



- SURFICIAL GEOLOGY**
- QUATERNARY**
- Qd** Glacier: A mass of ice formed from compacted snow in an area where snow accumulation exceeds melting and ablation.
 - POST-FRASER GLACIATION**
 - NONGLACIAL ENVIRONMENT**
 - O** **ORGANIC DEPOSITS:** peat and muck; 1 to 10 m thick (typically 2 to 3 m); forming bogs and bays; organic deposits too small to be shown at this scale occur within other units, common within abandoned meander 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.
 - Af** **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 flood level.
 - Ad** **Deltaic sediments:** stratified sand and gravel underlain by silt and clay; generally 2 to 15 m thick; occurring at the mouths of streams entering lakes.
 - Af** **Fan sediments:** poorly sorted sand and gravel, with clastic; generally 2 to 15 m thick; forming fans at the toe of slopes.
 - COLLUVIAL DEPOSITS:** clastic and rubble deposited by various mass-wasting processes, ranging from slope wash to rock fall; composition dependent on source materials.
 - Ch** **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; in many places, by gravel; 1 to 3 m thick, occurring as flat surfaces close to river level; prone to flooding.
 - 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 (>30°) slopes; commonly gullied; Cs deposits can be adjacent to each other where contacts meet; these represent separate events.
 - Cc** **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 <1 m thick; formed by bedrock weathering or reworking of unconsolidated deposits.
 - FRASER GLACIATION (LATE WISCONSINIAN)**
 - PROGLACIAL AND GLACIAL ENVIRONMENT**
 - IG** **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.
 - IG** **Ice-contact deposits:** sand and gravel; stratified to massive and commonly bedded; generally 0.5 to 2 m thick; forming terraces, benches, and other glacial deposits.
 - IG** **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 meander channels.
 - IG** **Glaciofluvial blanket:** sand and gravel; stratified to massive; generally 1 to 10 m thick; sediment cover is continuous, but the underlying morphology is visible; commonly located near the mouth of meander channels.
 - IG** **Proglacial deltaic sediments:** sand and gravel with minor silt and clay; 0.5 to 10 m thick; commonly overlying glaciofluvial silt and clay; forming, in part, slightly inclined surfaces.
 - IG** **Glaciofluvial veneer:** sand and gravel; well to poorly sorted, and commonly stratified; deposited by glacial meltwater; bedding disrupted locally following melting of supporting ice; 1 to 3 m thick.
 - GLACIAL ENVIRONMENT**
 - IT** **Till blanket:** continuous or cover with few bedrock outcrops; 1 to 3 m thick on average; conforming to and may be locally obscuring morphology of underlying units.
 - IT** **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, alluvium, silt, and colluvium.
- Geological boundary (defined, inferred)**
- Limit of mapping**
- Equipment**
- Large meander channel**
- Small meander channel**
- Sand and gravel pit (large, small)**
- Travel directions of landslides, many debris flows and snow avalanches**
- Creek**

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REFERENCES

Chadwick, C.M. and Varney, C.J. 1966. Landslide types and processes. In Special Report 247. Landslide investigation and mitigation. A.H. Turner and F.L. Schuster (eds). National Research Council, Transportation Research Board, Washington, D.C., p. 36-75.

90.020	90.024	90.028	90.032	90.036	90.040
90.024	90.028	90.032	90.036	90.040	90.044
90.028	90.032	90.036	90.040	90.044	90.048
90.032	90.036	90.040	90.044	90.048	90.052
90.036	90.040	90.044	90.048	90.052	90.056
90.040	90.044	90.048	90.052	90.056	90.060
90.044	90.048	90.052	90.056	90.060	90.064
90.048	90.052	90.056	90.060	90.064	90.068
90.052	90.056	90.060	90.064	90.068	90.072
90.056	90.060	90.064	90.068	90.072	90.076
90.060	90.064	90.068	90.072	90.076	90.080
90.064	90.068	90.072	90.076	90.080	90.084
90.068	90.072	90.076	90.080	90.084	90.088
90.072	90.076	90.080	90.084	90.088	90.092
90.076	90.080	90.084	90.088	90.092	90.096
90.080	90.084	90.088	90.092	90.096	90.100
90.084	90.088	90.092	90.096	90.100	90.104
90.088	90.092	90.096	90.100	90.104	90.108
90.092	90.096	90.100	90.104	90.108	90.112
90.096	90.100	90.104	90.108	90.112	90.116
90.100	90.104	90.108	90.112	90.116	90.120

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Compilation and interpretation was carried out using British Columbia 1:50,000 colour aerial photography series 30C0294, at 1:15,000 scale.

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This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (STPS) Quality Management System, registered to the ISO 9001:2000 standard.

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

Scale 1:50 000 / Echelle 1:50 000

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 DDO

Shaded relief image prepared by DDO, derived from the digital elevation model based on 1000 contour elevation data. Illumination: azimuth 315°, altitude 45°, vertical factor 1x

Magnetic declination 2008, 18°10' E, decreasing 13.1' annually.

Elevations in metres above mean sea level. Contour interval 20 m

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 5324

Open File 5324 is available in both English and French. The map is available in both print and digital formats. For more information, contact the Geological Survey of Canada, Open File 5324, 1500-100 Avenue des Canadiens, Ottawa, Ontario K1A 0S8.

2008

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