6. CONCLUSION

This report has presented (in section 2), original information on the economic characteristics of major Great Barrier Reef-based activities. In addition, through input-output analysis, the regional and state-wide impacts of the economic activities were able to be traced. The primary data and results of analysis have become part of the multi-disciplinary data base used by the Great Barrier Reef Marine Park Authority.

Any data must be interpreted correctly if it is to be used in decision-making. Several caveats with respect to the input-output results warrant mentioning here. Firstly, as noted in the text, the results produced using input-output analysis are order of magnitude measures only because of the small size of some Reef-based sectors and because of the inherent limitations in trying to model something as complex as a regional economy. Comparisons amongst these estimates for sectors and regions is however considered to be valid.

Secondly, much of the original data gathered is now somewhat dated. Nevertheless the comparison of all data based on 1981/82 dollars represents the most recent available comprehensive data. Over time, these data will acquire an historical role and will be of use as a baseline for monitoring economic activity in the Marine Park.

While it is a relatively straightforward matter to collect updated value of production figures for the various Reef sectors, it is a much larger task to update input-output transaction tables. The base regional tables used are derived from tables for Australia. The latest available Australian tables are for the 1977/78 financial year. Conventional practice is to use multipliers for a period of time that could extend for a number of years, until new ones are available.

It is probably an acceptable proposition that the multipliers presented in this report will hold relatively constant over a number of years. However if major structural change occurs in a sector, ideally the transactions table should be updated and new multipliers should be derived.

It must be emphasised that all sectors in all economies have flow-on effects. This is not a phenomenon unique to Great Barrier Reef based sectors and this must be remembered in interpreting the results of this input-output analysis. Other mainland-based sectors in a regional economy may have, for instance, higher employment multipliers than Reef-based sectors. Sectors with high employment multipliers should be favoured, for example, in government-funded schemes to reduce unemployment.

Finally, the point must be reiterated that economic impact analysis using the input-output analysis technique is only one of a number of approaches to economic analysis of industries. It does not estimate the net economic benefits of economic activities.

To summarize the results of data collection and analysis, it is best to turn to three sets of data, the value of production of Great Barrier Reef-based sectors, the multipliers for Reef-based sectors and the total output, income and employment effects generated using input-output analysis. The first data set is shown in Table 8 and the other two in the following Tables 12 and 13.

Economic impact analysis using the input-output technique can trace the effects of changes in output of any sector throughout defined economies and thus provide information useful for understanding the widespread consequence of decisions which may affect output. This information, plus the initial descriptive data required for analysis are a useful input into processes such as Marine Park planning and monitoring.

Table 12. Total multipliers - summary table.

	CAIRNS	TOWNSVILLE	MACKAY	ROCKHAMPTON
A. OUTPUT MULTIPLIERS				
1. Island Resorts	1.848	-	1.698	1.686
2. Charter Boats	1.543	1.765	1.750	1.682
3. Island Camping	-	-	1.695	1.783
4. Recreational Fishing	1.540	1.724	1.694	1.709
5. Commercial Fishing	1.772	1.776	1.740	1.756
6. Research	-	1.812	-	1.946
B. INCOME MULTIPLIERS				
1. Island Resorts	.633	-	.515	.404
2. Charter Boats	.382	.540	.586	.496
3. Island Camping	-	-	.201	.244
4. Recreational Fishing	.208	.272	.221	.280
5. Commercial Fishing	.714	.722	.491	.762
6. Research	-	.750	-	.745
C. EMPLOYMENT MULTIPLIERS				
1. Island Resorts	.057	-	.049	.043
2. Charter Boats	.038	.058	.036	.052
3. Island Camping	-	-	.032	.026
4. Recreational Fishing	.023	.029	.035	.030
5. Commercial Fishing	.069	.072	.122	.073
6. Research	-	.052	-	.149

Table 13. Total impacts - summary table.

	CAIRNS	TOWNSVILLE	MACKAY	ROCKHAMPTON	TOTAL
A. OUTPUT IMPACTS ($m)					
1. Island Resorts	11.08	-	47.03	20.56	78.67
2. Charter Boats	10.18	2.82	25.90	4.20	43.10
3. Island Camping	20.91	16.69	5.74	20.72	64.06
4. Recreational Fishing	17.86	24.48	8.80	20.16	71.30
5. Commercial Fishing	-	-	2.20	.53	2.73
6. Research	-	12.32	-	-	12.32
TOTAL	60.03	56.31	89.67	66.17	272.18
B. INCOME IMPACTS ($m)					
1. Island Resorts	3.80	-	14.26	4.92	22.98
2. Charter Boats	2.51	.86	8.67	1.24	13.28
3. Island Camping	8.42	6.78	1.62	8.99	25.81
4. Recreational Fishing	2.41	3.86	1.15	3.30	10.72
5. Commercial Fishing	-	-	.26	.07	.33
6. Research	-	5.10	-	-	5.10
TOTAL	17.14	16.60	25.96	18.52	78.22
C. EMPLOYMENT IMPACTS (employees)					
1. Island Resorts	342	-	1 357	525	2 224
2. Charter Boats	250	92	532	130	1 004
3. Island Camping	814	676	402	944	2 836
4. Recreational Fishing	267	411	182	354	1 214
5. Commercial Fishing	-	-	42	8	50
6. Research	-	353	-	-	353
TOTAL	1 673	1 532	2 515	1 961	7 696