1.0 INTRODUCTION

Cotton growers are seeking more precise information on the yield response to different levels of inputs, so they can optimise inputs and maximise crop profitability. The consequences of inappropriate water and nutrient management were amply demonstrated in the Emerald Irrigation Area, when profitability declined, and in some cases vanished, in the early 1980s.

Research at Emerald has provided basic information for developing a management decision program, as a tool for on-farm water scheduling and nutrient application decision making.

Techniques for water scheduling are regularly used in scientific experimentation. In particular the Water-Balance Method is a technique that can be easily and cheaply adapted for use by commercial growers.

This project utilises information from Emerald and other irrigation districts in the State to develop a scheduling system, WATERSCHED, as part of a Cotton Management Decision Program.