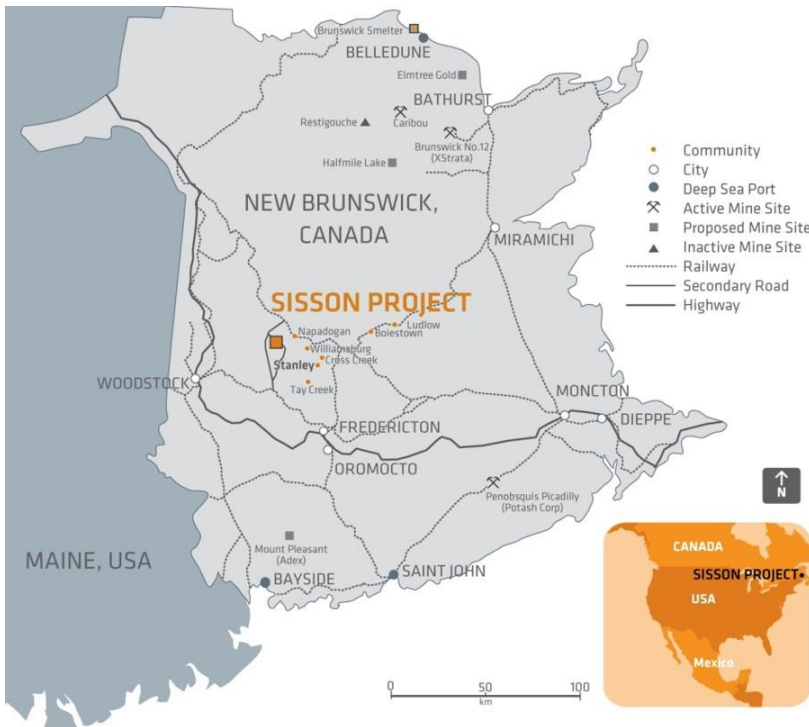




Photo Credit: John-Burrows

SISSON PROJECT FISHERIES PRODUCTIVITY OFFSETTING PLAN

MARCH 2018



The Sisson Project is located on crown land approximately 60 km northwest of Fredericton, New Brunswick, Canada. It consists of a 1,253-h development area for a tungsten and molybdenum ore open pit mine and processing facility.

Sisson Project Fisheries Productivity Offsetting Plan



The aquatic habitat potentially affected by the Sisson Project.

The project footprint will cover the upper reaches of four brooks that drain into Napadogan Brook – Bird Brook, Sisson Brook, McBean Brook and an un-named tributary – and will result in flow reductions in Napadogan Brook at different times during operations and closure (Stantec, 2013).

The upper reaches of the four brooks that will be directly affected by the Project provide limited habitat to Atlantic salmon. Atlantic salmon do use Napadogan Brook, and the minor habitat changes in that brook due to flow reductions have been studied and are not expected to affect them. Monitoring during the project lifespan will enable adaptive management measures if any unexpected effects on salmon habitat downstream of the project are observed.

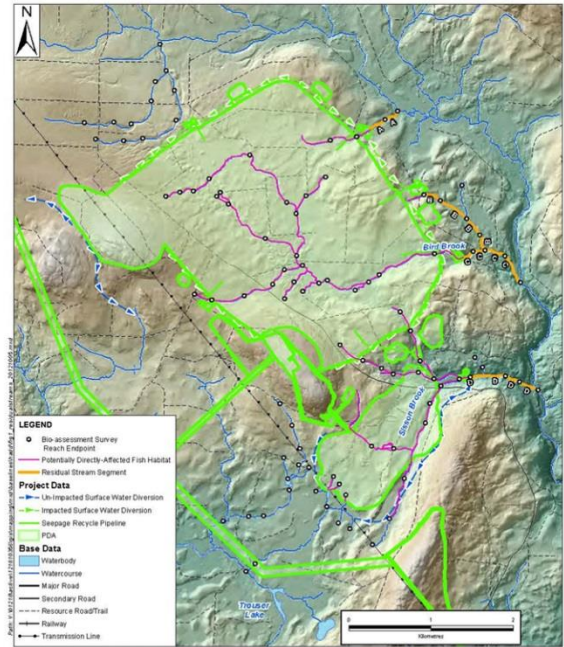


Figure 1. An illustration of the aquatic habitat that is potentially affected by the Sisson Project.

The proposed fisheries productivity offsetting plan

We propose to offset losses in fisheries productivity due to the Project by enhancing other areas of fish habitat in the Nashwaak River watershed. A fisheries productivity offsetting plan must be approved by Fisheries and Oceans Canada (DFO 2016) and Environment and Climate Change Canada (ECCC 2016) before the Sisson Project is allowed to undertake activities that may affect fish and fish habitat. Our proposal, subject to regulatory approval, is to remove an old water-level control dam/road culvert on the Nashwaak River just below its exit from Nashwaak Lake, and to replace it with a bridge. The dam/culvert is a barrier to fish passage. Replacing it with a bridge will allow gaspereau to regain access to the lake for spawning and rearing, and may also provide benefits to other species such as brook trout. The size of the habitat access gained under our offsetting plan is greater than the habitat to be lost as a result of the Project.

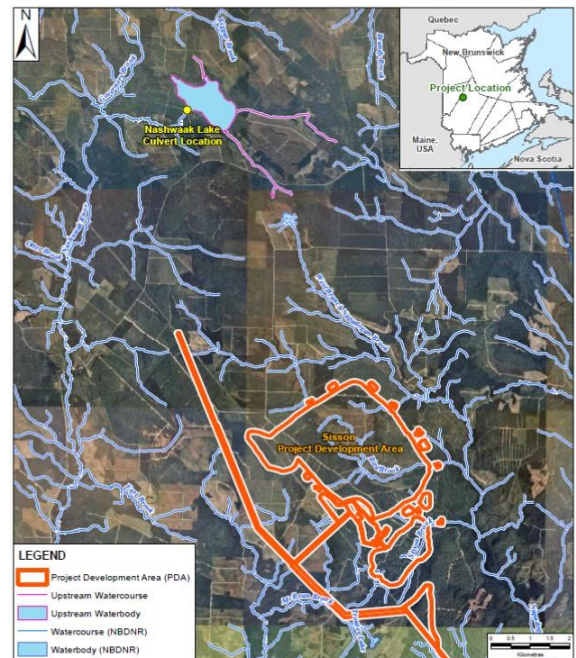


Figure 2. An illustration of the proposed fisheries productivity offsetting plan location at Nashwaak Lake relative to the location of the Sisson Project.

REFERENCES

DFO (Fisheries and Oceans Canada), 2016. *Fisheries Act*. <http://laws-lois.justice.gc.ca/eng/acts/f-14/>

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Stantec. 2013. Sisson Project: Environmental Impact Assessment Report. Prepared for Northcliff Resources Ltd. by Stantec Consulting Ltd., Fredericton, New Brunswick. July, 2013