

Preface

The purpose of this study has been to provide essential soil and land information that provides a strong scientific basis to guide land management and related policies across the WCMA region of Victoria. New technology and the application of improved farming systems are the key drivers for land use change and sustainable land management, and this process requires more detailed soil information. The 1:100 000 scale soil-landform survey for this region complements a similar study for the neighbouring Glenelg-Hopkins CMA (Baxter & Robinson 2001) and completes the work at this scale for western Victoria.

Although a number of historical land resource surveys have been undertaken within this region, they cover smaller areas, or are at coarser scales with less detail. The Wimmera Land Resource Assessment (WLRA) project undertaken by the Department of Primary Industries (DPI)-Primary Industries Research Victoria (PIRVic) now provides a comprehensive, consistent soil-landform survey for this region.

The data gathered during this project has been used to develop land hazard degradation susceptibility maps. However, the availability of soil-landform data and soil point data allows for more specific and detailed applications in future that include catchment modelling, scenario modelling and possibly future redesign of landscapes for sustainability. It will enable a clear understanding of the potential to develop land for various agricultural enterprises and to identify limitations linked to the natural resource base. The ability to access detailed soil point information and soil-landform units will benefit many modelling applications currently used to assess land resource management and water quality aspects such as Land Use Impact Model (LUIM), Soil and Water Assessment Tool (SWAT) and the Catchment Assessment Tool (CAT). Soil point information has been collected and is stored according to national protocols in the Victorian Statewide Soil Site Database (VSSD). This allows access to soil point information for incorporation in spatial models.

At the map scale of this project (1:100 000), soil-landform units are not homogeneous. Often a co-dominant and minor soil type have been described as part of this process. Importantly it should be noted that, at this mapping scale, soil attributes (for example soil depth, soil structure, size and abundance of coarse fragments, sodicity, pH) are expected to vary within map units.

As the variability of soil attributes within a map unit is difficult to predict, it is important to note that the representative soils should be used as a guide only. Site specific mapping and soil analysis is essential prior to establishment of any new development or enterprise.

Map unit and detailed soil profile information can be accessed in either Internet Explorer or Netscape Navigator from Adobe Acrobat files included on this CD-ROM via the [index](#) htm file.