

The past, present and the potential future of Osisko lake in Rouyn-Noranda

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Context

The boreal lake Osisko (Abitibi, Qc) has been degraded due to mining activities. Hence, the need to develop and evaluate an ecological restoration method that will benefit the community and the environment.



Objective

This project aims to evaluate the PAST, PRESENT, and FUTURE aquatic contamination and biodiversity of Osisko lake.



Hypothesis

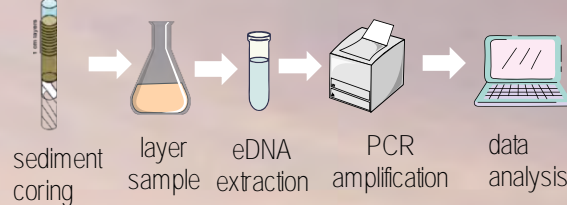
The restoration method will favour the decrease of heavy metal levels in the environment and lead to the recovery of the species composition in the boreal lake Osisko.



Methodology

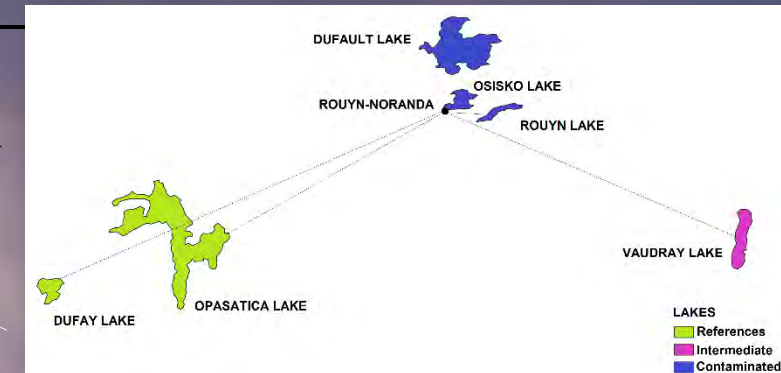
STUDY THE PAST

- eDNA metabarcoding to reconstruct the species composition of Osisko lake after 100 years of mining activities.



STUDY THE PRESENT AND THE FUTURE

- Heavy metals analysis in abiotic and biotic samples to assess the level of contamination before and after rehabilitation.



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Several benefits of the project: public health, ecological, economic, cultural, scientific.

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