



British Columbia Mine Tailings Map

Data Sources

July 2022

The following sources have been used to populate the [map](#) and its underlying database. Click the links to be directed to the source data. Please see the [Research Methodology](#) document for more information on how these sources were used.

Primary Sources (Site-Specific Data)

[BC MINFILE Mineral Inventory](#)—The BC MINFILE Mineral Inventory is a searchable online database containing geological, location and economic information on more than 14,750 metallic, industrial mineral and coal mines, deposits and occurrences across British Columbia. Maintained by the British Columbia Geological Survey, MINFILE records also provide detail on historical mineral exploration and production activities at specific mine sites. MINFILE records were cross referenced against geolocation data in other site-specific sources in order to obtain GPS coordinates for sites listed on the map.

[2021 BC TSF Code Requirements Compliance Status Table](#)—This summary table of the Compliance Status of 70 TSF sites across BC, published by the Ministry of Energy, Mines, and Low Carbon Innovation in June 2021, was used to identify sites (and site status) for inclusion on the map. The table is housed on the BC Mine Information [Tailings Management](#) website. The table was released by the Ministry in response to the BC Chief Auditor of Mines' [Audit of Code Requirements for Tailings Storage Facilities \(TSFs\)](#).

[British Columbia Mine Information Website](#)—The B.C. Mine Information website is an online resource developed by the Ministry of Energy, Mines and Low Carbon Innovation, the Environmental Assessment Office and the Ministry of Environment and Climate Change. It provides profiles of all major coal and metal mines across B.C., and public access to documents such as annual Dam Safety Inspection reports and Annual Reclamation Reports. These documents provided a wide range of site-specific data found on the map.

[Permitted Metal and Coal 2014 DSI Report Summary Table](#)—The Permitted Metal and Coal DSI Report Summary Table is a publicly-accessible CSV file published at the B.C. Data Catalogue, an online repository of B.C. Government data, applications and web services. Published in 2014, the file summarizes compliance status and key data points regarding the Dam Safety Inspection Reports that were conducted for Permitted Metal and Coal Mines in that year. This file was used to identify sites, and some site-specific data, for inclusion on the map.

[EPIC \(EAO Project Information Centre\)](#) The Environmental Assessment Office (EAO) is the B.C. regulatory agency responsible for managing environmental assessments of major industrial projects. The EAO's Project Information Centre (EPIC) is a web portal that provides public access to environmental assessment reports and related documentation for all major industrial projects in the province. The website was used to identify proposed sites,

and project-specific documents were used to collect site-specific data about proposed TSFs.

[British Columbia Geological Survey 2021 Provincial Overview](#)—The British Columbia Geological Survey is the provincial geoscience agency tasked with helping to guide the province's development of mineral resources. Every year, the B.C. Geological Survey releases a Provincial Overview of Exploration and Mining in British Columbia, which summarizes significant mining and exploration projects across the Province of British Columbia. This document was used to identify existing and proposed sites for inclusion on the map.

[Mount Polley Independent Expert Report—Appendix I](#)—The Report on Mount Polley Tailings Storage Facility Breach was released in 2015 (full report [here](#)). It was written by the Independent Expert Engineering Investigation and Review Panel established to investigate the breach of the tailings storage facility at Mount Polley, and develop recommendations to ensure that similar failures do not occur again in B.C. Appendix I of the report publishes an inventory of 183 individual TSF dams across the province of British Columbia. This appendix was used to identify sites, and some site-specific data, for inclusion on the map.

[Global Tailings Portal \(GTP\)](#)—The GTP is an international tailings database established by the Investor Mining and Tailings Safety Initiative in 2019. The GTP sources its information directly from publicly-listed mining companies via voluntary questionnaires. The GTP provided a wide range of site-specific data found on the map.

Site Photos

[Google Earth](#) is a Google web application that provides users with a 3D representation of Earth, based primarily on satellite imagery. Users can search for aerial images of specific sites using addresses, placenames, or GPS coordinates. The majority of the Site Photos included on the map were sourced from Google Earth using GPS coordinates obtained from the BC MINFILE Mineral Inventory.

Microsoft's [Bing Map](#) web application was also used to source images in some cases.

Finally, in a handful of cases, Site Photos were obtained from photographers, who hold the copyright to their images. ***These images should not be used without their permission.*** Please see the labels on each individual image for copyright details.

Map Layers

Minor Watersheds—Third-order watershed boundaries were taken from the [BC Freshwater Atlas](#), which is a standardized dataset for mapping British Columbia's hydrological features. Where necessary to fill out transboundary watershed boundaries, the US Department of Agriculture's Watershed Boundary Set was used.

- [BC Freshwater Atlas Watershed Groups](#)
- [US Watershed Boundary Data](#)

Salmon Habitat—Salmon habitat data were taken from the BC Provincial Fish Ranges dataset, which identifies presence/absence of species across third-order watersheds. Presence/absence data is displayed on the map for five salmon species: Sockeye, Pink, Coho, Chum, and Chinook.

- [BC Provincial Fish Ranges – Watersheds](#)

Drainage Regions—Principal drainages are highest-order watersheds. There are nine Principal Drainages in B.C.: Fraser River, Mackenzie River, Columbia River, Skeena River, Nass River, Stikine River, Taku River, Yukon River and the Coastal Rivers. Boundaries for these watersheds were taken from the [BC Freshwater Atlas](#), and transboundary drainage boundaries were supplemented from US and Yukon government sources.

- [The Major Drainage Regions of BC](#)
- [Columbia River Drainage Region](#)
- [Yukon River Drainage Region—Alaska](#)
- [Yukon River Drainage Region – Yukon](#)