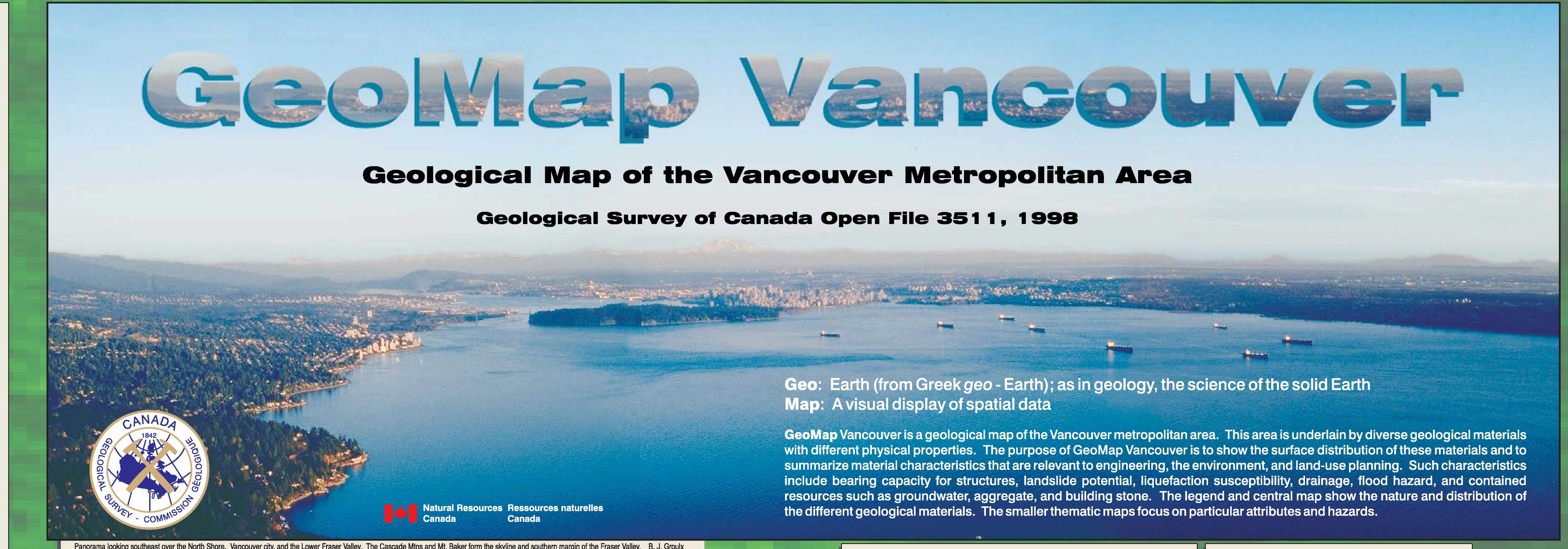
GeoMap Vancouver

Geological Map of the Vancouver Metropolitan Area

Geological Survey of Canada Open File 3511, 1998



Geo: Earth (from Greek *geo* - Earth); as in geology, the science of the solid Earth
Map: A visual display of spatial data

GeoMap Vancouver is a geological map of the Vancouver metropolitan area. This area is underlain by diverse geological materials with different physical properties. The purpose of GeoMap Vancouver is to show the surface distribution of these materials and to summarize material characteristics that are relevant to engineering, the environment, and land-use planning. Such characteristics include bearing capacity for structures, landslide potential, liquefaction susceptibility, drainage, flood hazard, and contained resources such as groundwater, aggregate, and building stone. The legend and central map show the nature and distribution of the different geological materials. The smaller thematic maps focus on particular attributes and hazards.

Natural Resources Canada / Ressources naturelles Canada

Panorama looking southeast over the North Shore, Vancouver city, and the Lower Fraser Valley. The Cascade Mtns and Mt. Baker form the skyline and southern margin of the Fraser Valley. B. J. Groulx

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GeoMap Vancouver is available from:
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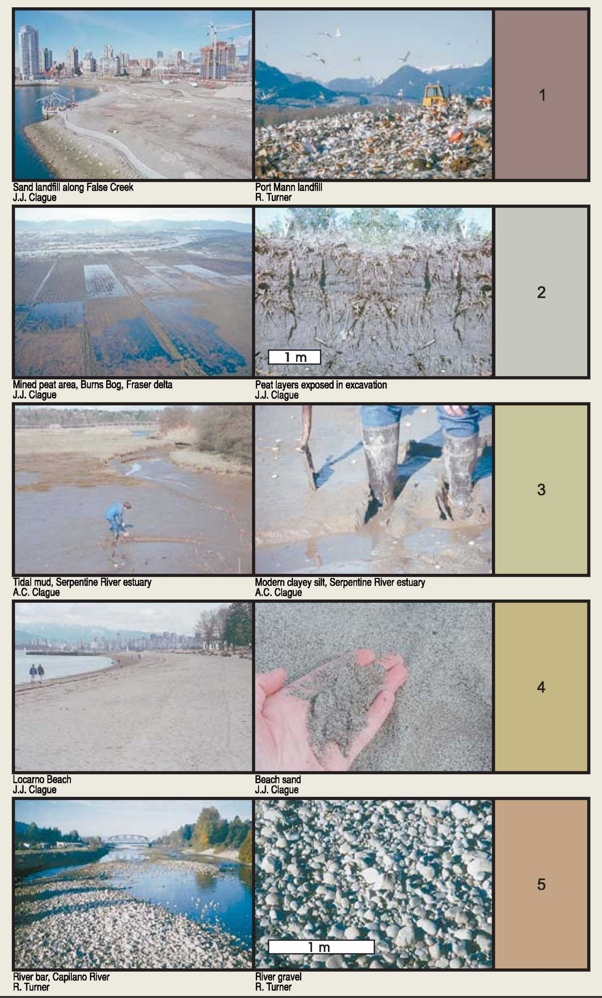
Modern Sediments in Lowlands



Landfill

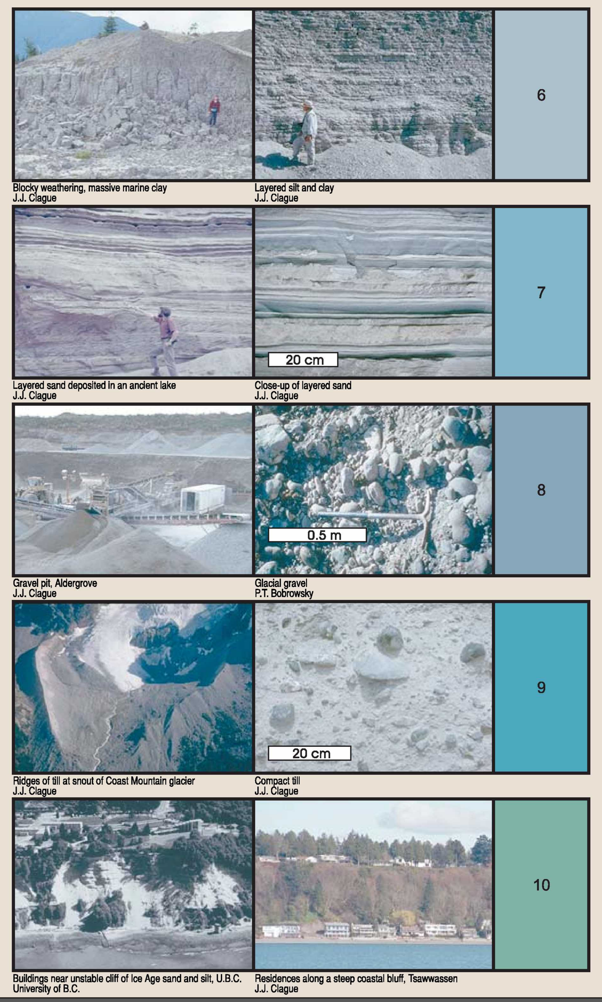
Peat

Silt and clay

Sand and silt

Gravel and sand

Ice Age Sediments in Uplands



Silt and clay

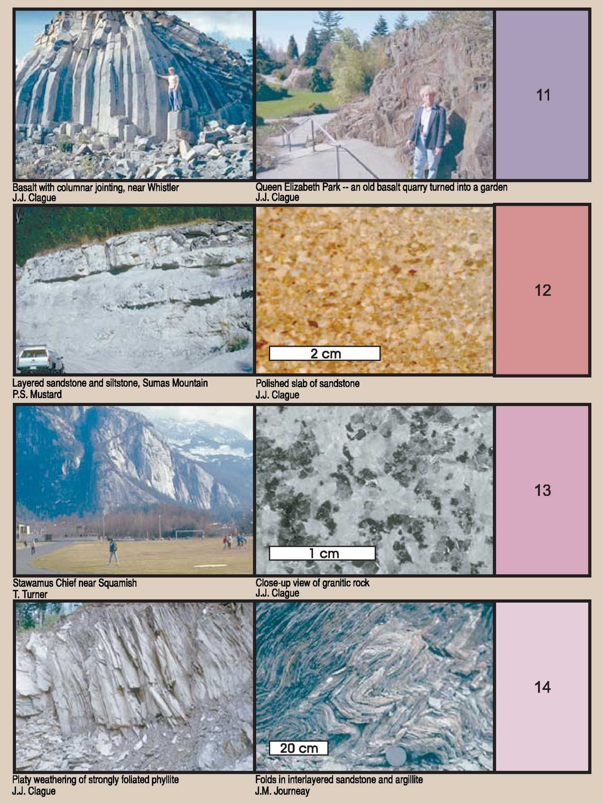
Sand

Gravel and sand

Till

Steepland sediments

Bedrock in Mountains



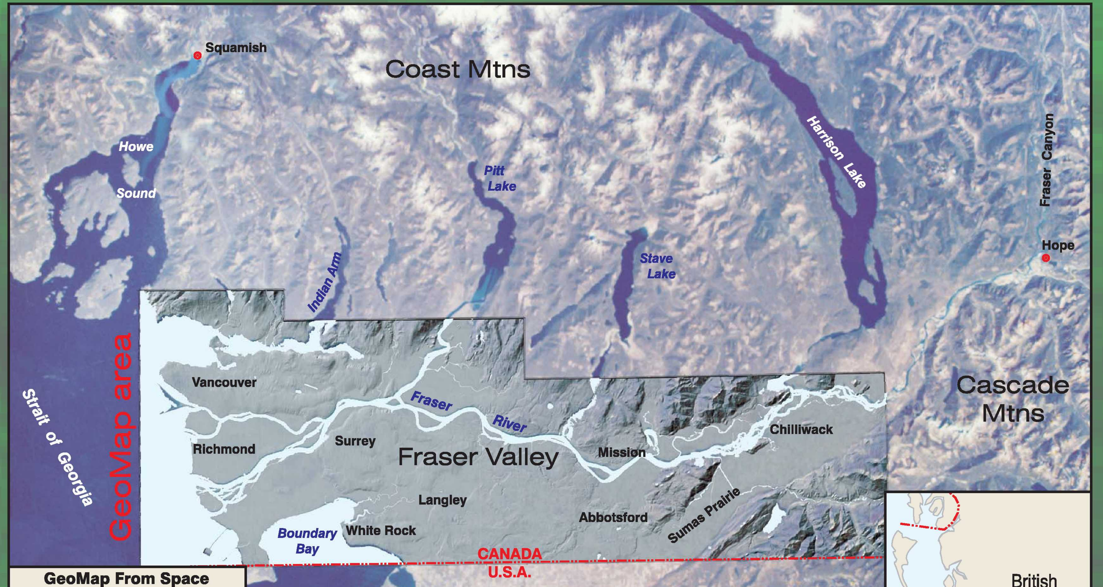
Volcanic rock

Sandstone

Granitic rock

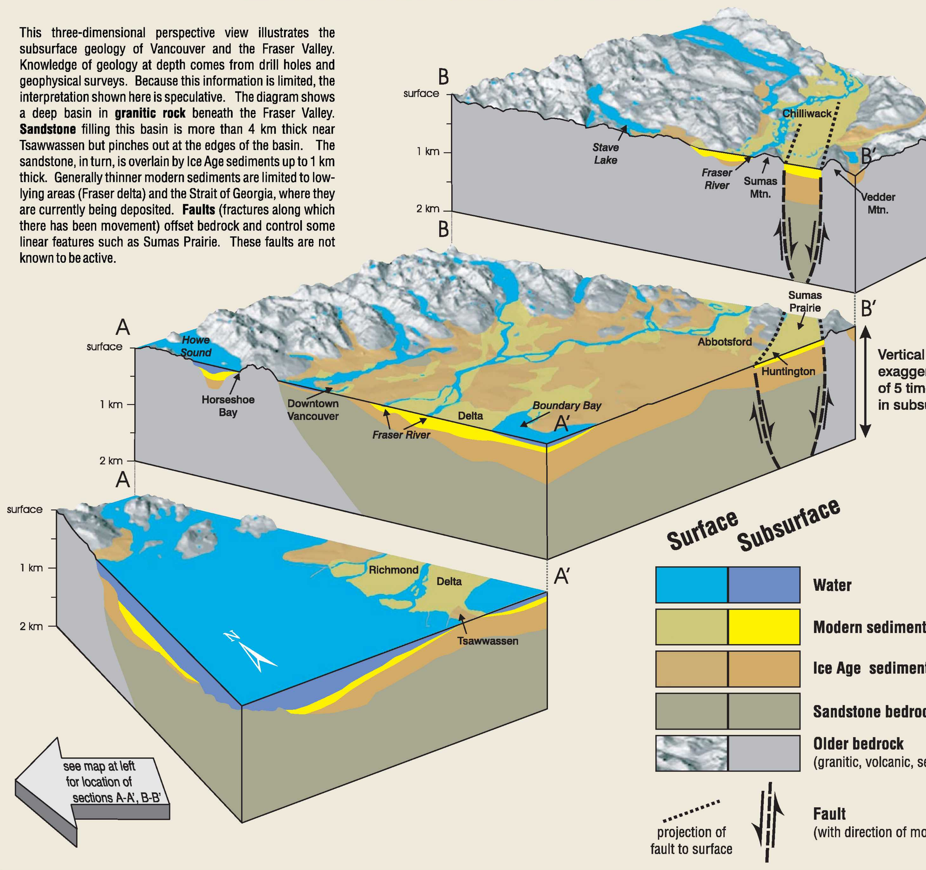
Foliated sedimentary and volcanic rock

GeoMap From Space

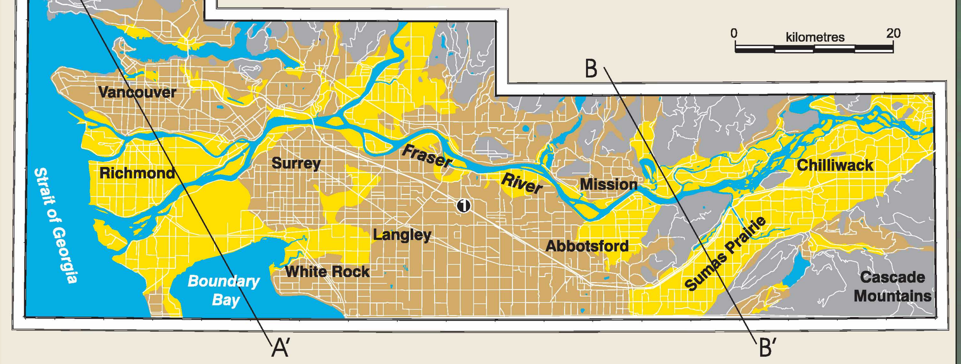


ADDITIONAL INFORMATION

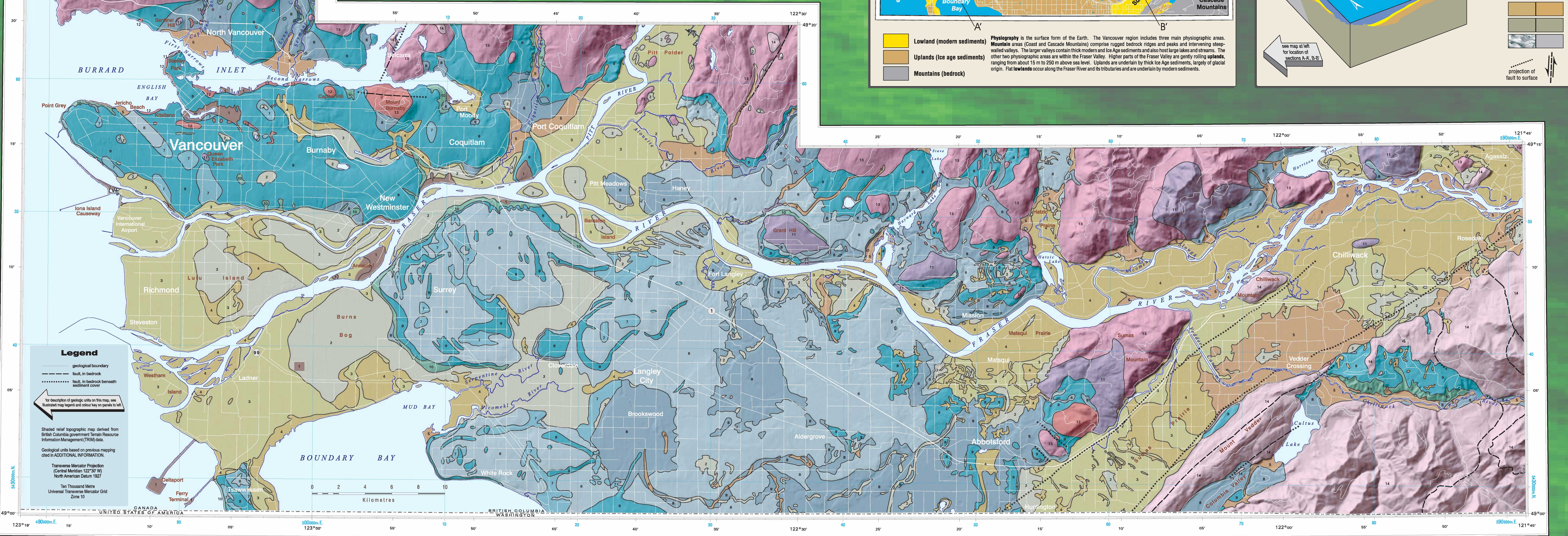
Beneath Vancouver



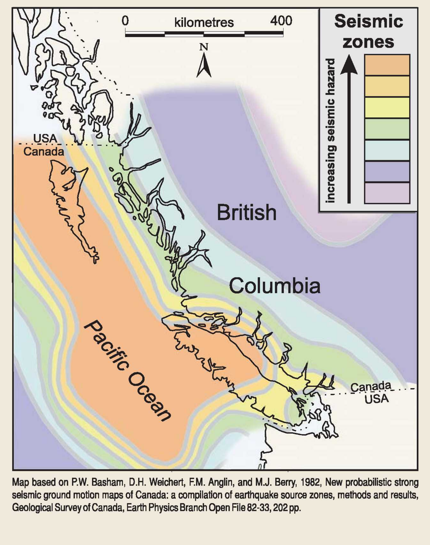
Physiography of GeoMap



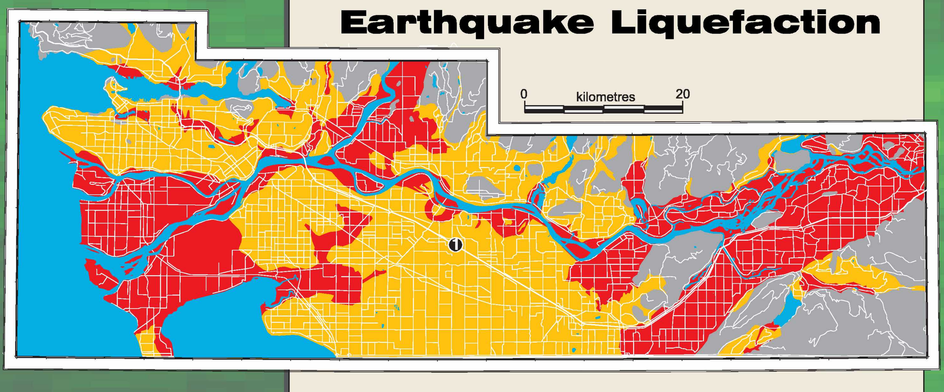
Lowlands (modern sediments)
Uplands (Ice age sediments)
Mountains (bedrock)



Earthquake Ground Motion

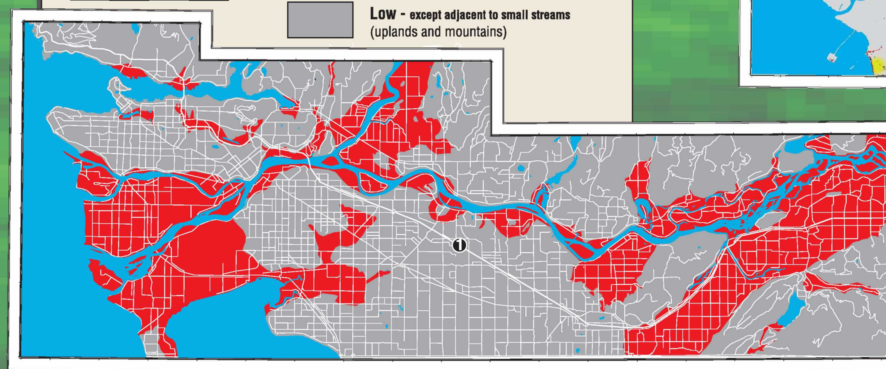


Earthquake Liquefaction



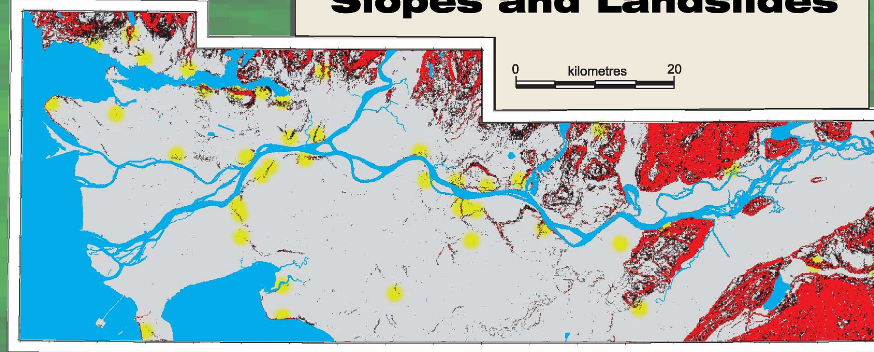
Moderate to High (modern lowland sediments)
Low (Ice Age upland sediments)
Nil (bedrock)

Flood Hazard



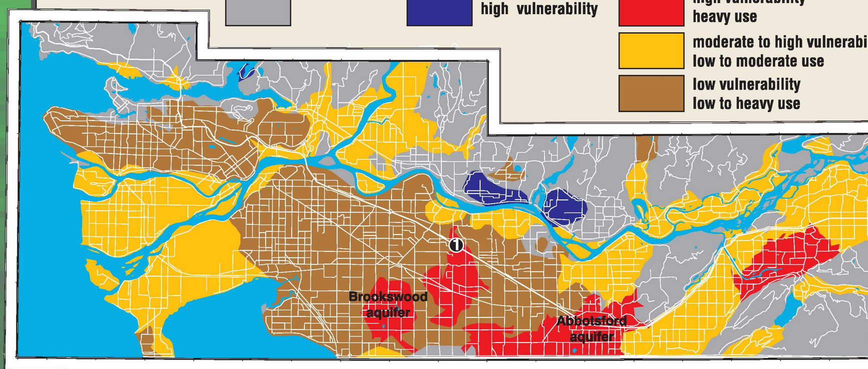
Moderate to High (modern lowland sediments)
Low – except adjacent to small streams (uplands and mountains)

Slopes and Landslides



Slope Angle
< 10°
10 - 20°
> 20°
landslide

Groundwater and Aquifers



Aquifers not assessed
Aquifers in Bedrock
high vulnerability
Aquifers in Sediment
high vulnerability, heavy use
moderate to high vulnerability, low to moderate use
low vulnerability, low to heavy use