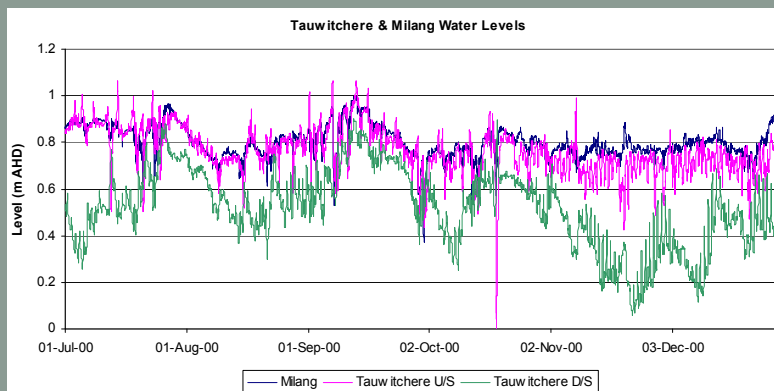


# Murray River Mouth Morphological Modelling

BMT WBM has developed a comprehensive numerical model for analysing the impacts on morphological processes of the Murray River mouth. The model also analyses associated water levels and salinity levels throughout Coorong by river flow release strategies at the barrages, incorporating ocean tide, storm surge, wave and wind processes. The SA Department for Water, Land and Biodiversity Conservation and the Murray-Darling Basin Commission are working together with BMT WBM in association also with Lawson & Treloar to apply state-of-the-art models to assist in optimising river flow benefits for improved environmental management of the Coorong.

The model provides a reliable basis for quantified evaluation of various flow management options to keep the river mouth open with minimal inflow of beach system sand to the Coorong. The models also have much wider application to other environmental issues throughout the Lower Murray of significance to aquatic communities, migratory bird habitats, fisheries and water quality.

**Client**

SA DWLBC and MDCB

**Date**

2001 - 2007

**Services & Expertise Provided**

Advanced model development for coastal and estuary hydrodynamics and morphology;

Simulation of dominant processes affecting the mouth and Coorong including tides, waves, wind, storm tides, barrage flows and mouth morphology;

Advice on associated environmental processes and issues, particularly salinity responses in the Coorong; and

Project management and liaison with stakeholders.

