most of these effects will be mitigated through the implementation of management plans, adherence to standards and best practices, and ongoing aquatic monitoring.



Compensation plans will be developed to offset the loss of fish habitat. Replacement habitat will be constructed for the 5.37 hectares of fish habitat lost beneath several KSM Project facilities, as well as associated water quantity reductions in North Treaty and South Teigen creeks downstream of the Tailing Management Facility dams. A further 8.98 hectares of replacement habitat will compensate for habitat loss due to the deposit of deleterious substances in the Tailing Management Facility and seepage collection ponds. In all, 37.8 hectares of new habitat will be created to offset the losses associated with construction of the Project.

POTENTIAL EFFECTS ON WETLANDS

Though wetland areas will be avoided as much as possible, mining activities will require the alteration or loss of some wetlands, primarily in the PTMA, with a smaller amount on or near the Mine Site.

Seabridge has committed to meeting Environment Canada's 'no net loss' of wetland area policy, and has developed a Wetland Compensation Plan to offset the loss of wetland extent and function. A new wetland will be developed along Highway 37 near Smithers to promote wetland research and education. With the Wetland Compensation Plan and reclamation of the Tailing Management Facility during the Closure Phase, wetlands in the region will increase in area two and a half times over the life of the KSM Project. Thus, effects on wetlands are not considered to be significant. Follow-up monitoring to confirm the effectiveness of the Wetland Compensation Plan in restoring wetlands will assist in determining whether the conclusions of the environmental assessment are accurate.

POTENTIAL EFFECTS ON MOOSE

The population of moose in the KSM Project area has been declining in recent years, principally because of hunting pressures. The KSM Project has the potential to affect moose by removing habitat, disrupting animal movement corridors, and increasing access for hunters and vehicles. Developing the Treaty Creek Access Road and extending the Coulter Creek Access Corridor into the KSM Project area will allow easier access by humans, which may result in an increase in unregulated hunting. Aboriginal groups have expressed much concern about the KSM Project's potential effects on moose: in particular, potential increases in vehicle-wildlife collisions along Highways 37 and 37A due to the greater traffic volume caused by the KSM Project.

To mitigate habitat loss and disruption of animal movement, some mine components will be partially deactivated and re-vegetated during Closure and Post-closure. Some infrastructure, such as bridges and roads, will be designed to minimize obstruction to wildlife. A no-hunting prohibition will be implemented for Project staff, and all vehicles will be required to obey traffic signs so as to reduce vehicle-wildlife collisions. Access to KSM Project roads will be restricted



Bear tracks



to traffic required for project activities. At closure, all non-essential roads will be deactivated, which will significantly reduce traffic volumes.

While the KSM Project's direct effects on moose cannot be entirely eliminated through these measures, they are not expected to be significant. However, these effects, when combined with the effects of other projects, may result in a significant cumulative impact to moose. In order to investigate the severity of this potential impact, and to account for uncertainty about how many other activities might proceed at the same time as the KSM Project, two traffic scenarios were developed.

In the Likely / Moderate Traffic Scenario, one to three of the potential future projects in the area proceed, leading to moderate increases in traffic on Highways 37 and 37A. Under this scenario, effects on moose were not expected to be significant.

In the Unlikely / High Traffic Scenario, most or all of the fourteen reasonably foreseeable future projects proceed at the same time as the KSM Project. The overall cumulative effect on moose is assessed as significant under this scenario for the following reasons:

- moose numbers have already declined below their natural population level in the Nass Wildlife Area due to hunting and other factors; and
- the traffic modelling report indicates that the cumulative effect of all projects, regardless of whether or not the KSM Project proceeds, will cause the moose population to decline.

However, this assessment has relatively low certainty because the likelihood of most or all proposed projects occurring simultaneously is low, and the model structure is believed to be overly sensitive to small reductions in survival.



Seabridge will consider contributing to regional monitoring initiatives where those monitoring initiatives replace proposed KSM Project-specific monitoring, and where these monitoring activities are approved and managed by relevant provincial authorities and stakeholders.

POTENTIAL EFFECTS ON MOUNTAIN GOATS

The greatest effect of the KSM Project on mountain goat is habitat loss through sensory disturbances and construction of Project infrastructure. Mountain goats are sensitive to noise and helicopter traffic. Mine activities such as blasting may cause them to leave otherwise suitable habitat surrounding the KSM Project. Approximately 1,150 hectares of high-quality mountain goat winter habitat will be permanently removed or altered through Project construction.

Helicopter flight plans will avoid critical mountain goat winter habitat, and noise controls (including use and maintenance of mufflers) will be implemented on vehicles. Noise levels will be continually monitored. Other mitigation discussed in the previous section (such as consideration of animal movement in bridge and road design, and traffic control and hunting measures) will also serve to reduce effects on mountain goats. Thus, while the Project's effects on mountain goat cannot be entirely eliminated through proposed mitigation, they are not expected to be significant.

TRAFFIC ISSUES

Since the beginning of the environmental assessment process, traffic-related issues and concerns have been raised in relation to the KSM Project by the Nisga'a Nation, First Nations, local governments, and federal and provincial agency representatives, including:

- concern about the potential increase in wildlife mortality levels on Highway 37 as a result of increased traffic;





- concern about potential effects on traditional medicine plants along the haul route;
- concern about emissions generated by trucking concentrate to Stewart, and by accidents and malfunctions;
- inclusion of transportation routes in the spatial boundary for the Project;
- requests to report Project-related traffic estimates;
- concern about mortality effects on certain birds due to collisions with vehicles; and
- concern about Project traffic cargo such as acid solvents, explosives and other dangerous materials and hazardous cargo.

A separate Traffic Effects Assessment report was prepared to address the potential effects of KSM Project-related traffic travelling on Highways 37 and 37A. In general, this study rated the potential for KSM Project-related traffic accidents as rare. Most social and environmental effects associated with traffic accidents are expected to be unlikely occurrences.



Effects resulting from normal KSM Project traffic activities, in the absence of accidents, are mostly expected to be of minor severity. For example, all highway transportation activities are certain to affect ambient air quality because all vehicles will use fuel. The maximum amount of fuel use will occur during Operation, but even during that phase, the contribution of air emissions is predicted to be minor. With or without accidents, there is a risk of increased wildfire incidence. While wildfire could affect rare and sensitive ecosystems and old growth forests, the potential for such wildfires is predicted to be rare.

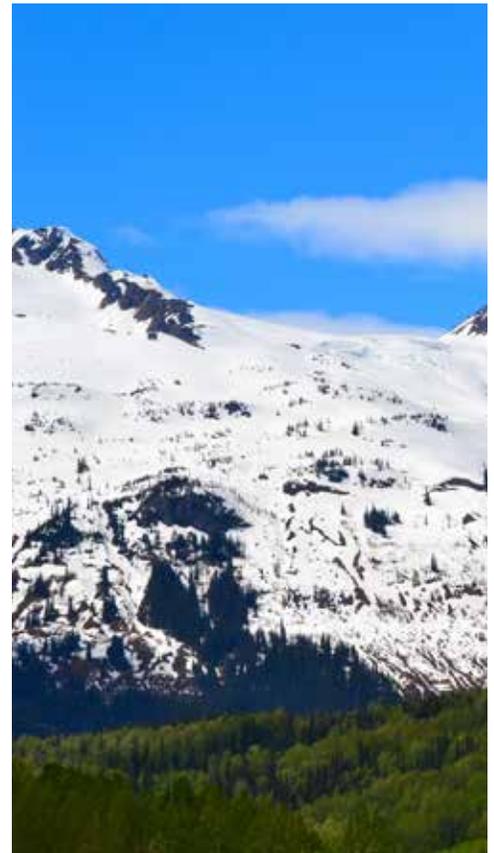
Traffic volumes on Highways 37 and 37A have declined since 2000. The KSM Project will contribute an additional four vehicles per hour at most, keeping traffic volumes below those reported in 2000. Risk of collisions between vehicles and moose, particularly along Highway 37 from Bell II to Bell I, will be higher during the winter, given the high quality habitat, and along migration corridors near Van Dyke Island and Cranberry Junction, and near the calving area on the Bell Irving River below Bell II. This effect may be magnified by moose travelling along the snow-cleared road during the winter, thus increasing the chances of moose collision. Even with mitigation, it is possible that these collisions will occur, resulting in direct mortality due to increased traffic on the highways, particularly on Highway 37. Given the current declining status of the moose population in the area and the high value habitat along Highway 37, the severity of the collision mortality risk is expected to be minor.

Seabridge's proposed Environmental Management Plans have been developed to minimize KSM Project-related traffic accidents, and to ensure that appropriate and timely measures are taken in the unlikely event that an accident occurs.

POTENTIAL EFFECTS OF GEOHAZARDS ON THE PROJECT

The KSM Project is situated in a geohazard-prone area. Potential geohazards originating in and around the KSM Project may affect, or be affected by, project components.

Some of these geohazards can be mitigated through proactive design strategies, such as choosing less geohazard-prone sites, selecting safer times for certain project activities, and the use of appropriate construction techniques.





Nisga'a Lisims Government Parliament building



Given the high terrain instability in the KSM Project area, combined with the potential for high consequences (including human deaths) if a geohazard event occurs, Seabridge will continue to monitor and mitigate for geohazard risk. In other cases, strategies include mine planning adjustments, such as consideration of the Snowfield landslide in staging the excavation of the Mitchell Pit.

Best management practices applied to grading, site contouring, and the maintenance of slope length and gradient will be the primary strategy for controlling erosion and sediment. With these measures implemented, the risk associated with potential geohazard scenarios will be reduced to an acceptable level, and the KSM Project itself is not expected to have any effects on geohazards.

Key Socio-economic Effects

POTENTIAL EFFECTS ON COMMUNITY WELL-BEING RESULTING FROM HIGHER TRAFFIC

The change of traffic volumes through Stewart due to the combined effects of the KSM Project and other proposed projects in the area is predicted to result in a significant negative cumulative effect during the Operation Phase. The specific effects are an increase in noise and exhaust, as well as a higher incidence of accidents due to increased traffic volume through the town. This assessment is contingent upon most or all of the other proposed projects and activities proceeding at the same time as the KSM Project. This outcome is considered unlikely.

To minimize the adverse residual effects on community well-being due to a change in traffic through Stewart, Seabridge plans to implement a Traffic and Access Management Plan, in addition to complying with the Government of British Columbia's Air Action Plan.

POTENTIAL EFFECTS ON EMPLOYMENT AND INCOME

The KSM Project is associated with significant beneficial cumulative effects on local employment and incomes, providing that most or all of the other projects and activities in the region proceed as planned. If only a few developments proceed, however, this cumulative beneficial effect may not be significant.

Currently under construction, the Red Chris Mine is scheduled to enter production in 2014, with an approximately 28-year mine life. Once operational, it is expected to directly employ about 250 workers. In addition, all identified future projects that temporally overlap with the KSM Project could, if they all proceed, provide additional employment. Additional jobs are associated with commercial land use activities, such as fishing, guide outfitting, mineral and energy resource exploration, recreation and tourism, and timber harvesting. Together, these projects and activities may act cumulatively by increasing employment levels in the local and regional communities.

As with the cumulative effect for change in employment, the Red Chris Mine, future mine and hydroelectric projects, as well as current and ongoing commercial land use activities, are expected to have cumulative benefits on personal incomes, Gross Domestic Product, and government tax revenues, including income to local residents in Aboriginal and non-Aboriginal communities.

Seabridge intends to implement a Labour Recruitment and Retention Strategy and a Procurement Strategy to increase the likelihood of these economic benefits being realized.





Summary

After all mitigation measures have been taken into account, most of the environmental effects of the KSM Project are not anticipated to be significant. The KSM Project may have the previously discussed negative cumulative effect on community well-being relating to traffic in Stewart during the Operation Phase, as well as an adverse effect on moose, depending on the number of other resource development projects in the region that proceed. The KSM Project is also predicted to have significant benefits to the employment and incomes of local Aboriginal and non-Aboriginal communities.

Mitchell Glacier



6. Conclusions

Mining at the KSM Project will be environmentally responsible as well as socially and economically beneficial, and will meet the Government of Canada's objectives for responsible resource development. The KSM Project will promote economic prosperity in all regions of British Columbia, especially the northwest. It will provide jobs, generate business opportunities, and produce local, provincial and federal tax revenues.

The KSM Project can be implemented without lasting negative environmental or economic effects, and without undermining family or community wellbeing, public health, or the rights and interests of potentially affected Aboriginal peoples. The KSM Project will be implemented in accordance with responsible mining practices that comply with sustainable development standards.



SEABRIDGE GOLD

HEALTH AND SAFETY POLICY

At Seabridge Gold, we are committed to achieving the highest standards of safety and health for all of our business activities. The health and safety of all employees and contractors is of the utmost priority to the Company's management. Training programs, safe work procedures and operational standards must be enforced at all of our projects to ensure that all work is undertaken in a safe manner with minimal risk to employees.

Health and Safety Policy Guidelines

The Company is responsible for providing and maintaining a safe and healthy work environment for all persons engaged on all Company worksites. The management team is required to provide active leadership and support for occupational health, safety, fire protection and loss control. The Company and its employees and subcontractors are responsible for complying fully with all health and safety standards and regulations including worksite inspections and accident/incident investigations.

These policy objectives will be achieved by:

- Meaningful involvement and participation of all employees;
- The provision of safe and appropriate equipment and conditions at the forefront of daily operations;
- The right for an employee to refuse to perform dangerous or unsafe work;
- Training employees to carry out their jobs safely and productively. No employee will be permitted to commence a job without the requisite training;
- Investigate the causes of accidents and incidents and developing effective and immediate preventative and remedial action;
- The development, maintenance and review of practices and procedures;
- Emergency preparedness to minimize losses or injury arising from an incident or unforeseen event;
- The monitoring, reporting and evaluation of our Health and Safety Performance;
- Promoting the Health and Safety Policy as a way of life in all aspects of our project work sites and in family and local community.

All personnel are also responsible for their own safety by complying with legislative, industry and Company standards. Our commitment is to safety first.

SEABRIDGE GOLD

ENVIRONMENTAL POLICY

The Company strives to be an exemplary leader in environmental management. We intend to meet or surpass existing regulatory standards and minimize undesirable impacts on the environment to the extent possible. To meet this objective we will:

- At a minimum, meet all regulatory requirements;
- Recognize environmental management as an important corporate priority and integrate environmental considerations into all mine exploration, development, operational and closure planning;
- Assess the potential environmental risks of project design so that effective preventive measures can be established;
- Use best practices and technologies that minimize environmental impacts and enhance quality of water, air, vegetation and wildlife;
- Continuously improve the efficient use of resources, processes and materials;
- Participate in recycling programs to the extent possible and commercially feasible;
- Optimize the use of resources to ensure the conservation of natural resources and consumer goods such as energy;
- Require contractors and suppliers to provide operational guidelines and procedures which meet their environmental responsibilities, as part of the bid and procurement process;
- Consider environmental guidelines when purchasing equipment and materials;
- Communicate environmental information to our employees including changes and potential changes to environmental regulations as well as technological developments that may mitigate impacts;
- Develop guidelines for training and education of employees;
- Work with government agencies, the public, Treaty Nations, First Nations and stakeholders to develop open communications for a shared understanding of the Company's environmental protection programs and responsibilities;
- To the extent that is practical and commercially reasonable, work to remediate disturbed ecosystems to enable them to revert to their original state or an alternative sustainable state which optimizes biodiversity and benefits to the wider community.

It is the responsibility of every employee of Seabridge Gold to carry out their daily activities in accordance with this Environmental Policy.

SEABRIDGE GOLD
KSM PROJECT

