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**GEOLOGICAL SURVEY OF CANADA
OPEN FILE 8717**

**Northern Canada glacial geomorphology database: part 1
— central mainland Nunavut**

Version 2020

P. Behnia, I. McMartin, J.E. Campbell, P.-M. Godbout, and T. Tremblay

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2020

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Permanent link: <https://doi.org/10.4095/327796>

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Recommended citation

Behnia, P., McMartin, I., Campbell, J.E., Godbout, P.-M., and Tremblay, T., 2020. Northern Canada glacial geomorphology database: part 1 — central mainland Nunavut; Geological Survey of Canada, Open File 8717 (ver. 2020), 1 zip file. <https://doi.org/10.4095/327796>

Publications in this series have not been edited; they are released as submitted by the author.

SUMMARY

A new glacial geomorphology database was produced in a core region of the Laurentide Ice Sheet (LIS) located in mainland Nunavut, an area for which accurate palaeoglaciological reconstructions demand significant improvement on data-based knowledge of ice sheet flow patterns, subglacial thermal regimes and ice-margin chronology. The compilation builds on recent and legacy maps and is supplemented by visual digitization of glacial features using a high-resolution digital elevation model (ArcticDEM) and Landsat 8 images. The database also includes an updated set of both remote and ground observations acquired during previous geological mapping projects or as part of recent field mapping activities within Natural Resources Canada's Geomapping for Energy and Minerals (GEM) Program (2008-2020).

All glacial geomorphological features and standardized field datasets are integrated into an ESRI ArcGIS 10.0 geospatial database (gdb) with a scalable map in mxd format. The geodatabase will be updated as new mapping is performed or new field work is completed. From this unprecedented detailed inventory of >156,000 features and >14,000 field observations, coherent patterns of landform development (landsystems) were identified, many of which are entirely new and others significantly modified or updated. The landsystems are included as georeferenced overlays in the gdb. To improve map presentation and readability, the mapped glacial features were generalized at both 1:5 million and 1:1 million scales using a semi-automated generalization method and are provided as PDF files. A complete description of the map sources, mapping method, mapped features, field datasets and interpretations of the glacial landsystems are presented in McMartin et al. (2020). A summary of the GEM project results and an historical review of previous glacial geomorphological mapping in Keewatin are provided in McMartin et al. (in press).

Related publications

McMartin, I., Godbout, P.-M., Campbell, J.E., Tremblay, T., and Behnia, P., 2020. A new map of glacial features and glacial landsystems in central mainland Nunavut, Canada; *Boreas*, 25 p.

<https://doi.org/10.1111/bor.12479>

McMartin, I., Campbell, J.E., Godbout, P.-M., Behnia, P., Tremblay, T., and Normandeau, P.X., in press. High resolution mapping of glacial landscapes in the north-central portion of the Laurentide Ice Sheet in Nunavut and Northwest Territories; In McMartin, I. (ed.): *Surficial Geology of Northern Canada: a Summary of Geo-mapping for Energy and Minerals Program Contributions*. Geological Survey of Canada, Bulletin 611.

METADATA

The gdb contains all attribute data and can be opened directly from the provided mxd.
of_8717_v2020_10_0.mxd

\\Data\of_8717_v2020.gdb

The data are also provided in separate shapefiles.

\\Data\of_8717_v2020_shp

study_area – outline of study area

water – areas of fresh and non-fresh water

Mapped glacial features

feature_lines – linear geomorphological features

feature_points – point geomorphological features

feature_plume_flowsets – generalized ice-flow directions within till plumes

feature_polygons – areas of regrouped glacial features

Field datasets

field_stations – ground and remote field stations

field_ice_flows – small- to medium-scale ice-flow indicators measured in the field

field_samples – samples collected for Quaternary studies

Glacial landsystems

ice_stream_flowsets – generalized ice-flow directions within areas of ice streams

ice_stream_landssystem – areas of ice streams

palimpsest_flowsets – generalized ice-flow directions within areas of palimpsest streamlined terrains

palimpsest_streamlined_landssystem – areas of palimpsest streamlined terrains

relict_cold_based_landssystem – areas of relict cold-based terrains

relict_intermediate_to_cold_based_landssystem – areas of relict intermediate to cold-based terrains

relict_intermediate_to_warm_based_landssystem – areas of relict intermediate to warm-based terrains

preserved_warm_based_landssystem – areas of preserved warm-based glacial terrains

cold_based_retreat_landssystem – areas of cold-based retreat glacial terrains

Projection:

Projected Coordinate System: NAD_1983_UTM_Zone_15N

Projection: Transverse_Mercator

False_Easting: 500000,00000000

False_Northing: 0,00000000

Central_Meridian: -93,00000000

Scale_Factor: 0,99960000

Latitude_Of_Origin: 0,00000000

Linear Unit: Meter

Geographic Coordinate System: GCS_North_American_1983

Datum: D_North_American_1983

Prime Meridian: Greenwich

Angular Unit: Degree

\Maps (in PDF)

Generalized_map_1M – Generalized map of glacial features at 1:1 million scale

Generalized_map_5M – Generalized map of glacial features at 1:5 million scale

Note: Generalized glacial features in shapefile format available upon request.

\Tables (in PDF)

Table_1 – List of mapped features, field datasets and interpreted glacial landsystems; with number of features.

Table_2 – List of maps used in the compilation. Complete list of references is given in Table 3.

Table_3 – Reference list for maps listed in Table 2. References for sources of field datasets are also included.

Table_4 – Criteria used for generalizations of glacial features.

Table_5 – Map unit legend.

ATTRIBUTE DESCRIPTIONS

Complete feature descriptions are given in McMartin et al. (2020).

Note: empty cells in attribute columns represent no data (including not measured or not applicable).

1) Mapped glacial features

feature_lines

ID – Unique identifier

Feature:

Crag-and-tail landform

Esker ridge (Note: eskers completely reworked into beaches were removed from the compilation)

Ice-front retreat position

Ice-flow direction

Lateral meltwater channel (Note: incomplete mapping in some areas)

Marine limit (Note: incomplete mapping in some areas; also some may represent glacial lake limits slightly above the local marine limit, namely around Yathkyed Lake, Princess Mary Lake and Schultz Lake)

Major moraine ridge

Streamlined landform

Subglacial meltwater corridor

Subset

Beaded (for esker only)

End (for moraine only)

Interlobate (for moraine only)

Lateral shear (for moraine only)

Lateral uphill left (for lateral meltwater channel)

Lateral uphill right (for lateral meltwater channel)

Undefined (for lateral meltwater channel only)

Pre-crag (for crag-and-tail landform only)

Sense (only applied to esker ridge and streamlined landform)

Known

Unknown (for esker only)

Unspecified (for streamlined landform)

Source

Values are given in Table 2. References for the map sources are listed in Table 3.

Age

Values are relative ages between glacial lineations (for crag-and-tail and streamlined landforms only), interpreted remotely and confirmed by surrounding striation chronology (if available).

Notes

Values are given for modified or new feature by Mapper; Year; Nature of modification; Cartographic tools used.

feature_points

ID – Unique identifier

Feature:

Delta

Ice-contact delta (Note: include kame terraces)

Subtype

Glaciolacustrine

Glaciomarine

Ice-margin

Lacustrine

Marine

SMC (Subglacial meltwater corridor)

Direction

Values are given in azimuth degrees with zero pointing to true north.

Source

Values are given in Table 2. References for the map sources are listed in Table 3.

Notes

Values are given for modified or new feature by Mapper, Year, Nature of modification.

feature_plume_flowsets

ID – Unique identifier

Feature

Till plume flowset

Notes

Values are given by Mappers, Year, Nature of modification.

feature_polygons

ID – Unique identifier

Feature:

Till plume

De Geer moraine area

Minor moraine ridge area (undifferentiated)

Subtype (for till plumes only):

Carbonate

Non-carbonate

Notes

Values are given by Mappers, Year, Nature of modification.

2) Field datasets

field_stations

ID – Unique identifier

StationID – Unique station identifier

VisitDate – Date of field observation, or approximate year for legacy maps

Latitude – Latitude in decimal degrees

Longitude – Longitude in decimal degrees

Easting_NAD83_15N – Easting in meters

Northing_NAD83_15N – Northing in meters

NTS – 50K map sheet number from the National Topographic System (NTS)

OrgDatum – Original projection of the datasets

ElevationM – Elevation in meters based on ElevMethod

ElevMethod – Source of elevation measurement

ObservType – Remote observation (from the aircraft) or Ground observation

StnType – Nature of observation

MapUnit – Surficial map unit label (see Table 5 for complete Map unit legend)
Landform – Geomorphological feature (if recorded)
Source – References listed in Table 3
Summary_info – Field observation, Ice-flow indicator only, Legacy map data, Sample only

field_ice_flows

ID – Unique identifier
IceFlowID – Unique ice-flow indicator identifier
StationID – Unique station identifier
Latitude – Latitude in decimal degrees
Longitude – Longitude in decimal degrees
Easting_NAD83_15N – Easting in meters
Northing_NAD83_15N – Northing in meters
OrgDatum – Original projection of the datasets
Feature – Ice-flow indicator type(s)
Azimuth – Down-ice direction with zero pointing to true north
Sense – Known or unknown
Relative_age – Age relationship (1=oldest; 0: unknown)
Definition – Well, moderately or poorly defined
Main – Predominant indicator: T=True; F=False or unknown (blank if not recorded)
Source – References listed in Table 3
Mapped_symbol – Striations (include chatter marks, rat tails, grooves, crescentic gouges, etc.), Roches moutonnées (include whaleback, stoss and lee, etc.)

field_samples

ID – Unique identifier
SampleID – Unique sample identifier
StationID – Unique station identifier
Latitude – Latitude in decimal degrees
Longitude – Longitude in decimal degrees
Easting_NAD83_15N – Easting in meters
Northing_NAD83_15N – Northing in meters
OrgDatum – Original projection of the datasets
LithoType – Description of sample
DepthMax – Maximum sampling depth (in cm)
MatrixModi – Field matrix texture modifier
Matrix – Field matrix texture
Purpose – Type of analysis determined on sample
Source – References listed in Table 3
Notes – Various
Summary_info – Unconsolidated sediments, Marine fossils, Organic materials, Bedrock/boulder

3) Glacial landsystems

ice_stream_flowsets

ID – Unique identifier
Feature – Ice stream flowset
Type – Name of ice stream (see McMartin et al., 2020)

ice_stream_landsystem

ID – Unique identifier

Feature – Ice stream

Type – Name of ice stream (see McMartin et al., 2020)

References – References provided in McMartin et al. (2020)

palimpsest_flowsets

ID – Unique identifier

Feature – Palimpsest flowset

palimpsest_streamlined_landsystem

ID – Unique identifier

Feature – Palimpsest

relict_cold_based_landsystem

ID – Unique identifier

Feature – Relict cold-based (CB)

relict_intermediate_to_cold_based_landsystem

ID – Unique identifier

Feature – Relict intermediate (IB) to CB

relict_intermediate_to_warm_based_landsystem

ID – Unique identifier

Feature – Relict IB to warm-based (WB)

preserved_warm_based_landsystem

ID – Unique identifier

Feature – Preserved WB

Ice_flow_direction – General azimuth of ice flow with zero pointing to true north

cold_based_retreat_landsystem

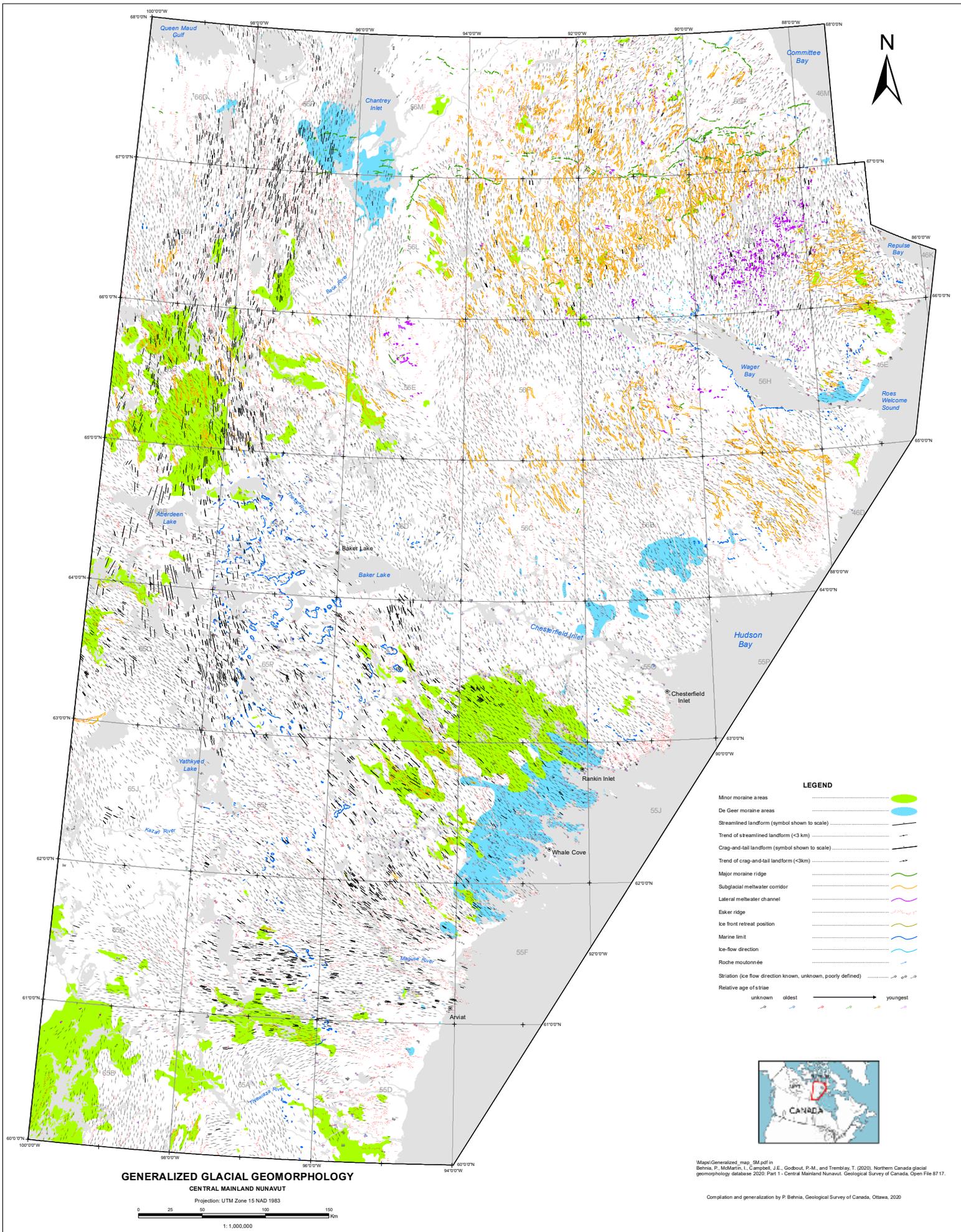
ID – Unique identifier

Feature – CB retreat

References – References provided in McMartin et al. (2020)

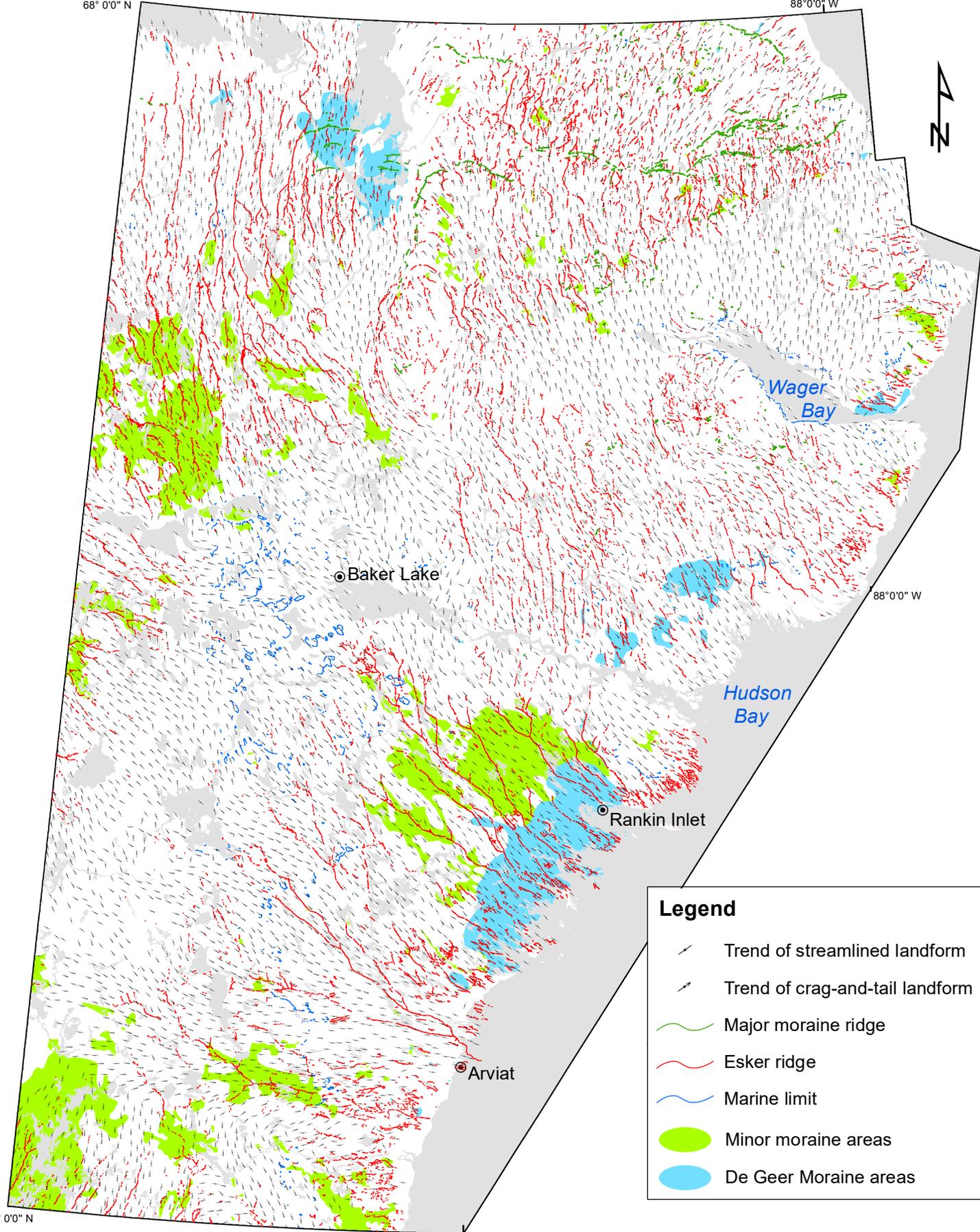
ACKNOWLEDGEMENTS

This work is part of the Synthesis of Glacial History and Dynamics Activity of Natural Resources Canada Geomapping for Energy and Minerals (GEM) Rae project, led by the Geological Survey of Canada, in collaboration with the Canada-Nunavut Geoscience Office and the Northwest Territories Geological Survey. We thank Alain Plouffe for the internal review of the report and database structure.



100° 0'0" W
68° 0'0" N

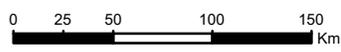
88° 0'0" W



60° 0'0" N

94° 0'0" W

GENERALIZED GLACIAL GEOMORPHOLOGY CENTRAL MAINLAND NUNAVUT



Projection: UTM Zone 15 NAD 1983

Legend

-  Trend of streamlined landform
-  Trend of crag-and-tail landform
-  Major moraine ridge
-  Esker ridge
-  Marine limit
-  Minor moraine areas
-  De Geer Moraine areas

Maps\Generalized_map_5M.pdf in
Behnia, P., McMartin, I., Campbell, J.E., Godbout, P.-M., and
Tremblay, T. (2020). Northern Canada glacial
geomorphology database 2020: Part 1 – Central Mainland Nunavut.
Geological Survey of Canada, Open File 8717.

Compilation and generalization at 1:5 000 000 scale by P. Behnia,
Geological Survey of Canada, Ottawa, 2020

Table 1. List of mapped features, field datasets and interpreted glacial landsystems with number of features.

Feature Type	Feature Type Subset	Count
<i>Mapped features</i>		
Major moraine ridge	End, Interlobate, Lateral shear	1102 ^a
Ice front retreat position		377
Ice-flow direction (in glacial trough)		127
Streamlined landform	Sense: Known, Unspecified	94 601
Crag-and-tail landform	Pre-crag (if indicated)	29 540
Esker ridge	Beaded (if indicated); Sense: Known, Unknown	22 768 ^a
Subglacial meltwater corridor		3357 ^b
Lateral meltwater channel	Lateral uphill left, Lateral uphill right, Undefined	2500
Marine limit		1738 ^a
Ice-contact delta	Glaciomarine, Glaciolacustrine, Ice-margin, SMC ^c	331
Delta	Marine, Glaciolacustrine, Lacustrine	196
Till plume, visible	Carbonate, Non-carbonate	13
De Geer moraine area		50
Minor moraine ridge area		143
<i>Field information</i>		
Field station	Observation type	14 153
Ice-flow indicator	Indicator type	4667
Sample location	Sample type	8266
<i>Interpreted glacial landsystems</i>		
Ice stream		6
Palimpsest streamlined		53
Relict cold-based		50
Relict intermediate to cold-based		27
Relict intermediate to warm-based		19
Preserved warm-based		7
Cold-based retreat		4

^a Counts represent segments of line features

^b Counts represent segments of line features (both sides of corridors)

^c Ice-contact delta within a subglacial meltwater corridor

Table 2. List of maps used in the compilation. Complete list of references is given in Table 3.

Map sheet	Map source	Reference	Map scale	Available field information
NTS 46D	CGM 145	Dredge et al., 2013a	1:100 000	reconnaissance
NTS 46E	CGM 422	Randour et al., in press	1:100 000	regional/reconnaissance
NTS 46L	Remote imageries only	NA	NA	regional
NTS 46M	CGM 152	Campbell and McMartin, 2014	1:100 000	regional
NTS 55D	Map 8-1979 (CGM 239)	Aylsworth et al., 1981b	1:125 000	reconnaissance
NTS 55E	Map 8-1980 (CGM 240)	Arsenault et al., 1981b	1:125 000	reconnaissance
NTS 55F	Map 9-1979 (CGM 241)	Arsenault et al., 1981c	1:125 000	reconnaissance
NTS 55J	Map 10-1980 (CGM242) OF 4595	Aylsworth et al., 1981d McMartin and Henderson, 2004	1:125 000 1:250 000	reconnaissance detailed
NTS 55K	Map 9-1980 (CGM 244) OF 4116 (CGM 68) OF 4595	Aylsworth et al., 1981c McMartin, 2002 McMartin and Henderson, 2004	1:125 000 1:50 000 1:250 000	reconnaissance detailed regional
NTS 55L	Map 7-1979 (CGM 245) OF 4595	Arsenault et al., 1981a McMartin and Henderson, 2004	1:250 000 1:125 000	regional regional
NTS 55M	Map 11-1980 (CGM 225) OF 4595	Aylsworth et al., 1981e McMartin and Henderson, 2004	1:125 000 1:250 000	regional/detailed regional
NTS 55N	Map 1-1984 (CGM 246) OF 4595	Aylsworth et al., 1986a McMartin and Henderson, 2004	1:125 000 1:250 000	reconnaissance regional/detailed
NTS 55O	Map 1-1985 (CGM 247) OF 4595	Aylsworth et al., 1986b McMartin and Henderson, 2004	1:125 000 1:250 000	reconnaissance regional
NTS 56A	CGM 146, 147	Dredge et al., 2013b-c	1:100 000	reconnaissance
NTS 56B	Map 45-1989 (CGM 387)	Aylsworth, 1990b	1:250 000	minimal
NTS 56C	Map 46-1989 (CGM 343)	Aylsworth, 1990c	1:250 000	minimal
NTS 56D	Map 3-1985 (CGM 329)	Aylsworth et al., 1985	1:125 000	reconnaissance
NTS 56E	Map 3-1981 (CGM 330)	Thomas and Dyke, 1981a	1:250 000	minimal
NTS 56F	Map 4-1981 (CGM 381)	Thomas and Dyke, 1981b	1:250 000	minimal
NTS 56G	A-Series 2111A (CGM 344)	Dredge and McMartin, 2007	1:250 000	regional
NTS 56H	CGM 312 (South) Remote imageries only (North)	Randour and McMartin, 2017 NA	1:100 000 NA	regional regional
NTS 56I	CGM 204, 294	McMartin et al., 2015a, 2017	1:100 000	regional
NTS 56J	CGM 151 OF 4280	Dredge et al., 2016 Utting, 2004	1:100 000 1:100 000	regional regional
NTS 56K	OF 4278, 4279	Little and Ferbey, 2003; Ferbey and Little 2003	1:100 000	regional
NTS 56L	Map 6-1981 (CGM 175)	Thomas and Dyke, 1982a	1:250 000	minimal
NTS 56M	Map 7-1981 (CGM 385)	Thomas and Dyke, 1982b	1:250 000	minimal
NTS 56N	Map 8-1981 (CGM 380)	Thomas and Dyke, 1982c	1:250 000	minimal
NTS 56O	OF 4281 CGM 384	Oyzer, 2004 Dredge, 2018	1:100 000 1:100 000	regional reconnaissance
NTS 56P	CGM 60, 61, 62, 63 OF 5016	Campbell et al., 2013a-b-c-d Little, 2006	1:50 000 1:50 000	regional regional
NTS 65A	Map 10-1990 (CGM 243)	Aylsworth et al., 1990b	1:125 000	reconnaissance
NTS 65B	Map 6-1985 (CGM 327)	Aylsworth, 1986	1:125 000	minimal
NTS 65G	Map 1-1988 (CGM 328)	Aylsworth, 1989	1:125 000	minimal
NTS 65H	Map 2-1985 (CGM 238)	Aylsworth et al., 1986c	1:125 000	reconnaissance/regional
NTS 65I	Map 2-1979 (CGM 85) OF 4595	Aylsworth et al., 1981a McMartin and Henderson, 2004	1:125 000 1:250 000	reconnaissance regional
NTS 65J	Map 37-1989 (CGM 325)	Aylsworth and Clark, 1989b	1:125 000	minimal
NTS 65K	Map 35-1989 (CGM 134)	Aylsworth and Clark, 1989a	1:125 000	minimal
NTS 65L	Map 39-1989 (CGM 326) OF 4595	Aylsworth and Clark, 1989c McMartin and Henderson, 2004	1:125 000 1:250 000	regional/detailed regional
NTS 66A	A-Series 2120 (CGM 314) Map 43-1989 (CGM 324)	McMartin et al., 2008 Aylsworth et al., 1990a	1:100 000 1:125 000	reconnaissance/regional regional
NTS 66B	Map 44-1989 (CGM 323)	Aylsworth, 1990a	1:125 000	minimal
NTS 66C	CGM 208 CGM 411	St-Onge and Kerr, 2017 Dredge, 2020	1:125 000 1:100 000	minimal minimal
NTS 66D	Map 9-1981 (CGM 331) OF 626	Thomas, 1981 Thomas et al., 1979	1:250 000 1:125 000	minimal minimal
NTS 66E	Map 10-1981 (CGM 332)	Thomas, 1982	1:250 000	minimal
NTS 66F	CGM 194 (South) Remote imageries & map (North)	St-Onge and Kerr 2014 Dredge (in prep)	1:125 000 NA	minimal minimal
NTS 66G	A-Series 1618A (CGM 313)	Helie, 1984	1:250 000	minimal
NTS 66H	A-Series 1618A (CGM 313)	Helie, 1984	1:250 000	minimal

Table 3. Reference list for maps listed in Table 2. Additional references for sources of field datasets are also included at the end of this list.

Arsenault, L., Aylsworth, J. M., Kettles, I. M. & Shilts, W. W. 1981a: Surficial geology, Kaminak Lake, District of Keewatin. *Geological Survey of Canada, Preliminary Map 7-1979 (CGM 245)*.

Arsenault, L., Aylsworth, J. M., Cunningham, C. M., Kettles, I.M. & Shilts, W. W. 1981b: Surficial geology, Eskimo Point, District of Keewatin. *Geological Survey of Canada, Preliminary Map 8-1980 (CGM 240)*.

Arsenault, L., Aylsworth, J. M., Kettles, I.M. & Shilts, W. W. 1981c: Surficial Geology, Dawson Inlet, District of Keewatin. *Geological Survey of Canada, Preliminary Map 9-1979 (CGM 241)*.

Aylsworth, J. M. 1986: Surficial geology, Nueltin Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 6-1985 (CGM 327)*.

Aylsworth, J. M. 1989: Surficial geology, Watterson Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 1-1988 (CGM 328)*.

Aylsworth, J. M. 1990a: Surficial geology, Aberdeen Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 44-1989 (CGM 323)*.

Aylsworth, J. M. 1990b: Surficial Geology, Armit Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 45-1989 (CGM 387)*.

Aylsworth, J. M. 1990c: Surficial Geology, Tehery Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 46-1989 (CGM 343)*.

Aylsworth, J. M., Cunningham, C.M. & Shilts, W.W. 1981a: Surficial geology, Ferguson Lake, District of Keewatin. *Geological Survey of Canada, Preliminary Map 2-1979 (CGM 85)*.

Aylsworth, J. M., Cunningham, C.M. & Shilts, W.W. 1981b: Surficial Geology, Hyde Lake, District of Keewatin. *Geological Survey of Canada, Preliminary Map 8-1979 (CGM 239)*.

Aylsworth, J. M., Boydell, A.N. & Shilts, W.W. 1981c: Surficial geology, Tavani, District of Keewatin. *Geological Survey of Canada, Preliminary Map 9-1980, 1981 (CGM 244)*.

Aylsworth, J. M., Boydell, A.N. & Shilts, W.W. 1981d: Surficial Geology, Marble Island, District of Keewatin. *Geological Survey of Canada, Preliminary Map 10-1980 (CGM 242)*.

Aylsworth, J. M., Boydell, A.N., Cunningham, C.M. & Shilts, W.W. 1981e: Surficial Geology, Macquoid Lake, District of Keewatin. *Geological Survey of Canada, Preliminary Map 11-1980 (CGM 225)*.

Aylsworth, J. M., Cunningham, C.M., Shilts, W.W. 1985: Surficial geology, Baker Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 3-1985 (CGM 329)*.

Aylsworth, J. M., Boydell, A. N. & Shilts, W. W. 1986a: Surficial geology, Gibson Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 1-1984 (CGM 246)*.

Aylsworth, J. M., Boydell, A. N. & Shilts, W. W. 1986b: Surficial geology, Chesterfield Inlet, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 1-1985 (CGM 247)*.

Aylsworth, J. M., Cunningham, C. M., Kettles, I. M. & Shilts, W. W. 1986c: Surficial Geology, Henik Lakes, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 2-1985 (CGM 238)*.

Aylsworth, J. M. & Clarke, M. D. 1989a: Surficial geology, Tebesjuak Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 35-1989 (CGM 134)*.

Aylsworth, J. M. & Clarke, M. D. 1989b: Surficial geology, Tulemalu Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 37-1989 (CGM 325)*.

Aylsworth, J. M. & Clarke, M. D. 1989c: Surficial geology, Thirty Mile Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 39-1989 (CGM 326)*.

Aylsworth, J. M., Cunningham, C. M. & Shilts, W. W. 1990a: Surficial geology, Schultz Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 43-1989 (CGM 324)*.

Aylsworth, J. M., Cunningham, C. M. & Shilts, W. W. 1990b: Surficial geology, Edehon Lake, District of Keewatin, Northwest Territories. *Geological Survey of Canada, Preliminary Map 10-1990 (CGM 243)*.

Campbell, J. E., Little, E. C., Utting, D. J. & McMartin, I. 2013a: Surficial geology, Nanuraqtalik Lake, Nunavut. *Geological Survey of Canada, Canadian Geoscience Map 60*.

Campbell, J. E., Little, E. C., Utting, D. J. & McMartin, I. 2013b: Surficial geology, Kinngalugjuaq Mountain, Nunavut. *Geological Survey of Canada, Canadian Geoscience Map 61*.

Campbell, J. E., Little, E. C., Utting, D. J. & McMartin, I. 2013c: Surficial geology, Atorquait River, Nunavut. *Geological Survey of Canada, Canadian Geoscience Map 62*.

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Table 4. Criteria used for generalizations of glacial features (see McMartin et al., 2020).

Feature	Scale 1:1 000 000		Scale 1:5 000 000		
	Minimum length (m)	Proximity (m)	Minimum length (m)	Proximity (m)	
Line symbol					
Streamlined landform	3000	-	-	-	
Major moraine ridge	1200	-	1500	200	
Subglacial meltwater corridor	3000	-	-	-	
Lateral meltwater channel	1000	500	-	-	
Ice-flow direction	-	-	-	-	
Crag-and-tail landform	3000	-	-	-	
Marine limit	1000	500	1000	500	
Esker ridge	-	-	-	-	
Ice front retreat position	-	-	-	-	
Point symbol					
	(priority)				
Striation	(1)	-	3000 (<20°)	-	10 000 (<20°)
Crag-and-tail	(2)	-	2000	-	5000
<3000 m					
Streamlined landform	(3)	-	2000	-	5000
<3000 m					
Roche moutonnée	(4)	-	3000 (<20°)	-	10 000 (<20°)

Table 5. Map Unit Legend (ref labels in Field station features)

O	Organic deposits
E	Eolian sediments
A	Alluvial sediments
B	Boulders
L	Lacustrine sediments
M	Undifferentiated marine sediments
Md	Marine deltaic sediments
Mn	Marine littoral and nearshore sediments
Mr	Marine beach sediments
Mt	Marine terraced sediments
Mv	Marine sediment veneer
Mb	Marine sediment blanket
GM	Glaciomarine sediments
GL	Undifferentiated glaciolacustrine sediments
GLd	Glaciolacustrine deltaic sediments
GLr	Glaciolacustrine beach sediments
GLv	Glaciolacustrine sediment veneer
GLb	Glaciolacustrine sediment blanket
GF	Undifferentiated glaciofluvial sediments
GFc	Glaciofluvial ice-contact sediments
GFp	Glaciofluvial outwash plain sediments
GFf	Glaciofluvial outwash fan sediments
GFh	Glaciofluvial hummocky sediments
GFt	Glaciofluvial terraced sediments
GFv	Glaciofluvial sediment veneer
T	Undifferentiated glacial sediments
Th	Hummocky till
Tm	Moraine complex
Tp	Till plain
Tr	Ribbed moraine
Tx	Weathered till
Tv	Till veneer
Tb	Till blanket
R	Bedrock
W	Weathered bedrock or regolith

Notes:

Stratigraphic relationship: where observed or can be confidently inferred, a map unit stratigraphic sequence is shown with a maximum of two map unit designators separated by a slash ("/") (e.g., Mr/R designates marine beach sediments overlying bedrock).

Complex units: where the surficial cover forms a complex and the map units are too small to be mapped individually, yet constitute a significant component of the total polygon, a dot (".") separates the first dominant map unit designator from the less abundant secondary unit (e.g., R.Tr designates an area of bedrock interspersed with ribbed moraine).

Prefix:

b: bouldery

e: eroded

r: reworked

w: winnowed