6.5 Djerriwarrh Land System

This land system occupies 29.3 km² or 1.1% of the survey area.

The soil is predominantly a red calcareous sodic duplex soil, often with buckshot at the base of the A horizon. Along depression lines the soil is very similar, but darker. The surface soil often contains fragments of quarts which suggests there has been some fluvial influence.

Trees, particularly River Red Gum and Casaurinas are common in this land system although the climate is similar to that of the other land systems on basalt which are naturally treeless. This suggests that the light textu^red topsoil may be important in allowing the establishment of trees.





Schematic Block Diagram



Drainage Pattern

| | 1 | 2 |
|-------------------------------------|---|---|
| Proportion % | 90 | 10 |
| CLIMATE | | |
| Rainfall (av.) | Annual: 480-530 mm (monthly range: October 50 mm – August 35 mm) | |
| Temperature (av.) | Annual: 14°C (monthly range: February 20°C – July 9°C) | |
| Seasonal growth limitations | Temperature: less than 10°C June – August | |
| | Precipitation: less than potential evapotranspiration October – April | |
| GEOLOGY | | |
| Age, rock | Pleistocene basalt | |
| TOPOGRAPHY | | |
| Landscape | Flat to gently undulating plain | |
| Elevation (range) m | 120-180 | |
| Local relief (av.) m | 2 | |
| Drainage pattern | Dendritic | |
| Drainage density km/km ² | 1.2 | |
| Land form | Slope | Drainage line |
| Slope (av.) %, slope shape | 2; Straight | 1; Concave |
| NATIVE VEGETATION | | |
| Structure | Open woodland | |
| Dominant species | E. camaldulensis, Casuarina stricta, C. luehmannii | |
| SOIL | | |
| Parent Material | In situ weathered rock | |
| | Alluvium | |
| Description | Red calcareous sodic duplex soils, coarse structure | Red calcareous sodic duplex soils, coarse structure |
| Factual Key | Dr 2.23 | Dr 2.12 |
| Surface Texture | Light clay | Clay |
| Permeability | Moderate | Low |
| Depth (av.) m | 1.5 | 2.0 |
| LAND USE | Cropping (cereal), occasional grazing | |
| SOIL DETERIORATION HAZARD | | |
| Critical land features | Hard setting surfaces | Seasonal high watertable, hard setting surfaces |
| Processes | Overland flow | Periodic waterlogging, overland flow |
| Forms | Sheet erosion | Surface compaction, sheet erosion |