393121

SOUTH ESK RIVER

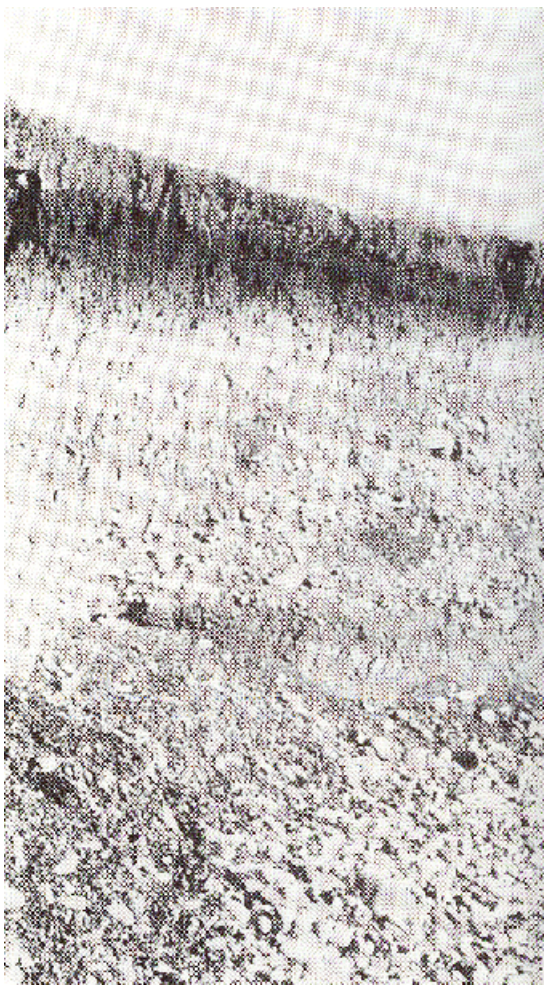
Undulating plains comprising Quaternary siliceous sands and clays occur along the major river systems in the Region. The major occurrence comprises the river terraces and floodplains of the South Esk River, stretching from Hadspen to the confluence with the Break O'Day River near Fingal. Between Evandale and Epping Forest the system is up to ten kilometres in width. Other areas are found along the Macquarie and Lake Rivers and Brumbys Creek between Longford and Poatina and to the west of Cressy. Further west are smaller areas associated with the Meander and Liffey Rivers and the Whitemore Creek. The system has an average elevation of about 160 metres and local relief is only a little over 20 metres.

All soils in the system are about two metres in depth. Red mottlings are evident towards the base of the soil profiles on component 1. A narrow intermediate terrace (component 2) sometimes appears below component 1, this being recognisable by its dark yellowish brown duplex soil. Dolerite gravels are found scattered throughout the soil profile on this component, with red and grey mottlings evident at depth. Lime concretions are evident in some profiles on the floodplains. Small lagoons, too small to map separately, have been included in this system. Locally derived windblown yellow sands are associated with these scattered small lagoons. Soils found in this system have been previously described by Nicolls (1958).

The open-forest on the higher of the two river terraces is dominated by white gum, swamp gum and black peppermint. When present, the intermediate terrace carries an open forest dominated by cabbage gum, swamp gum and silver wattle. A woodland vegetation of paperbark, blackwood, rushes and tussock grass was found on the floodplains.

The major land uses are cropping and grazing. The main crops grown are cereals. Wool, prime lamb and cattle production are the main livestock enterprises.

Streambank erosion, waterlogging, flooding and associated sheet erosion are the major hazards associated with the soils on the floodplains.



Shallow black clay soil over waterworn pebbles on the present floodplains of the Nile River.

LAND SYSTEM

393121

South Esk River

COMPONENT	1	2	3
PROPORTION %	50	10	40
CLIMATE	Average Annual Rainfall 625-750 mm		
GEOLOGY	Quaternary sands and clays		
TOPOGRAPHY			
Land form		Undulating plains	
Position	River terraces		Present floodplains
Average Side slope °	3	2	1
NATIVE VEGETATION			
Structure	Open-forest		Woodland
Association	White gum, swamp gum, black peppermint, silver wattle, bracken fern	Cabbage gum, swamp gum, silver wattle	Paperbark, blackwood, rushes, tussock grass
SOIL	Mottled yellowish brown (10 YR 5/8) grey (10 YR 6/1) duplex soil	Dark yellowish brown (10 YR 4/4) duplex soil	Black (5 YR 2.5/1) clay soil, uniform texture
Surface Texture	Sandy loam		Light clay
Permeability	Moderate		Low
Average Depth m	1.8	1.7	>2.0
PRESENT LAND USE	Grazing, cropping		
HAZARDS	Moderate gully and streambank erosion, flooding and waterlogging		