appendix –

Bellarine Peninsula Geology

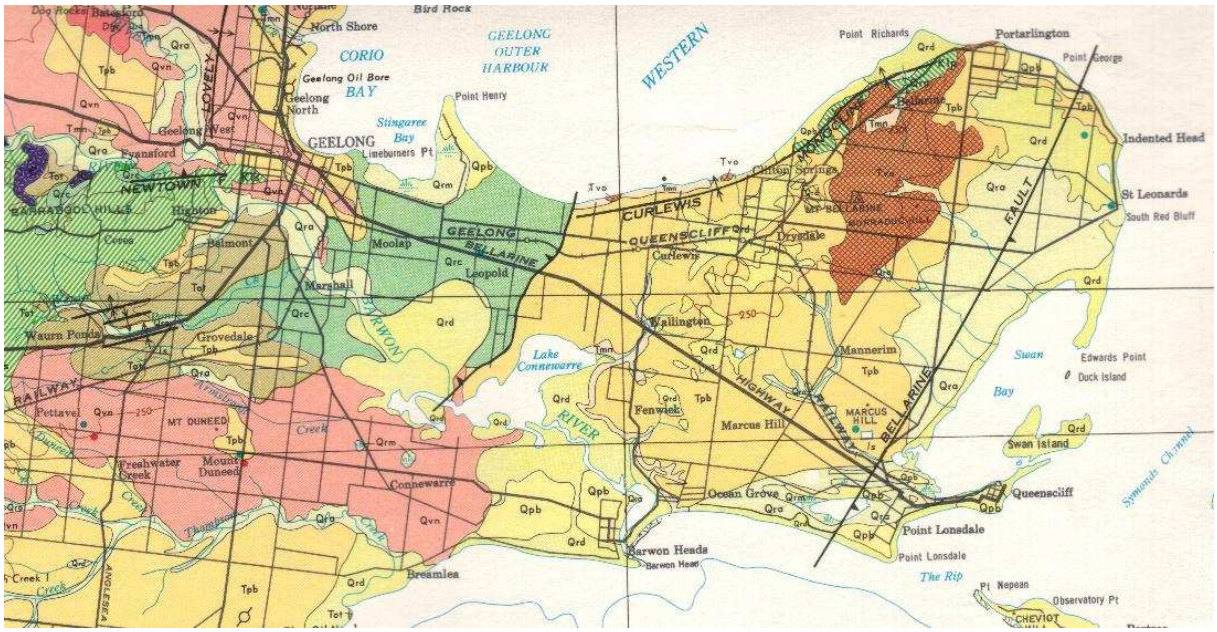
The geology underlying the landscapes of the Bellarine Peninsula is relatively recent being either Quaternary (< 21,000 years BP) or Tertiary (< 70,000 years BP) and comprises marine sedimentary deposits, continental deposits and basaltic materials. These characteristics have strongly influenced the areas ecology and land use capability. Three main physiographic units may be identified:

Tertiary sedimentary and older volcanic plain comprising the elevated central portion of the Peninsula extending east of Leopold, south to Ocean Grove, north east through Drysdale to Portarlington and east toward Queenscliff.

Post tertiary sedimentary plains south-east of Geelong including riparian areas of the Barwon River - Lake Connewarre and Reedy Lake, and coastal margins of Swan Bay, Queenscliff, Point Lonsdale and the coast west of Portarlington.

Newer volcanic plains east and west of Mt Duneed.

Sea level fluctuations and erosion has resulted in the deposition of alluvium, lacustrine and aeolian sediments, formation of swamps, deltas and the drowning of river valleys. The newer basalts are found in the higher parts south of the Barwon River east and west of Mt Duneed. Mt Bellarine (140m) and Murraduc Hill south of Portarlington are of older volcanic origin.



Source: Queenscliff SJ55-9 !:250,000 Geological Survey of Victoria 1971

LEGEND

Qra	Recent stream alluvium, sand, silt and clay
Qrm	Recent swamp, lagoon deposits, mangrove swamps, salt marsh, clay, silt peat, mud.
Qrc	Recent fan deposits, fault aprons, high level alluvium gravel and sand
Qrd	Recent dunes, aeolian siliceous sand sheets, raised beaches, and shell beds
Qvn	Newer Volcanics: basalt, limburgite, scoria and tuff.
Tpb	Tertiary sand, ferruginous sand, dune limestone, gravel, plant and marine fossils
Tvo	Older Volcanics: Tertiary olivine basalt, titanaugite basalt, pyroclastics