

Mineral Assessment of Proposed Lewes-Marsh SMA Progress Report

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The Kwanlin Dun First Nation proposed Lewes-Marsh as a Chapter 10 special management area (SMA). Current information from LCIS is that the area will be designated as a Habitat Protection Area with full up-front mineral withdrawal. The SMA proposal is confidential and the First Nation is in the process of ratifying the Final Agreement Memorandum of Understanding that was initiated on March 31st, 2002.

Located west of the Alaska Highway, the proposed SMA covers the wetlands along the Yukon River upstream to the Alaska Highway Bridge Crossing and includes the northwestern portion of Marsh Lake and is approximately 21 square kilometers in size.

Base metal skarn occurrences have been staked in the region and the Rosbank 27 & 29 mineral claims are located along the Alaska Highway covering the only known rock outcrops in the proposed SMA. The existing claims are being excluded from the final SMA boundaries.

Mid-Cretaceous andesite to dacite volcanic rocks host precious metal bearing quartz-sulphide veins in outcrops east of the highway. Rocks of the Cache Creek Terrane underlay the southeast corner of the proposed SMA. Ultramafic related mineral occurrences have been explored on the structural break between the two exotic terranes. The Jurassic Aged Laberge Group volcanic and sedimentary rocks outcrop west of Marsh Lake and the proposed SMA.

A regional mineral assessment panel ranked tracts covered by the proposed SMA for the potential to host the following deposit types: plutonic related gold, gold quartz veins, copper & molybdenum skarn, low sulfidation epithermal, polymetallic veins, and porphyry copper molybdenum, and uranium porphyry. The proposed SMA area is within tracts that ranked highest and moderate relative regional mineral potential with respect to Phase IV (SW Yukon) of the Yukon-wide Regional Mineral Potential Map (Figure 1 attached).

A compilation of available geoscientific data was completed in April 2002. The highest response in multi-elements for potential economic metals is associated with the mafic-andesite volcanic rocks east of the highway and 2002 fieldwork concentrated on potential gold placer creeks draining into the proposed SMA and known mineral occurrences surrounding the proposed SMA. Multi-element litho-geochemical and soil and/or silt concentrate sampling was carried out from outcrops, streams and across stratigraphic or structural zones to characterize the mineral occurrences within and adjacent to the proposed SMA.

A total of 8 samples of rock, soil, and pan concentrates were collected and analyzed during three man-days of field study.

This new data is currently being integrated with existing geochemical, geophysical, and geological data in preparation for hosting a mineral assessment panel scheduled for the second week of December 2002. A mineral potential map of the study area, slightly larger than the proposed SMA, will be the result of the detailed assessment. Tracts of similar geology will be ranked, by consensus, relative to this much smaller detailed study area around the proposed SMA. A comprehensive report on the findings of the detailed assessment will be prepared following the panel's assessment of the area.