Athabasca Basin: Tailings and Impacts on Aquifers

Data gaps in understanding groundwater and surface water quality and interaction around tailing ponds north of Fort McMurray have long been acknowledged. Our Tailing Ponds and Impacts on Aquifers project intends to create a database and provide easy access through a digital visualization tool developed by a team of hydrogeologists led by Dr. Giles Wendling. We will tell the story of groundwater and surface water quality and interaction in terms adopted to a non-technical audience. This is a collaborative project that proposes to engage Indigenous communities including Fort McMurray First Nation, Athabasca Chipewyan First Nation, Mikisew Cree First Nation, Fort MacKay First Nation, and Fort MacKay Métis Nation, and interested partners such as the First Nation Technical Advisory Group, Athabasca Watershed Council, Cows and Fish, Canadian Association of Physicians for the Environment, as well industry groups.

By involving indigenous communities, especially Elders' Circles, Indigenous Knowledge holders, and Youth groups at the initiation of this project, we expect to gain insight about concerns and very valuable local and indigenous knowledge. Thus, we aim to produce deliverables that address these concerns, and organize the data so that it is easy to view. The platform will include a map, allowing users to click on a location and see groundwater and surface water data in an interactive mode. The database and platform will be shared publicly for free. It will also help identify data gaps for our partners, indigenous communities, industry groups, and the general public. We hope to encourage community based monitoring programs that could eventually help to fill these data gaps.

We also fulfill objectives in the Lower Athabasca Regional Plan s. 38 (1) to improve watershed stewardship literacy through citizen science, and the proposal to work towards community based monitoring programs. This advance in access to information will work in support of community based monitoring programs (CBM) to help fill data gaps. CBM is increasingly visualized by governments as a legitimate and important technique to engage communities, contribute to watershed literacy, and help answer environmental questions.

April 18, 2018
First Nations, Métis Nations Will be invited to the community meeting in October 2018 to give input into this project and tour various sites with Keepers of the Athabasca, First Nations Technical Advisory Group, and the scientists involved.

Interested NGO’s and other groups: Will be invited to the public meeting in March 2019 to meet community members, discuss the project results, and get the report and digital visualization tool

Please consider writing a letter of support for *Athabasca Basin: Tailings and Impacts on Aquifers* (template letter is available)

For more information:

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