

## **Using a Bottom-Up GIS approach to model Yawuru collective values along the foreshore of Broome, WA**

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This thesis explored the Yawuru community of Broome, Western Australia, as a case study for the implementation of locally driven, analytical GIS in Indigenous Australia. Using a variety of Action Research and Bottom-Up GIS techniques, this project produced a collective representation of three Yawuru community values along the in-town foreshore: pearling heritage, resources and access to views. This primary output was overlaid on administrative documents to demonstrate strategic intelligence the community may draw from analytical GIS modelling. The output identifies culturally important areas in the in-town estate, synergies and conflicts between Yawuru values and Shire development plans and discusses their implications for Yawuru decision-making.

This project demonstrates how Bottom-Up GIS techniques and collaborative research removed some, but not all, challenges associated with GIS modelling in Indigenous communities. It argues that the techniques used in this research may be applicable across the Yawuru estate and to other Australian Indigenous communities. Finally, it concludes that the Yawuru community may encourage the critically reflexive uptake of GIS technology by other Australian Indigenous communities.