## 2.6 PlA6 PLAINS – level, ALLUVIAL, type 6

An alluvial plain containing heavy grey calcareous clays lie between Bet Bet Creek and Emu Creek, south of Dunolly. The alluvial soils are heavier than those of surrounding valleys, and may be derived from basaltic sources. Interestingly, the grey clays conform to the trace of a buried basalt, and basaltic boulders are exposed in dam excavations and drainage depressions near Burkinshaws Swamp (Day 1985). This clayey plain is truncated at Green Hill where an arm of Ordovician bedrock had narrowed the valley. It is possible that swamp or lacustrine deposition upstream of this barrier has been responsible for the heavier-than-usual textures.

Geology Qs - Quaternary alluvium

Rainfall 500-550 mm per annum

Slope Average 0%; range 0-1%

Dominant landform element Plain

Minor landform elements Swamp

**Soils** Dominant: Ug5.2. Grey calcareous clay soils are most common, usually deep well structured and often with carbonate nodules in the subsoil; a dark-grey loam topsoil may overlie the clay in some areas

Minor: Dr2, Dy3. N Reddish-brown to yellowish-brown duplex soils in slightly better-drained areas

Native vegetation Isolated specimens of *E. microcarpa*, and *E.camaldulensis* in the wetter areas, remain

Stone-rock outcrop Nil

Pans Nil or not observed

Land use Predominantly grazing on improved pastures, with some cereal-cropping

**Observed land deterioration** Salting observed near Green Hill, just north of Timor West

Susceptibility to land deterioration Inundation (moderate) Salting (moderate) Gully erosion and streambank erosion (low to moderate)



These level plains, characterized by grey cracking clay soils, occur to the east of the Black Ranges (background).

