

## Yukon Permafrost Database

The Yukon Permafrost Database is a compilation of ground thermal and geotechnical data in Yukon, including related reports.

In referring to information included in this download please use the following citation:  
Yukon Geological Survey, current year. Yukon permafrost reports data. *In*: Yukon Permafrost Database. Government of Yukon, <https://service.yukon.ca/permafrost>, accessed [month day, year].

## Reports

The reports component of the Yukon Permafrost Database comprises a catalogue of reports, maps, posters, journal articles and academic theses specifically pertaining to permafrost and geotechnical investigations in Yukon. Each document was georeferenced (“footprinted”) in ESRI ArcGIS to capture the spatial extent of the work. Documents were footprinted with either a point (e.g., for boreholes and site specific investigations), line (e.g., for road segments) or polygon feature class (e.g., for property boundaries, or general regions) as appropriate.

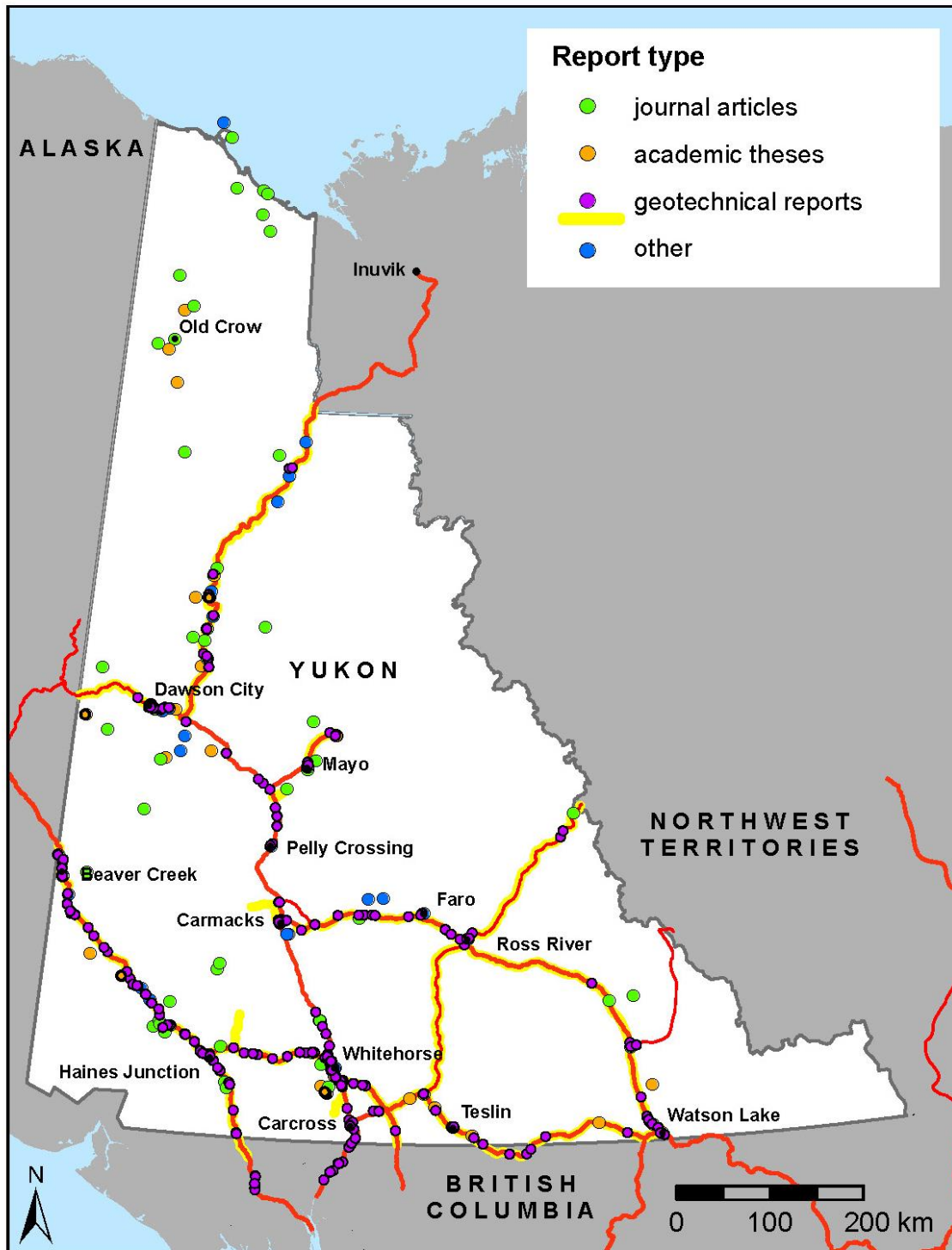
Permafrost-related documents come from a number of sources, only some of which are openly accessible. Publicly available internal government documents that exist in digital format may be downloaded from an ftp site, while proprietary URLs or DOI links are provided for documents that do not have open access, such as selected journal articles.

Overall, this component of the database provides a comprehensive summary of the permafrost literature available for Yukon. It provides an accessible and convenient method of determining what permafrost-related work has been done in the territory and where, and will facilitate gathering relevant literature for specific areas of interest. The collection will be updated annually to incorporate new permafrost-related literature directly pertaining to Yukon.

As of November 2021, the documents catalogued in the reports component of the Yukon Permafrost Database include 167 journal articles, 56 academic theses, 121 geotechnical reports, and 111 other documents (such as internal reports, maps and posters). The approximate locations of the work represented in these documents are shown in Figure 1.

*Georeferenced document types, as of November 2021.*

Document type and source	Number of documents footprinted
Academic theses	56
Journal articles	167
Geotechnical reports	121
Other (e.g. maps, posters, internal reports)	111



**Figure 1.** Locations of georeferenced reports loaded into the Yukon Permafrost Database. Yellow highlighting indicates road segments described in geotechnical reports. Note polygons are not shown because overlapping features are too difficult to discern at this scale.

## DOWNLOADS

### Permafrost Report Index

The primary reports download consists of the following two index tables which are provided in CSV format. Field definitions for these tables are provided below.

#### **VW\_GEOTECHNICAL\_REPORTS.CSV**

Index table summarizing all geotechnical reports that have been georeferenced and linked to digital copies on a publicly accessible FTP site. As of November 2021, this table contains 121 records. These reports were largely acquired from a geotechnical reference library at YG Highways and Public Works (HPW), Transportation Engineering Branch.

FIELD	DESCRIPTION
REFERENCE_NUM	A unique identifier, as assigned in HPW reference library
TITLE	Report title
AUTHOR	Author(s) of document or corporate name of consultant
CONSULTANT_NUM	Consultant number, if applicable
REPORT_TYPE	e.g. geotechnical investigation, hazard assessment, terrain/airphoto analysis, design, inventory, reference, and subcategories (airport, alignment, bridge, community, granular, rock, slope stability)
YEAR	Year report was written
NOTES	Additional notes describing report
HIGHWAY	Name of highway study involves
FILENAME	Name of PDF file
REPORT_LINK	URL to download or access digital report from FTP site, if available.

#### **VW\_PERMAFROST\_REPORTS.CSV**

Index table summarizing all permafrost reports that have been georeferenced and linked to a DOI or URL for download. As of November 2021, this table contains 334 records.

FIELD	DESCRIPTION
ID	A unique identifier for each record in the table
YEAR	Year published or released
TITLE	Report title
AUTHOR	Author(s)
REPORT_TYPE	e.g. journal article, thesis, report, map, poster, conference paper, etc.
DESCRIPTION	General location description
REPORT_LINK	DOI or URL to download or access digital report, if available.

## **Spatial Data**

Four spatial data files are available in a variety of formats including ESRI file geodatabase (FGBD), ESRI shapefile (SHP) and Google Earth (KMZ). The attribute tables for these files follow the same structure as the corresponding geotechnical and permafrost CSV files listed above.

### ***Geotechnical Reports***

**Points:** The geotechnical point features represent localized study areas. 56 of the 308 features have links to digital PDF files. Features with no links to digital PDF currently only exist in hard copy, but may be scanned and digitized in the future.

**Lines:** The geotechnical line features represent road segments associated with a particular report. 64 of the 270 features have links to digital PDF files. Features with no links to digital PDF currently only exist in hard copy, but may be scanned and digitized in the future.

### ***Permafrost Reports***

**Points:** 148 reports are represented by 231 point features (some reports contain multiple study locations).

**Polygons:** 197 reports are represented by polygon features. 53 of these cover either all or most of the Yukon, while the remaining 144 cover smaller more discrete areas.