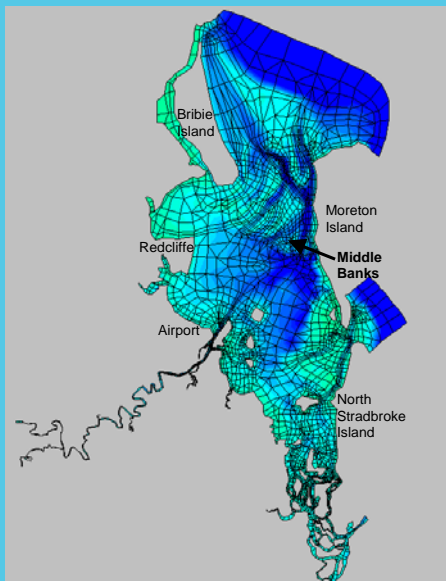


Brisbane Airport Corporation: New Parallel Runway EIS

To meet the demand for significant growth in use of Brisbane Airport, an additional new parallel runway was proposed, involving filling of land with about 14 million cubic metres of sand dredged from Middle Banks in Moreton Bay. BMT WBM contributed to the comprehensive Impact Assessment Study undertaken through a range of high level technical assessments for both the dredging area and the airport surrounds with respect to:

- Hydrodynamics and associated sedimentation processes within Moreton Bay;
- The shorelines of Moreton Bay, particularly at Moreton Island and adjacent to the airport;
- Water quality at both the dredging area and at tailwater discharge locations within Kedron Brook and Bramble Bay; and
- Marine and terrestrial ecology at and near Middle Banks and as may potentially be affected at and adjacent to the airport site.

Comprehensive hydrodynamic, sedimentation and water quality modelling was undertaken using the BMT WBM detailed finite element model of Moreton Bay. The model was refined around Middle Banks and the airport area, including in Kedron Brook and further calibrated and validated to field measurements undertaken for the project.

**Client**

Brisbane Airport Corporation

Date

2005 - 2007

Services & Expertise Provided

IAS technical assessments;

Existing environment and impact assessment;

Hydrodynamic processes of Moreton Bay;

Sedimentation associated with dredging at Middle Banks;

Water quality in Moreton Bay and at construction discharges to Kedron Brook and adjacent Bay;

Marine and terrestrial ecology at Middle Banks and airport surrounds; and

Environmental Management Plans.