

# 1 INTRODUCTION

## 1.1 Background and Purpose

The Great Barrier Reef Marine Park Authority (GBRMPA) has published various research papers estimating the financial values of activities which directly utilise the Great Barrier Reef Marine Park (GBRMP), including commercial tourism, commercial fishing, recreational fishing and recreational boating. The most recent analysis, *Dollar Values and Trends of Major Direct Uses of the Great Barrier Reef Marine Park* (Driml 1997b), estimates gross financial values of these major direct uses over the financial years 1991–92 and 1995–96. Driml, Hundloe and Blamey (1997) explored the broader issues of economics associated with the GBRMP, discussing methodologies to ascertain economic resource values, and how ecological economics could be applied to the management of the GBRMP. Further, in *Protection for Profit* (Driml 1994a), research was also presented on resource values associated with the GBRMP that are not measured in dollar terms, but should be considered in order to effectively manage the Marine Park.

The purpose of this paper is to update the financial values presented in Driml (1997b), and also further discuss methods by which resource values for the Marine Park may be estimated on an ongoing basis. This is to allow for the identification of appropriate models for the effective evaluation of resource management strategies.

Specifically, the terms of reference of this assignment were to:

- report on the trends in gross financial values of the direct uses of the Great Barrier Reef World Heritage Area;
- review methodologies for reporting on the economic values of the Great Barrier Reef World Heritage Area and make recommendations for reporting those values;
- calculate gross financial values for commercial tourism for as many years as is possible since 1997–98 and provide information on visitor numbers and Reef use;
- provide information on sources for indicators of Reef uses and gross financial values for commercial fishing and recreational fishing and boating in the Great Barrier Reef Marine Park and World Heritage Area; and
- recommend appropriate economic and financial reporting cycles specific to the Authority's requirements.

## 1.2 Scope of Works Completed

KPMG, Dr Richard Brown and Dr Jackie Robinson were engaged by GBRMPA to complete this assignment, essentially updating the earlier Driml reports with respect to financial use values and also to provide details as to methodologies for reporting on economic values of the Marine Park.

We note that the scope of the study was limited to desk research only, with no primary research incorporated within the scope of works. Further, the authors prepared this study in the context of attending one briefing session with various GBRMPA representatives.

In completing the update of financial use values, KPMG completed the following tasks:

- review secondary data sources on tourism activity and prepare current estimates of financial use values for tourism activity;
- analyse Queensland Fisheries Management Authority data on the volume and gross wharf value of fish landed in ports within the Marine Park;
- review current literature on the value of recreational fishing and boating, extrapolate historical values into the future and compare the results; and
- summarise financial values from tourism activity, commercial fishing and recreational fishing and boating in the Marine Park.

In preparing the estimates of financial values, KPMG refined the approach adopted by Driml (1997b), and in this respect, the outcomes of the two studies are not necessarily comparable. We note that the methodology utilised by KPMG is open to further refinement as secondary data sources evolve over time.

In preparing a methodology for estimating economic values associated with the GBRMP, Dr Richard Brown and Dr Jackie Robinson completed the following tasks:

- determine flow-on impacts of the financial values through use of input-output analysis;
- discuss various economic decision-making models to assist GBRMPA, including detailing primary and secondary data requirements; and
- detail methodologies associated with Multiple Criteria Analysis (MCA), including presenting steps associated with its process.

In conclusion, we have summarised the financial values associated with the Marine Park and identified a methodology by which economic values associated with the Marine Park may be determined.

### **1.3 Warranties and Disclaimer**

The statements and opinions in this report are given in good faith but, in the preparation of this report, KPMG Consulting has relied upon information provided by officers of the Great Barrier Reef Marine Park Authority.

This report has been prepared for the Great Barrier Reef Marine Park Authority and accordingly no warranty is given to third parties who may seek to utilise the information contained in this report.

The findings of this report are based on the sources indicated. Neither the whole or any part of this report nor any reference thereto may be included in or with or attached to any document, circular, resolution, letter or statement other than mentioned previously without our prior written consent in the form and context in which it appears.