453131

RETREAT

Low hills trending north-north-west have formed on sandstone and mudstone deposits in the north and east of the Region. These sandstone and mudstone deposits are commonly referred to as the Mathinna Beds. The largest area is between Lefroy and the Brid River, stretching from the coast southwards to Lower Turners Marsh and Nabowla. Another large area stretches from St Helens southwards to German Town. Smaller occurrences are found to the north of Branxholm, around Mt Horror and to the north-east and east of Gladstone.

A characteristic of this system is the sandy soils which are loose and ' snuffy ' when dry, but soft and boggy when wet. A coarse structured gradational soil has developed on the sharp crests and upper slopes. The stony mottled duplex soil on the mid slopes has an iron-organic B horizon. The mottled gradational soil on the lower slopes and swales is often poorly drained.

Stringy gum, stringybark and black peppermint are the main components of the open-forests in this system.

By far the greatest land use is that of forestry. Large areas are used for both hardwood and softwood production. This land system accounts for approximately half the total number of pine plantations found in Region 4. Considerable areas have not been developed but serve as zones of nature conservation. Other areas, especially between Lefroy and Brid River, have been cleared and sown to improved pasture for grazing. Pasture establishment is generally difficult on these soils because of their low natural fertility.

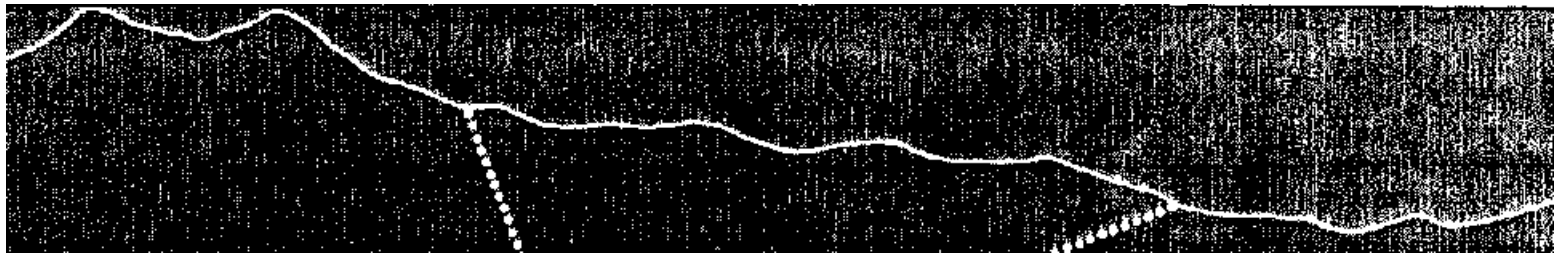
The sandy soils are prone to severe sheet, gully and rill erosion. In many areas throughout the system, the soil surface has been completely removed from the upper components by erosion, with subsequent siltation of drainage lines.

Pine plantation.

LAND SYSTEM

453131

Retreat



COMPONENT	1	2	3
PROPORTION %	30	45	25
CLIMATE	Average Annual Rainfall 750-1 000 mm		
GEOLOGY	Lower Devonian— Tremadocian— Cambrian (Mathinna Beds) sandstone— mudstone sequence		
TOPOGRAPHY			
Land form		Low hills trending N.N.W.	
Position	Sharp crests and upper slopes	Mid slopes	Lower slopes and swales
Average Sideslope °	20	9	3
NATIVE VEGETATION Structure	Open-	forest	Tall open-forest
Association	Stringy gum, black peppermint, silver wattle, bracken fern	Stringybark, black peppermint, sunshine wattle, silver wattle	Black peppermint, Stringybark, white gum, woolly tea-tree, sunshine wattle
SOIL	Yellowish red (5 YR 5/8) gradational soil, coarse structure	Stony mottled yellowish brown (10 YR 5/8) grey (10 YR 6/1) duplex soil, iron-organic B horizon	Mottled grey (10 YR 6/1) yellowish brown (10 YR 5/8) gradational soil
Surface Texture	Sandy clay loam	Gravelly clay loam	Sandy clay loam
Permeability	Moderate		Low
Average Depth m	1.0	1.5	1.8
PRESENT LAND USE	Forestry (hardwood and softwood) nature conservation, grazing		
HAZARDS	Severe sheet and gully erosion and rilling		