

## CONCLUSIONS

The Townsville-Cardwell section of the Queensland coast is a particularly important area for dugongs. In 1994, approximately 49% of dugongs in the Great Barrier Reef south of Cooktown occurred in this area (Marsh et al. 1996). Dugongs move throughout the whole Townsville-Cardwell region (and beyond), and division of the region into discrete sections is, at least partly, arbitrary. Nevertheless, the northern Hinchinbrook area, including Shepherd Bay, Missionary Bay and Hinchinbrook Channel supports the largest number of dugongs at any one time in this region, and is the core of the Hinchinbrook Dugong Protection Area.

Unfortunately, the Hinchinbrook DPA does not extend to the waters off Lucinda, which were used by the dugongs tagged in Missionary Bay area. Similarly, all the dugongs tagged in the Cleveland Bay DPA spent time in Bowling Green Bay. The waters of Lucinda, and the waters of Bowling Green Bay are Type 'B' DPAs and as such, the use of several types of net that pose threat of entanglement and drowning to dugongs is still permitted. These nets include foreshore nets (i.e. nets set in waters < 2 m deep) that can be set on seagrass meadows, drift nets up to 1.2km long (in waters > 20 m deep) and bottom set nets (nets anchored close to the sediment). These areas of the Lucinda coast and Bowling Green Bay that are regularly used by dugongs should be included in the adjoining Type 'A' DPAs (Hinchinbrook and Cleveland Bay, respectively).

Although the Hinchinbrook and Cleveland Bay DPAs prohibit the use of some mesh nets that pose a threat to dugongs, no other specific management has been implemented to protect the dugongs or their habitat in these special areas. Developments in Hinchinbrook Channel mean that increasing boat traffic is one potential impact that will require attention. To that end, I have proposed a series of recommendations for a Boat Traffic Management Plan for the Hinchinbrook DPA. These recommendations attempt to strike a balance between reasonable use and adequate protection of a unique and important habitat. The recommendations are integrated in that the protection of some areas is compromised for the better protection of other, more important areas. As a result the suggested plan should not be divided into its component parts or partially implemented without careful consideration of the consequences.