

ROUNDED HILLS AND GENTLY UNDULATING TERRAIN ON SILTY TERTIARY AND DEVONIAN SEDIMENTS

Land system: *Stewart (Sw) – Public land only.*

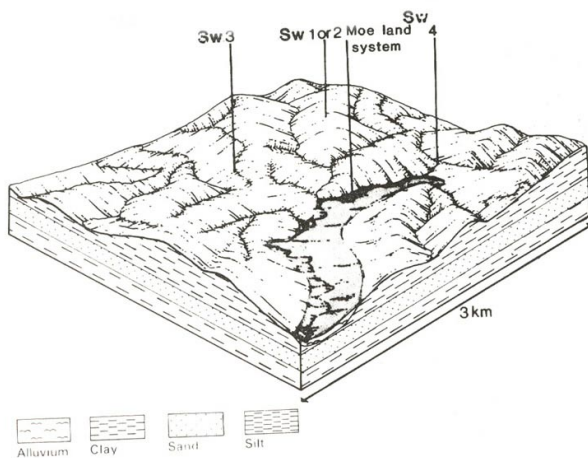
This land type consists of generally low rounded hills with moderate slopes and undulating terrain formed on extremely silty parent material in some areas of Tertiary and adjoining Devonian sediments (TG, DLO). Broad alluvial floors in concave valleys are fed by seepage from the hills and carry water all year round. These floors are therefore commonly swampy and have peaty surface materials.

This land occurs in the southern part of the catchment to the north east of Willow Grove, and also in areas east of both Mt Carmel and Tanjil South near the eastern catchment boundary.

The silty and clayey materials give rise to duplex and gradational soil profiles that are strongly leached and moderately to strongly acid. The most common profiles have dark greyish brown sand to silt loam topsoils changing abruptly or gradually to a mottled yellow brown or yellow, generally blocky structured clay subsoil. These are classified as Yellow Podzolics or Yellow Earths. The high silt content of the soils is reflected in their poor internal drainage, high subsoil dispersibility and depauperate woodland vegetative cover. These features render the soils particularly susceptible to erosion.

A diagnostic feature of these areas is the depauperate nature of the vegetation on most slopes. The vegetation is mainly woodland or open forest, with closed scrub or shrubby open forest on drainage floors. Tree species include yertchuk (*E. considiana*), silver-leaf stringy-bark (*E. cephalocarpa*) and (*Melaleuca ericifolia*).

Four components have been distinguished here on topographic and vegetation differences as follow: SW1, hill slopes with depauperate vegetation, SW2, hill slopes with normal vegetation, SW3, local drainage flats and SW4, major drainage tracts.



Stewart Land System & Components (Public land only)



High relief “ridge and ravine” terrain (Kirchubel land system)

Showing steep forested slopes of high elevation. La Trobe and Neerim land systems are in background.
Courtesy GRES.



Gently undulating terrain on silty sediments (Stewart land system)

Showing depauperate vegetation due to poor drainage. Courtesy GRES