1. INTRODUCTION

1.1 Introduction

Land varies considerably in its basic characteristics and its response to the demands made upon it. Such demands include the production of food, fibre, water, and development for residential purposes.

Planners need to match the requirement of land use with the capability of the land to sustain that use, otherwise degradation will occur and productivity will decline. Alternatively, when a less-than-ideal land use must proceed, then the appropriate level of management must be implemented to minimise future degradation. Prior knowledge of soil and land limitations can prevent unnecessary and costly mistakes. Information obtained through land capability assessments can provide the necessary data to assist local government with planning decisions and the preparation of planning strategies for the future.

This report provides information for broad-scale planning within the Rural City of Marong, based on an assessment of the physical characteristics of the land. It does not provide recommendations for land use and no allowance has been made for social or economic considerations which may influence planning proposals. It is primarily an examination of potential consequences and levels of management required for a range of land uses.

1.2 Location

The Rural City of Marong is located to the north west of Bendigo in central Victoria, approximately 150 km north-west of Melbourne (see Figure 1.1). It is a relatively large Municipality of approximately 1300 km2 and it lies mostly in the Loddon River catchment with a small section in the Campaspe. It is bounded on the western flank by the Loddon River.



Figure 1.1 - Location of the Rural City of Marong

1.3 Purpose of Study

The Rural City of Marong is predominantly rural but, as a neighbour to the growing city of Bendigo, is experiencing increasing pressure from urban expansion. Land that was once agricultural or forested is being converted into rural residential lots, particularly on the city's fringe. It has been predicted that the Bendigo region will be accommodating an extra 50 000 residents by the year 2020, including 8 000 in the Marong township (Loddon Campaspe Regional Planning Authority 1991).

The principal attractions of new residents to the Region are a rural lifestyle and environment combined with many urban services, abundant bushland, historical areas and recreation facilities. In future planning for the area, there is a need to preserve the qualities which make this area unique while also accommodating population growth. It is also important to preserve better agricultural land and the farming sector because of its significant input into the economy of the Bendigo region.

The Rural City of Marong has commenced a review of its planning policies, particularly those dealing with future rural land use.

Objectives of this review include:

- i) identifying the significance of agriculture and the role of other rural uses,
- ii) identifying those rural areas that are inappropriately zoned,
- iii) to provide for the sustainable use of rural land.

To achieve these objectives and to ensure a sound base for future planning strategies, the Rural City of Marong requested a land capability study by the then Department of Conservation and Environment. Previous studies have been undertaken in the area (Schoknecht 1988; Lorimer and Schoknecht 1987) but neither at a scale appropriate for preparing municipal land planning strategies.

1.4 Objectives

Major:

To provide land resource information to the Rural City of Marong that will facilitate the planning of future land use.

Specific:

- To delineate the Rural City into a series of map units based upon geology, topography and soil type at 1:25 000 scale in the urban fringe and 1:50 000 scale in rural areas.
- ii) To assess the capability of each map unit to support particular uses identified as important by the Rural City. These include:
 - a) Agriculture
 - b) Building foundations
 - c) Roading
 - d) Effluent Disposal
 - e) Farm Dams
- For each map unit, provide information relating to erosion risk, potential recharge to the groundwater system and other degradation processes
- iv) To support the Department of Conservation and Natural Resources regional office in its role of extension support to the Rural City.