

2019 NRI Non-Technical Summary of Proposed Research

Back River Project Baseline Studies

Sabina Gold & Silver Corp. (Sabina) received the NIRB Project Certification (No. 007) on December 19, 2017 and the Type A Water Licence ((2AM-BRP1831) on September 21, 2018 for the Back River Project (the Project), located in the West Kitikmeot region of Nunavut. Sabina leads coordinating research activities for the project and engages multiple specialists to support research acquisition.

A Final Environmental Impact Statement was submitted to NIRB in November 2015. It is anticipated that all required baseline information has been collected for the proposed Project, but information gaps could be identified during the regulatory process. Additional field studies may also be required to support potential changes and refinements to engineering studies.

A potential study area that encompasses all potential Project infrastructure and access corridors is shown on the map provided with this proposal. If baseline information is collected in 2018, it will focus on specific areas, as regional-type information has already been collected over the years. However, at this early date, it is not possible to define the exact areas where baseline data may be collected from.

The proposed ongoing baseline program would be conducted starting on January 1, 2020 and could continue for a full year until December 31, 2020. However, the same baseline and scientific studies may continue in subsequent years.

Baseline studies could include the following environmental components:

- Site-specific meteorological data collection (meteorological stations at Goose camp, George camp, and Bathurst Inlet)
- Site-specific air quality data collection
- Site-specific noise data collection
- Site-specific deep groundwater sampling
- Site-specific permafrost data collection
- Surface hydrology and bathymetric data collection
- Freshwater sampling for water, sediment, and aquatic biology
- Freshwater fish and fish habitat sampling
- Marine sampling for water, sediment, and aquatic biology
- Marine fish and fish habitat sampling
- Soil sampling
- Wildlife and wildlife habitat (vegetation) sampling

The local climate has been and likely will continue to be monitored through 3 meteorological stations that continuously record information on winds, precipitation, humidity, temperature, and other related characteristics.

Air quality and noise have been and may be monitored with the use of dustfall traps and noise monitors.

A deep groundwater well was installed in 2013 and this well may continue to be sampled to collect samples of deep groundwater.

Various thermistors are in place already near the 2 exploration camps. This work may continue, and/or additional thermistors may be installed.

Surface hydrology may be measured at streams in the area by the use of data-loggers installed in the streams before freshet. Lake water level fluctuations and lake bathymetric information may also be collected by data loggers and GPS/boat methods.

Freshwater samples may be collected for water, sediment, and aquatic biology. This could include streams and lakes. Freshwater fish and fish habitat sampling may take place following the protocols of the required DFO permits.

Marine samples may be collected for water, sediment, and aquatic biology. Marine fish and fish habitat sampling may take place following the protocols of the required DFO permits.

Baseline data collection on various wildlife species may occur, and involve a number of methods which would all be outlined in detail in the required GN-DOE wildlife permit. Information may be collected on the following wildlife species: migratory birds, waterbirds, raptors, seaducks, wolverine, caribou, muskox, grizzly bear, wolves, foxes, seals. Non-invasive methods such as remote camera may be used. Additional information on wildlife habitat may be collected which would include vegetation and possibly soil sampling.

Any baseline sampling would be based logically out of the existing Goose or George exploration camps, and could include snowmobiles, helicopters, boats, hiking, or fixed-winged aircraft. Any baseline sampling will be minimized during periods sensitive to wildlife.

Any baseline data obtained would be compiled in to baseline reports and/or incorporated into the the annual reporting requirements of any existing licenses, permits or authorizations.

In 2019, baseline studies:

- Site-specific meteorological data collection
- Site-specific permafrost data collection
- Surface hydrology and bathymetric data collection
- Freshwater sampling for water, sediment, and aquatic biology
- Freshwater fish and fish habitat sampling
- Wildlife and wildlife habitat (vegetation) sampling