

Mount Lofty Ranges Catchment Modelling

The Mount Lofty Ranges in South Australia contain numerous water storages used to supply water to Adelaide. The South Australian Environmental Protection Authority (SA-EPA) manages the catchments surrounding these storages and required an improved predictive capability to determine the impacts of potential land use changes within these areas.

BMT WBM was initially commissioned to develop an EMSS (Environmental Management Support System) of the Mount Lofty Ranges in partnership with the EPA. Drawing upon SA-EPA's GIS layers and field data, the EMSS model was constructed at a fine resolution to be comparable with subcatchment management units in use at that time.

The EMSS framework was developed by the CRC for Catchment Hydrology, however recent applications suggested that further flexibility was required. The development of the E2 modelling framework by the CRC meant that conversion of the Mount Lofty Ranges model to E2 allowed the SA-EPA to have access to that flexibility for future applications of the model. BMT WBM undertook the rebuilding of the EMSS model into E2 in one of the first commercial applications of the software.

Once delivered, BMT WBM continued to assist SA-EPA with developing in-house modelling capability and provision of technical advice when needed.

Client

South Australian Environmental Protection Authority

Date

2004 - 2006

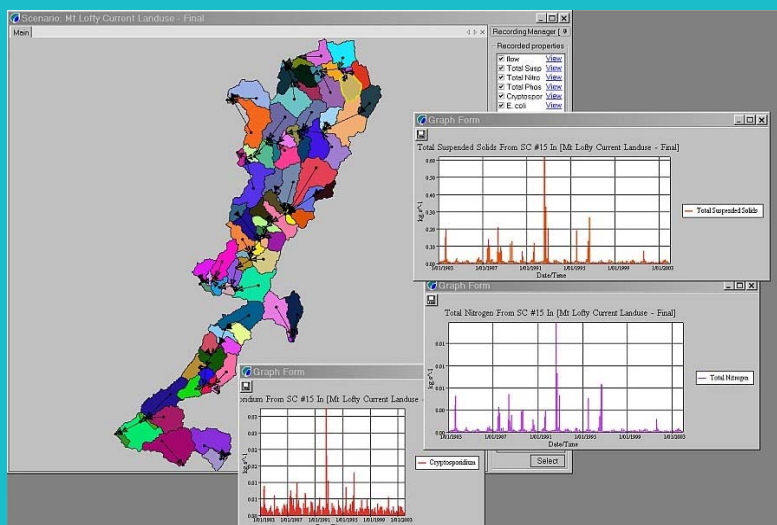
Services & Expertise Provided

Development of EMSS model describing storage catchments;

Calibration of hydrology;

Conversion of EMSS model to E2 framework;

Capacity Building and ongoing advice



E2 Model of Mt Lofty Ranges