# THE SEABRIDGE GOLD UPDATE

## SEABRIDGE GOLD

# **Message from the President**



Jay Layman President and Chief Operating Officer

2017 was a highly rewarding year for Seabridge Gold. From industry recognition for our sustainability programs to successful completion of remediation efforts at Iskut to exploration success at Iron Cap, we were able to move our Projects forward while ensuring economic and social benefits to the region. We are looking forward to another exciting year in 2018 including nearly \$20 million more exploration on our BC projects, further environmental remediation and preparations for a permanent camp at KSM to enable year-round work at the Project.

# Here is a quick look at some of our last year's successes:

Continuing Exploration: Exploration activity at both our Projects generated encouraging results. We increased the size and grade of the Iron Cap deposit which now has the potential to significantly improve the economic benefits of the Project to the region. We also continued our exploration at the Iskut Project which found promising evidence of a possible high grade gold discovery.

Reclamation activities: The Iskut Project came to us with a legacy of poor mining practices. Clean-up efforts started at the old Johnny Mountain Mine site upon acquisition of SnipGold in 2016. Since then, we have successfully reversed environmental damage by carefully disposing of hazardous materials, cleaning up old oil spills and reinforcing the tailings dam.

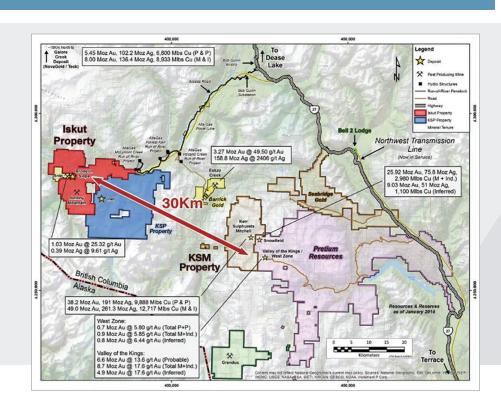
Industry recognition: Our hard work and effort towards sustainable development received industry recognition. The Environmental Team of Seabridge Gold received the Association for Mineral Exploration's (AME) Robert R. Hedley Award for the KSM Project. This prestigious award is presented to the company that has achieved significant contributions in the realm of social and environmental responsibility

Building a local workforce: To advance training and education skills of local residents, Seabridge implemented a bursary program last year, awarding 43 students a total of \$61,500.

Engagement with communities: Seabridge supported approximately 20 community events in the past year through participation, sponsorships and donations.

Search for a Joint-Venture Partner. Seabridge is actively searching for the right joint-venture partner to fund, develop and operate the KSM Project. The right partner will be a major mining company with the experience and expertise to build a major Project like KSM and the willingness to honour all of our commitments to the people and communities of northwestern BC.

We are constantly engaging with the First Nations, local communities in BC and State officials in Southeast Alaska. Their input has helped us design a better project with minimal impacts. I would like to thank all of you for the support you have given us, without which, we would not have come this far.





#### Quick facts - KSM Project

- A proposed copper, gold, silver and molybdenum mine located 65 km northwest of Stewart BC
- Received federal and provincial environmental approvals in 2014
- 52-year mine life
- Estimated employment: 1,800 people during 5-year construction period and 1,040 permanent jobs during mine operations
- Estimated reserves of 38.8M ounces of gold, 10.2B pounds of copper, 183M ounces of silver and 207M pounds of molybdenum

### Quick facts - Iskut Project

- Obtained upon Seabridge's acquisition of SnipGold Corporation in June 2016
- Includes the former gold Johnny Mountain Mine and Bronson Slope deposit, located 110 km northwest of Stewart BC
- Activities to date include exploration and remediation programs

## **KSM Project Overview Map**

Although the KSM Project has not yet started construction, the map below shows what the Project will look like when it begins operations.

#### Coulter Creek Access Road

- · Controlled access to limit effects on fish and wildlife.
- 35 km addition to existing road.
- · Bridge over Unuk River.

#### **Processing Plant**

- · Located near the end of the ore transport tunnels.
- Copper, gold and molybdenum are separated from the ore using a flotation process.
- Cyanide, used to extract more gold, is recovered and residual cyanide is subjected to two separate destruction methods.
- Copper, molybdenum and gold are trucked off-site for further processing.
- Ground ore with metals are removed, "tailing" is pumped to the tailing management facility.
- · Camp nearby to house employees.

#### **Tailing Management Facility**

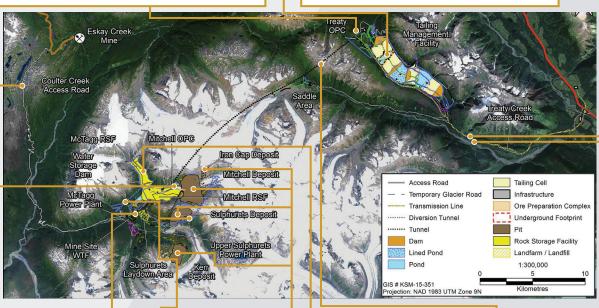
- Dams constructed with locally guarried rock and non-sulphide bearing tailing.
- Sulphide bearing tailing submerged in a lined pond to ensure permanent saturation.
- · Dams at either end have low permeability cores.
- · Seepage collection dams downstream of tailing dams.

#### **Transmission Line**

- · Parallels Treaty Creek access road.
- Provides link to provincial electricity grid power to KSM site.

#### **Treaty Creek Access Road**

- 33 km access road to Highway 37.
- Controlled access limits effects on fish and wildlife.
- · Bridge over Bell-Irving River.



#### **Water Treatment Facilities**

- Dam on lower Mitchell Creek collects water from the Mitchell Pit and rock storage facilities.
- Drainage from facilities piped to the dam.
- Water piped by gravity to a treatment plant.
- Turbine installed in the pipeline generates electricity.
- Camp nearby to house employees.

## Ore Preparation Complex

 Ore is crushed and transported to the processing plant. KSM comprises four main deposits – Kerr, Sulphurets, Mitchell and Iron Cap – that will be developed in stages using typical truck and shovel excavation methods.

TOTAL proven and probable reserves at the four deposits:

- Gold: 38.8 million ounces
- Copper: 10.2 billion pounds
- · Silver: 183 million ounces
- Molybdenum: 207 million pounds

## **Diversion Tunnels**

- Three tunnels divert water away from the mine site.
- Keep fresh water away from surface disturbances, maintaining water quality.
- Water discharging through tunnels is mostly directed through turbines to generate electricity to supplement power from the provincial grid.
- Will remain in operation after closure and will supply power to water treatment facilities.

#### **Ore Transport Tunnels**

- Required to access the processing plant and tailing management facility from mine site.
- Each tunnel will be 23 km long with an access about 7 km from the northern end.
- Cross connections between the tunnels provide an escape route and enable ventilation.
- Tunnels include a transportation corridor, diesel pipeline and transmission line.

#### Rock Storage Facilities (RSF)

- Stores non-ore rock removed to access ore.
- Ditches and tunnels divert surface run-off.
- RSF drainage collected and treated.
- Covered with overburden and vegetated at closure.

Do you have any questions or concerns about our KSM Project? Visit, email or call our local Smithers office at the address given below:

1235 Main Street

P.O. Box 2536 Tel: 250.847.4704

Smithers, BC V0J 2N0 ksm\_community@seabridgegold.net

## **KSM Project Timeline**

#### 2006

- Initiated baseline studies
- Began seasonal annual exploration program

#### 2009

Entered EAO and CEAA permitting process

#### 2010

Established community office in Smithers, BC

# **2012**Prefeasibility

Studies

Gitxsan Nation expressed support for KSM Project

2013

#### 2016

- · Updated preliminary feasibility study
- Best Available Technology (BAT) Review
- Obtained permits for Deep Kerr exploration
- Iskut Project, purchased sister project to KSM

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

#### 2014

#### July:

Received provincial environmental approval

#### December:

Received federal environmental approval

- Key construction permit issued for KSM Project
- Signed Environmental Sustainability agreement with Gitanyow
- Signed Benefits agreement with Nisga'a Nation

#### 2015

Established Independent Geotechnical Review Board (IGRB)

#### 2017

- Addition of significant resources through Iron Cap exploration
- Received the Robert R. Hedley award
- Continued search for a partner with a major mining company

#### Construction?

Dependent on finding a partner

Exploration (2006 - )

## **Community Development Through Education and Training**

Seabridge is committed to addressing the developments needs of the communities it operates in. Education and training are among the most important of these needs. In close collaboration with the Gitanyow Nation, Seabridge helped to fund the Gitanyow Adult Literacy Program in March 2018. Future employment opportunities would benefit from improving literacy and increasing the high school completion rate for Gitanyow Wilp and membership. Open to anyone with a desire to further their education, the program aims to assist adult learners to increase their literacy, numeracy, information technology and employability skills.

While construction has not yet started on the KSM Project, Seabridge supports building a strong workforce in northwest BC by supporting local residents to further education and training through its KSM Bursary Program. Here are some of our bursary recipients from last year:







#### **KSM Project Winter Bursary Program**

The next Student Bursary program will be open for submission on August 6, 2018 and will close on August 19, 2018. Applications will be available on the KSM Project website at www.ksmproject.com.

## **Keeping Business Local**



Seabridge is committed to working with local business suppliers and contractors of Northwest BC to responsibly develop and advance the KSM Project.

Here are some of the local businesses we work with regularly:

Soucie Construction
Hy-Tech Drilling
Bulkley Valley Wholesale
Northwest Truck Rentals
Tahltan Nation
Development Corporation
Allnorth

Rescan Tahltan Environmental Consultants Kalum Kabs
Gitanyow Fisheries
Bell 2 Lodge
Sodexo
Matrix
Lakelse Air

## **Supporting Local Communities**

Seabridge is committed to community development and participates in many events through sponsorships and donations. Here is what the Terrace Search and Rescue team had to say about us:

"Seabridge Gold was one of the first Corporate Sponsors to donate to the New SAR Building Fund. Thank you so much for your generous contribution towards Terrace Search and Rescue's New Building Fund."







# Seabridge Gold staff participating in the 2018 Tour de Telegraph Bulkley Valley Search and Rescue

# Have a question or a comment?

We are always looking at ways to improve our newsletter. Please feel free to write in to us with a comment or a question.

Subscribe to our email list to receive updates:

ksm\_community@ seabridgegold.net

## **CONTACT:**

Seabridge Gold

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