

## LEGEND

### SURFICIAL GEOLOGY QUATERNARY



**Glacier:** A mass of ice formed from compacted snow in an area where snow accumulation exceeds melting and sublimation.

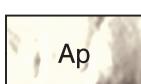
#### POST-FRASER GLACIATION

##### NONGLACIAL ENVIRONMENT



**ORGANIC DEPOSITS:** peat and muck; 1 to 10 m thick (typically 2 to 3 m); forming fens and bogs; organic deposits too small to be shown at this scale occur within other units; common within abandoned meltwater channels.

**ALLUVIAL (FLUVIAL) DEPOSITS:** gravel and sand with minor silt and clay, deposited by streams; commonly stratified; generally well sorted except in alluvial fans



**Floodplain sediments:** sand and silt, commonly including organic materials and underlain, in many places, by gravel; 1 to 3 m thick; occurring as flat surfaces close to river level; prone to flooding.



**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.



**Fan sediments:** poorly sorted sand and gravel, with diamicton; generally 2 to 15 m thick; forming fans at the toe of slopes.

**COLLUVIAL DEPOSITS:** diamicton and rubble deposited by various mass-wasting processes, ranging from slope wash to rock fall; composition dependent on source materials.



**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-df, debris flow deposit; Ch-da, debris avalanche; Ch-ds, debris slide; Ch-rs, rock slide; Ch-ra, rock avalanche; Ch-sa, snow avalanche track.



**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.



**Talus:** rubble and block accumulations at the bottom of steep (> 40°) slopes; 1 to 10 m thick; forming aprons and cones.



**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

**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.



**Glaciomarine ice-contact deposits:** sand and gravel, stratified to massive and commonly faulted; generally >3 m thick; forming hummocky surfaces, may be fossiliferous.



**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 fossiliferous. Contiguous terraces were numbered by increasing elevations, e.g., Gmt<sup>1</sup>, Gmt<sup>2</sup>.



**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, an inferred transition between the terrestrial and marine proglacial sediments.



**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.

**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.



**Ice-contact deposits:** sand and gravel, stratified to massive and commonly faulted; generally >3 m thick; forming hummocky surfaces.



**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.



**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

**TILL:** Poorly sorted diamicton 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 glaciofluvial sediments, especially in valley bottoms and near the mouths and banks of meltwater channels; till surface is commonly rilled on steep slopes.



**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.



**Till veneer:** discontinuous till cover with abundant bedrock outcrops; 1 m thick on average; reflecting topography of underlying bedrock.

#### PRE-QUATERNARY



**BEDROCK:** sedimentary, low-grade metamorphic, volcanic, and intrusive rocks of Jurassic to Quaternary age; including, in places, till veneer, drift, and colluvium.

Geological boundary (defined, inferred)	.....	
Limit of mapping	.....	
Escarpment	.....	
Large meltwater channel	.....	
Small meltwater channel	.....	
Sand and gravel pit (large, small)	.....	
Travel directions of landslides, mainly debris flows and snow avalanches	.....	
Crest	.....	
Fossil	.....	