Land Unit Maps - 10

The alpha numeric coding for the Land Units is presented in the two keys shown below. The alpha code is grouped by way of eight Land Zones which follow the Australian Soil and Land Survey Handbook (McDonald et al, 1984).

The numeric soil code is linked to broad geology and soil types.

All maps are coloured so as units can be easily associated with the Land Zone types. This presentation allows for a two step land-form delineation from the broad generalised map shown below (Figure 13.1). This has been done to allow the regional planner a more practical use of the data.

By way of example if a unit is coded Sm2 it has been perceived to be a distinct moderate slope with a gradient of 10%-32% and with a Geology/Soil association number 2. If its colouring is a dark brown it has also been viewed as being an integral part of a broader Escarpment unit but large enough to be separately delineated at the 1:100 000 scale.

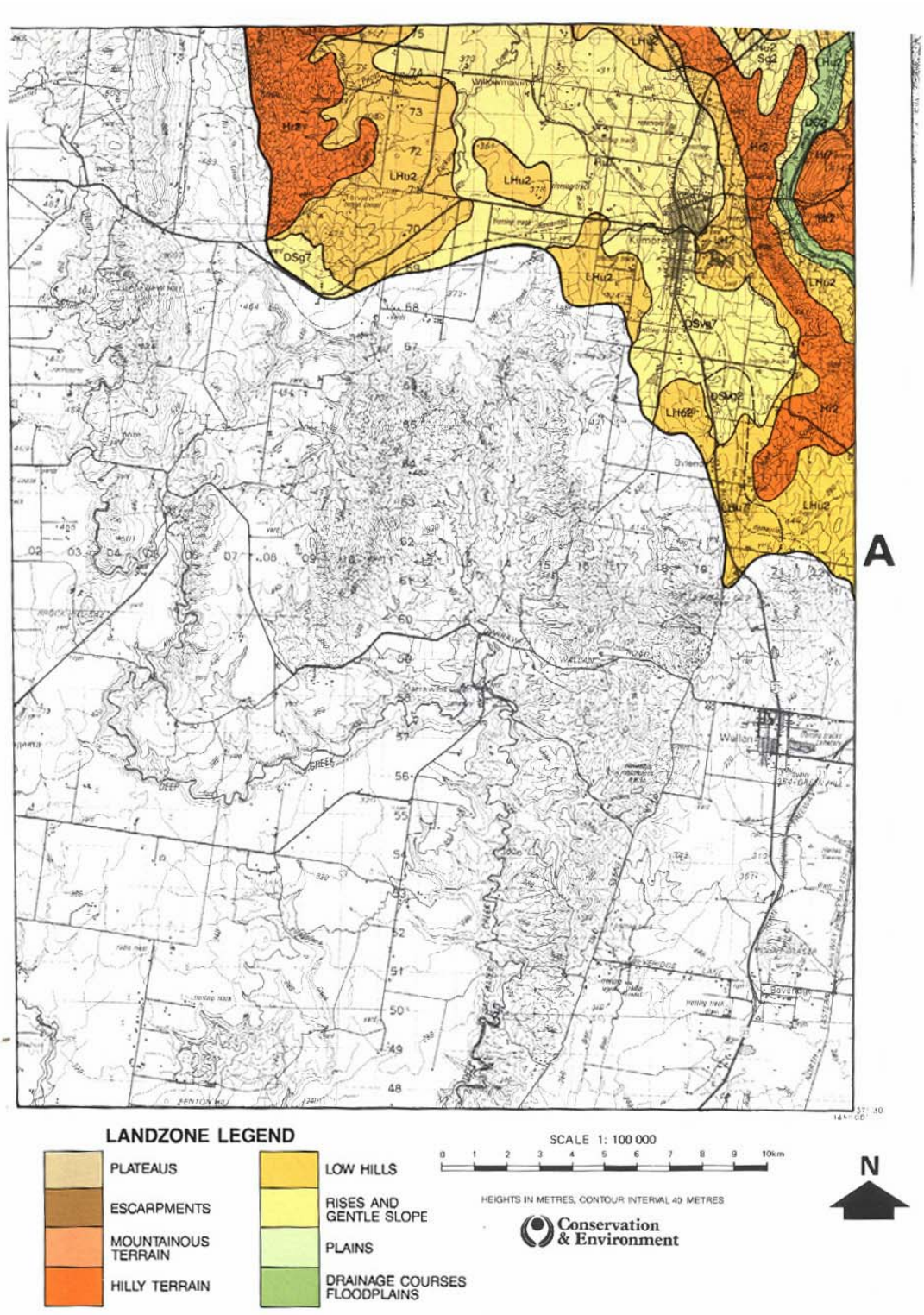
The study area is subdivided into twelve areas and is presented on ten separate map sheets. The base maps used are the standard 1:100 000 topographic sheets (as originally supplied by the Royal Australian Survey Corps.). The base details contour, road, drainage and town names. The key to the maps used is shown below in Figure 13.1. Within maps 6A and 6B the broken boundary line indicates where the boundary no longer follows the catchment. Broken map unit lines indicate more uncertain geological divisions.

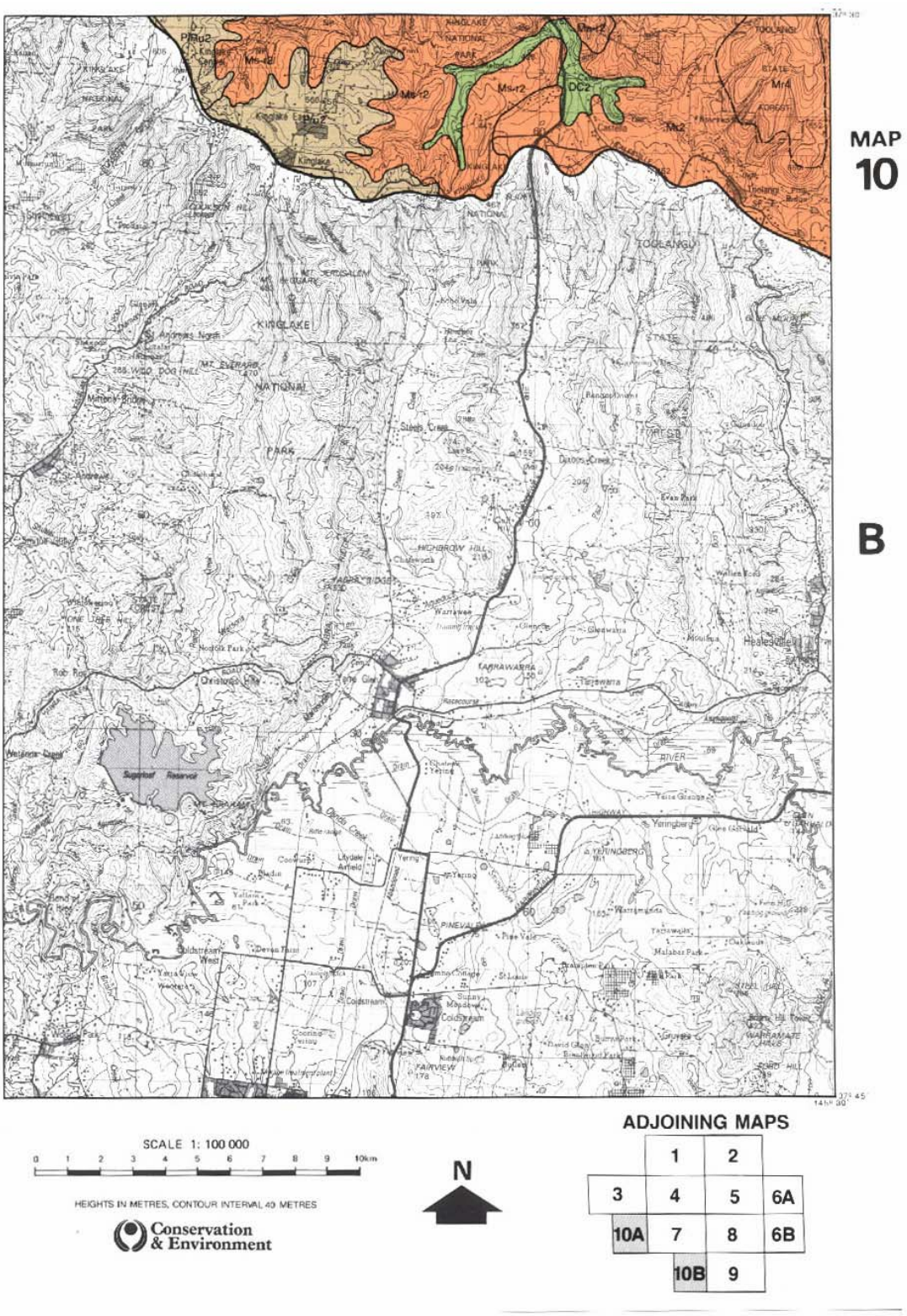
Landzones And Associated Units Key

LANDZONES	ASSOCIATED MAP UNIT DESCRIPTIONS	SLOPE %	CODE
Plateaux	Plateau of rolling hills	10 – 32	P/Hr
	Plateau of undulating hills	3 – 10	P/Hu
	Plateau with moderate drainage slopes	10 – 32	P/HSm
	Plateau of rolling to undulating low hills	3 – 32	P/LHr-u
	Plateau of undulating low hills	3 – 10	P/Lhu
	Plateau of undulating rises	3 – 10	P/Ru
	Undulating plateaux	3 – 10	P/u
	Plateau with gentle drainage slopes	3 – 10	P/DSg
Escarpments	Steep escarpment	32 – 56	Es
	Moderate escarpment	10 – 32	Em
	Moderate slopes	10 – 32	Sm
	Steep hills	32 - 56	Hs
	Rolling hills	10 – 32	Hr
	Steep to rolling hills	10 – 56	Hs-r
Mountainous terrain	Very steep mountains	> 56	Mvs
	Steep mountains	32 – 56	Ms
	Steep to rolling mountains	10 – 56	Ms-r
	Rolling mountains	10 – 32	Mr
	Moderate drainage slopes	10 – 32	DSm
	Moderate slopes	10 – 32	Sm
Hilly terrain	Steep hills	32 – 56	Hs
	Steep to rolling hills	10 – 56	Hs-r
	Rolling hills	10 – 32	Hr
	Undulating hills	3 – 10	Hu
	Moderate slopes	10 – 32	Sm
Low hills	Rolling low hills	10 – 32	LHr
	Undulating low hills	3 – 10	Lhu
	Low hill	3 – 32	LH
Rises and gentle slopes	Crest	1 – 3	C
	Undulating rises	3 – 10	Ru
	Rises	3 – 10	R
	Gentle drainage slopes	3 – 10	DSg
	Gentle slopes	3 – 10	Sg
Plains	Very gentle drainage slopes	1 – 3	DSvg
	Very gentle slopes	1 – 3	Svg
	Undulating plain	3 – 10	Pu
Floodplains and drainage courses	Alluvial plain	< 1	AP
	Level plain	< 1	PI
	Floodplain	< 1	FP
	Drainage course	< 1	DC

Soil Geology Association Key

SOIL NO.	GEOLOGY	BRIEF SOIL DESCRIPTION
1	Cambrian shales and ash (E).	Moderately deep to deep well structured friable generally whole coloured duplexes (Dr 4, Dr 5).
2	Silurian and Devonian marine and minor non-marine sediments of sandstone, siltstone claystone, greywacke-conglomerate and minor calcareous siltstone lithology. (S-D)	Soils are a complex of uniform fine textured clays and gradational soils which incorporate large percentages of broken rock and gravel in their subsoil. They are typified by a bleached, dry hard, erosion resistant, A2 horizon. Depths are variable and dependent upon topographic position.
3	Middle Devonian igneous extrusions of biotite Rhyodacite. Some Rhyolite grades on fringe areas. Minor basalt areas and shalestone conglomerates occur. (Dc)	Deep friable brown to reddish brown to dark red whole coloured, gradational, well structured rough ped earths. (Gn 4).
4	Middle to Upper Devonian igneous intrusions of fine to medium grained granodiorite and granite. Minor biotite dykes occur. (Dg)	Three principle soil types: (i) deep, red, well structured, very friable uniformly fine textured to gradational profiles; (ii) deep stoney, gravelly and sandy apedal pale brown sometimes mottled gradationals. (iii) moderately deep to shallow, pale brown to yellow, very gravelly duplex and gradational earths.
5	Lower Carboniferous non-marine sedimentary deposits of conglomerate, pebbly sandstones, siltstones and mudstones. (Cl)	Deep, uniformly fine textured clays which have a mottled subsoil and often exhibit a hardsetting A2 horizon in upland areas.
6	Miocene to Pliocene Tertiary alluvium incorporating gravels, sand, and minor clays with some laterised non-marine quartzose sand. (Tp)	Moderately deep to deep yellowish red to strong brown apedal massive, very gravelly gradational earths. Some areas of lag gravels exist.
7	Quaternary igneous extrusions of olivine basalt, minor tuff and integrated sand. (Qv)	Shallow to deep uniformly heavy textured clays which fall into three groups. Soils with (i) greyish brown subsoils; (ii) reddish brown subsoils; (iii) black subsoils.
8	Quaternary alluvial sediments comprising clay, silt, sand and gravel with numerous levee sequences. (Qs)	Deep, uniformly fine textured gradational brown structured earths and complexes of polygenetic soils.
9	Recent Quaternary non-marine alluvium with illsorted gravels sands and silts. (Qc)	A complex of polygenetic soils which are essentially deep non-cracking, uniform massive fine textured profiles. Many sand and gravel areas.


A
LANDZONE LEGEND
PLATEAUS
ESCARPMENTS
MOUNTAINOUS TERRAIN
HILLY TERRAIN
LOW HILLS
RISES AND GENTLE SLOPE
PLAINS
DRAINAGE COURSES FLOODPLAINS
SCALE 1: 100 000
0 1 2 3 4 5 6 7 8 9 10km
HEIGHTS IN METRES, CONTOUR INTERVAL 40 METRES
Conservation & Environment
N


MAP
10
B
SCALE 1: 100 000
0 1 2 3 4 5 6 7 8 9 10km
HEIGHTS IN METRES, CONTOUR INTERVAL 40 METRES
Conservation & Environment
N
ADJOINING MAPS
1 2
3 4 5 6A
10A 7 8 6B
10B 9

B