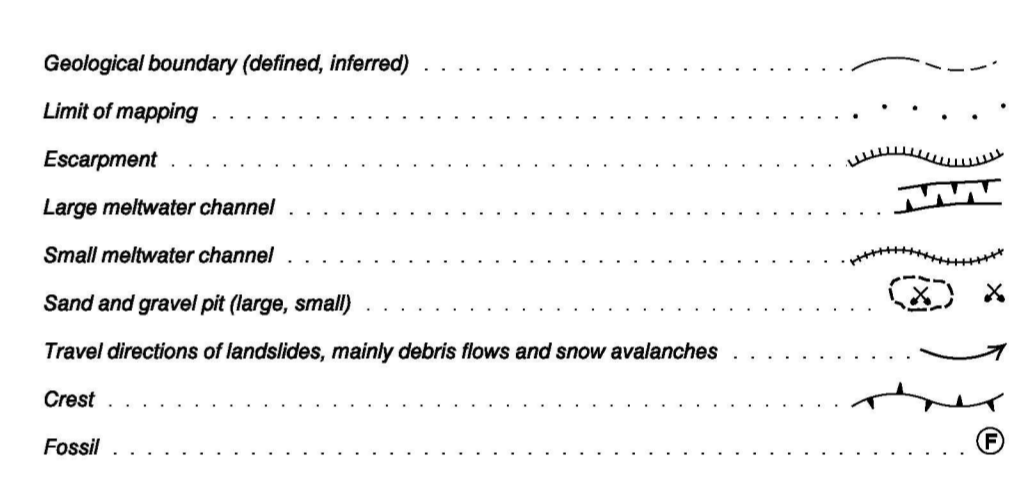


- LEGEND**
- SURFICIAL GEOLOGY QUATERNARY**
- Glacier:** A mass of ice formed from compacted snow in an area where snow accumulation exceeds melting and sublimation.
- POST-FRASER GLACIATION NONGLACIAL ENVIRONMENT**
- O:** ORGANIC DEPOSITS: peat and muck, 1 to 10 m thick (typically 2 to 3 m); forming fans and bogs; organic deposits too small to be shown at this scale occur within other units; common within abandoned meltwater channels.
 - Ap:** ALLUVIAL (FLUVIAL) DEPOSITS: gravel and sand with minor silt and clay, deposited by streams; commonly stratified; generally well sorted except in alluvial fans.
 - At:** Floodplain sediments: sand and silt, commonly including organic materials and pebbles; in many places, by gravel; 1 to 3 m thick; occurring as flat surfaces close to river level; prone to flooding.
 - AT:** Terrace sediments: stratified sand and gravel overlain by a veneer of sand and silt; 2 to 10 m thick; forming terraces well above floor level.
 - AF:** Fan sediments: poorly sorted sand and gravel, with diamict; generally 2 to 15 m thick; forming fans at the toe of slopes.
 - CD:** COLLUVIAL DEPOSITS: diamict and rubble deposited by various mass-wasting processes, ranging from slope wash to rock fall; composition dependent on source materials.
 - Cv:** Landslide debris: mostly unconsolidated sediments, with texture dependent on source materials; generally 1 to 10 m thick, but may exceed 10 m near the toe of large landslides; forming hummocky accumulations on lower slopes and valley floor. Where possible, landslides were identified by type: Ch-d, debris flow deposit; Ch-sa, debris avalanche; Ch-sl, debris slide; Ch-r, rock slide; Ch-rs, rock avalanche; Ch-sa, snow avalanche track.
 - Cs:** Slope colluvium: rock fragments in a matrix of boulders, gravel, sand, silt, and minor clay; 1 to 10 m thick; formed by bedrock weathering or reworking of unconsolidated deposits on steep (>40°) slopes; commonly gullied.
 - Ca:** Talus: rubble and block accumulations at the bottom of steep (>40°) slopes; 1 to 10 m thick; forming aprons and cones.
 - Cv:** Colluvial veneer: rock fragments in a matrix of boulders, gravel, sand, silt; usually <3 m thick; formed by bedrock weathering or reworking of unconsolidated deposits.
- FRASER GLACIATION (LATE WISCONSINAN) PROGLACIAL AND GLACIAL ENVIRONMENT**
- Gm:** GLACIOMARINE DEPOSITS: sand and gravel, well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally due to melt of glacier ice.
 - Gmh:** Glaciomarine ice-contact deposits: sand and gravel, stratified to massive and commonly faulted; generally >3 m thick; forming hummocky surfaces, may be faulted.
 - Grit:** Glaciomarine terrace sediments: sand and gravel, stratified to massive; 1 to 10 m thick; forming flat surfaces perched well above alluvial deposits or associated with meltwater channels; may be faulted.
 - Gmd:** Proglacial deltaic sediments: sand and gravel with minor silt and clay; on average 10 m thick, but can be >10 m; commonly overlie glaciomarine silt and clay; may form, in part, inclined surfaces. There is an inferred transition between the terrace and nearshore proglacial sediments.
 - Gmv:** Glaciomarine veneer: sand and gravel, well to poorly sorted, and commonly stratified; 1 to 3 m thick; deposited by glacial meltwater; bedding disrupted locally due to melt of associated glacier ice.
 - Gr:** GLACIOFLUVIAL DEPOSITS: sand and gravel, well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally following the melting of supporting ice.
 - Gf:** Ice-contact deposits: sand and gravel, stratified to massive and commonly faulted; generally >3 m thick; forming hummocky surfaces.
 - Gt:** Glaciofluvial terrace sediments: sand and gravel, stratified to massive; 1 to 10 m thick; forming flat surfaces perched well above alluvial deposits or associated with meltwater channels.
 - Gv:** Glaciofluvial veneer: sand and gravel, well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally following the melting of supporting ice; 1 to 3 m thick.
- GLACIAL ENVIRONMENT**
- Tt:** TILL: Poorly sorted diamict consisting of pebbles, cobbles, and boulders in a sandy to clayey matrix, directly deposited by glaciers; includes colluvium (reworked till) on steep slopes, and small units of glacioluvial sediments, especially in valley bottoms and near the mouths and banks of meltwater channels; till surface is commonly tilted on steep slopes.
 - Tb:** Till blanket: continuous till cover with few bedrock outcrops; 1 to 3 m thick on average; conforming to and may be locally obscuring morphology of underlying units.
 - Tv:** Till veneer: discontinuous till cover with abundant bedrock outcrops; 1 m thick on average; reflecting topography of underlying bedrock.
- PRE-QUATERNARY**
- R:** BEDROCK: sedimentary, low-grade metamorphic, volcanic, and intrusive rocks of Jurassic to Quaternary age, including, in places, till veneer, drift, and colluvium.



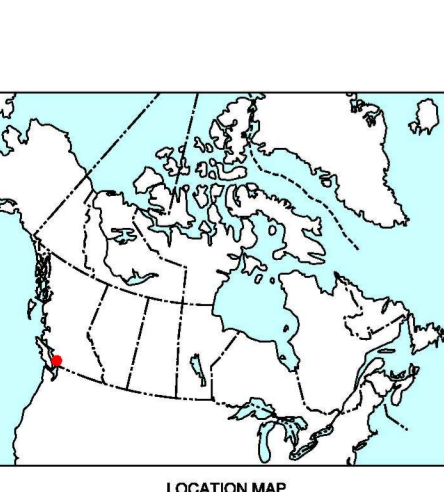
ACKNOWLEDGEMENTS

This mapping project was funded by Climate Change Action Fund A768A. The author wishes to thank R. Schwartz and P. Kertland of COAF for financial and managerial guidance of the project. The author is grateful to T. Millard and M. Gibson from BC Ministry of Forests and Range for providing digital TRIM data as well as helpful discussions. J. Clague, O. Hurng, and F. Baumann provided invaluable critical reviews. K. Steinhilber, S. Denney, M. Triss, C. Holden, N. Jordan, F. Baumann, M. Baumway, R. Hermann, C. Jernyn, and B. Strick provided field and/or technical assistance. R. Fourie, M. Brown, F. O'Neil, and S. Paraskevas gave GIS assistance for parts of the map area. M. Millard and N. O'Neil are thanked for their assistance in GIS and creating the final map product. Many thanks go to my GSC colleagues for helpful discussions and advice throughout the project.

REFERENCES

Cruden, D.M. and Varnes, D.J.
1966: Landslide types and processes. In Special Report 87, Landslide Investigation and Mitigation, A.K. Turner and R.L. Schuster (eds.) National Research Council, Transportation Research Board, Washington D.C., p. 36-75.

801,020	801,024	801,028	801,032	801,036	801,040
801,023	801,027	801,031	801,035	801,039	801,043
801,026	801,030	801,034	801,038	801,042	801,046
801,029	801,033	801,037	801,041	801,045	801,049
801,032	801,036	801,040	801,044	801,048	801,052
801,035	801,039	801,043	801,047	801,051	801,055
801,038	801,042	801,046	801,050	801,054	801,058
801,041	801,045	801,049	801,053	801,057	801,061
801,044	801,048	801,052	801,056	801,060	801,064
801,047	801,051	801,055	801,059	801,063	801,067
801,050	801,054	801,058	801,062	801,066	801,070
801,053	801,057	801,061	801,065	801,069	801,073
801,056	801,060	801,064	801,068	801,072	801,076
801,059	801,063	801,067	801,071	801,075	801,079
801,062	801,066	801,070	801,074	801,078	801,082
801,065	801,069	801,073	801,077	801,081	801,085
801,068	801,072	801,076	801,080	801,084	801,088
801,071	801,075	801,079	801,083	801,087	801,091
801,074	801,078	801,082	801,086	801,090	801,094
801,077	801,081	801,085	801,089	801,093	801,097
801,080	801,084	801,088	801,092	801,096	801,100
801,083	801,087	801,091	801,095	801,099	801,103
801,086	801,090	801,094	801,098	801,102	801,106
801,089	801,093	801,097	801,101	801,105	801,109
801,092	801,096	801,100	801,104	801,108	801,112
801,095	801,099	801,103	801,107	801,111	801,115
801,098	801,102	801,106	801,110	801,114	801,118
801,101	801,105	801,109	801,113	801,117	801,121
801,104	801,108	801,112	801,116	801,120	801,124
801,107	801,111	801,115	801,119	801,123	801,127
801,110	801,114	801,118	801,122	801,126	801,130



Author: A. Blais-Stevens
Geology by A. Blais-Stevens, 2004-2007
Compilation and interpretation was carried out using British Columbia 1:50,000 scale series 350004, at 1:175,000 scale.
Digital cartography by N. CM, Data Dissemination Division (DDD)
This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (STSD) Quality Management System, registered to the ISO 9001:2000 standard.

SURFICIAL GEOLOGY AND LANDSLIDE INVENTORY OF THE LOWER SEA TO SKY CORRIDOR BRITISH COLUMBIA

Scale 1:50 000/Échelle 1/50 000
Universal Transverse Mercator Projection
North American Datum 1983
Projection: transverse universelle de Mercator
Système de référence géodésique nord américain, 1983
© Her Majesty the Queen in Right of Canada 2008
© Sa Majesté la Reine en chef du Canada 2008

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada.
Digital base map from Terrain Resource Information (TRIM), modified by DDD.
Shaded relief image prepared by DDD, derived from the digital elevation model, based on TRIM contours elevation data
Illumination: azimuth 315°, altitude 45°, vertical factor 1x
Magnetic declination 2008, 18°2' E, decreasing 12.4' annually.
Elevations in metres above mean sea level
Contour interval 20 m

OPEN FILE DOSSIER PUBLIC
5322
GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA
2008

Open file number that have not gone through the normal publication process.
Les dossiers publics sont des produits qui n'ont pas encore subi le processus normal de publication de la GSC.

Recommended citation:
Blais-Stevens, A.
2008. Surficial geology and landslide inventory of the lower sea to sky corridor, British Columbia. Geological Survey of Canada, Open File 5322, scale 1:50 000.

