Introduction

In early 1999 the Centre for Water Policy Research was approached by the Namoi Water Users Association, the NSW Irrigators Council, and the Cotton Research and Development Corporation (CRDC), to investigate the possibility of introducing Capacity Sharing for Namoi Valley irrigators. It was agreed that the Department of Land and Water Conservation, New South Wales (DLWC) would provide a copy of their Namoi river Integrated Quality and Quantity Model (IQQM), a hydrology model, to the Centre to enable the modelling of sharing scenarios. However, the DLWC advised the Centre that the Namoi IQQM was still being developed, and would not be available until October 1999 (This estimate later proved incorrect)[1]. The Centre then sought to use the DLWCs' monthly model for the Namoi that had been in use before the development of the IQQM. After discussions with the DLWC staff it was determined that the monthly model did not contain transmission loss elements, and would not therefore be suitable for the estimation of Capacity Shares. It was established that there were no other suitable existing models, and that the creation of a new model would be necessary for this project. Because of the project timetable the Centre researchers resolved to build a river hydrology model, with monthly time intervals, for the Namoi River to enable them to assess Capacity Sharing scenarios. This has been done, although it has consumed the financial resources made available for the project plus some of the Centre's own funds. This report describes the modelling approaches tested, some interim results, and discusses option for handling transmission losses.