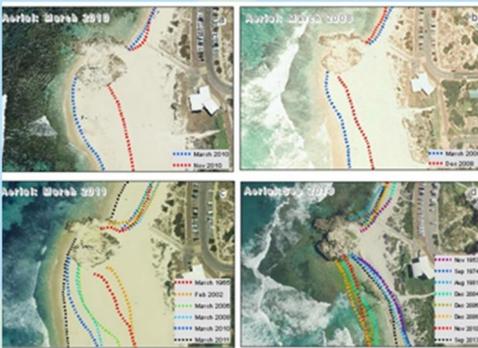
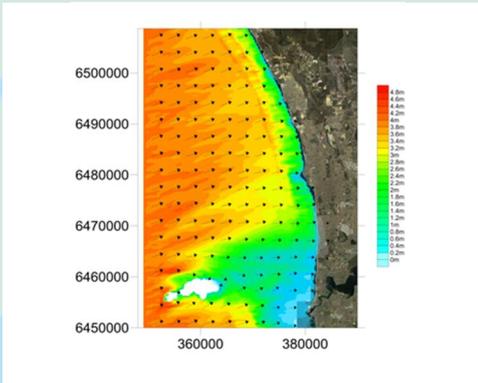


“Where will our knowledge take you?”

City of Stirling—Strategic Coastal Study

City of Stirling



Location

Stirling, Perth North Metropolitan Coast

Date

2011 – 2015

“ **Monitoring of the beaches and a comprehensive scientific study of the primary coastal processes undertaken by BMT JFA will provide a robust basis for future coastal planning strategy along the City of Stirling coastline.** ”

BMT JFA assists the City of Stirling with their strategic management of the coastline. This project has centred on the establishment of monitoring along the City’s beaches, supplemented by the assimilation and analysis of existing datasets, including bathymetric LiDAR and aerial photography.

Additionally, a thorough modelling exercise has been carried out to provide a simulated one-year wave dataset for the nearshore areas along the 3m contour.

The City of Stirling required a comprehensive assessment of coastal processes and coastal risks to underpin the development of strategic coastal plans and adaptation plans to address the increasing erosion risks to their vulnerable northerly coastline. In particular it was important to develop an understanding of the potential impacts of sea level rise.

Assessing historical and current shoreline trends is a core part of

the study, achieved through analysis of the beach profiles to determine inter-annual trends and the assessment of aerial photography using D-SAS (Digital Shoreline Analysis Software) to establish recession and advance and the associated rates of change.

The final output from the study will be a detailed risk assessment, establishing risk profiles for coastal management units and key ‘activity nodes’ together with a series of recommendations relating to the most vulnerable areas.

BMT JFA Role

- Develop scope of monitoring and study
- Numerical modelling of wave climate
- Analysis of bathymetry and sediment transport
- Analysis of beach profiles
- Analysis of aerial photography
- Sediment sampling
- Geotechnical investigations
- Risk Assessment
- Community Consultations

Services & Expertise Provided

- Project Management
- Numerical wave modelling
- Data analysis
- Report writing
- Public consultation