

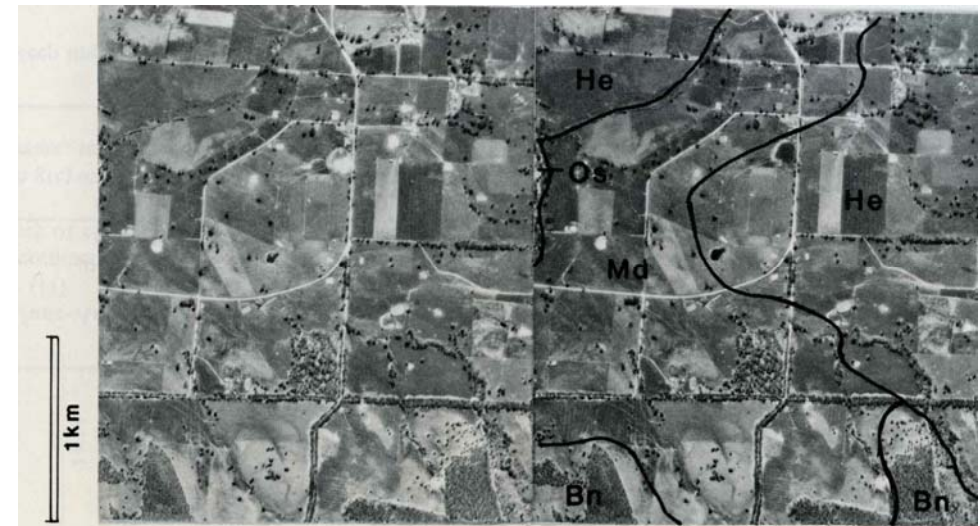
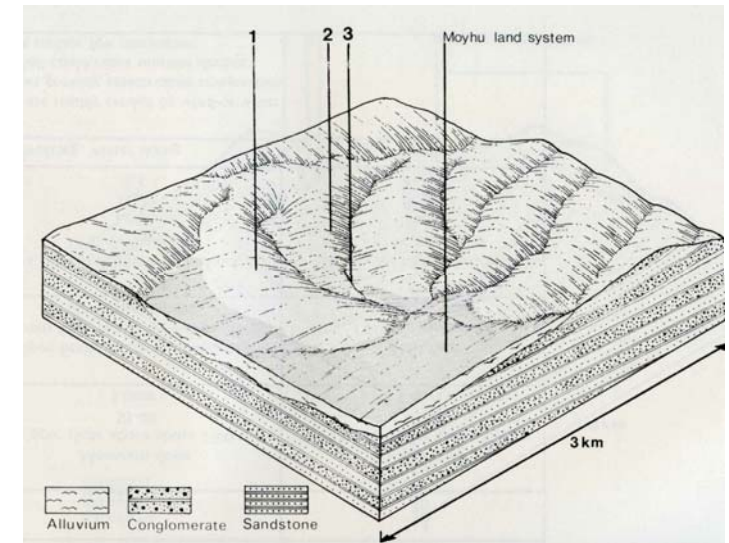
## 7.11 Hansonville land system

Although common to the north, this land system has only two relatively small extensions into the study area. It consists of low hills and associated gently sloping footslopes on Carboniferous sedimentary rocks. Annual rainfall is moderate; and summers are hot and winter cool.

The main soils are red duplex soils with smooth ped fabric, with some yellowish brown duplex soils. Weakly bleached reddish brown gradational soils occur on steeper slopes, and drainage lines have weakly bleached yellowish brown gradational soils.

While the native vegetation has been mostly cleared, its remnants indicate it was woodland of *Eucalyptus blakelyi* and *E. microcarpa*, with occasional *E. Albens*, *E. melliodora*, *E. bridgesiana* and *E. polyanthemos*.

The area is used for grazing. Hard-setting surface soils and relatively low rainfall are factors indicating a moderate erosion hazard. Compaction of surface soils or reduction of ground cover could result in excessive surface run-off and gully erosion of drainage lines.



**HANSONVILLE LAND SYSTEM** Area 11 sq km

|   |   |  |  |
|---|---|--|--|
| <b>CLIMATE</b><br>Rainfall, mean (mm)<br>Temperature, mean (°C)<br>Seasonal growth limitations  | Annual 700; lowest January (45), highest June (110)<br>Annual 14; lowest July (7.5), highest January (21)<br>Temperature – less than 10°C (av): June-August<br>Precipitation – months less than 50% frequency of effective rain: December-January |  |  |
| <b>GEOLOGY</b><br>Age, lithology  | Lower Carboniferous conglomerate, sandstone, siltstone, shale   |  |  |
| <b>PHYSIOGRAPHY</b><br>Landscape<br>Elevation range (m)<br>Relative relief (m)                  | Low hills<br>200 – 300<br>20  |  |  |
| <b>LAND COMPONENT</b><br>Percentage of land system  | 1<br>70   | 2<br>10  | 3<br>20  |
| <b>PHYSIOGRAPHY</b><br>Land form<br>Position on land form<br><br>Slope range (%)<br>Slope shape | Hill<br>Moderate, well-drained and upper slope<br>8-20<br>Convex  | Hill<br>Steep slope<br>20-25<br>Linear   | Hill<br>Lower, less steep slope and drainage line<br>5-8<br>Concave  |
| <b>NATIVE VEGETATION</b><br>Structure<br>Dominant species                                       | Woodland<br><i>E. blakelyi, E. microcarpa, E. Albens, E. melliodora, E. bridgesiana, E. polyanthemos</i>  |  |  |
| <b>SOIL</b><br>Parent material<br>Description<br>Surface texture<br>Permeability<br>Depth (m)   | <i>In situ</i> weathered rock, some colluvium of surface mantle<br>Red duplex soils with smooth ped fabric<br>Sandy loam<br>Moderate<br>1.0   | Colluvial mantle over weathered bedrock<br>Weakly bleached reddish brown gradational soils<br>Gravelly loam<br>High<br>1.0   | Alluvium-colluvium over weathered bedrock<br>Yellowish brown duplex soils<br><br>Sandy loam<br>Low<br>2.0                              |
| <b>LAND USE</b>   | Cleared; grazing, sheep and cattle  |  |  |
| <b>SOIL DETERIORATION HAZARD</b><br>Critical land features, processes, forms                    | Hard-setting surface soils; surface run-off may be increased if ground cover is significantly reduced; sheet erosion  | Hard-setting surface soils; surface run-off may be increased if ground cover is significantly reduced; sheet erosion; may have low available water capacity if a high proportion of stone is present | Hard-setting surface soils; surface run-off may be increased if ground cover is significantly reduced; low permeability; gully erosion |