The Impact of Revised Zoning and Management of the Solitary Islands Marine Park on Local Businesses

A report commissioned by Solitary Islands Marine Park from

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Executive Summary

This report was commissioned by the Manager of the Solitary Islands Marine Park. The purpose of the report was to assess the extent to which changes in the management of the Marine Park since 2002 had impacted upon local businesses.

In September and October 2005 a project officer approached 248 businesses operating within the vicinity of the Marine Park. Face to face interviews were undertaken. However, the majority of respondents sought to spend time (days / weeks) completing the questionnaire and forward the completed survey by mail.

A total of 51 businesses within the estimated economic zone of the Solitary Islands Marine Park completed the questionnaire. They covered many types of business and the largest single segment was drawn from the commercial accommodation sector. No bait and tackle stores returned the questionnaire. Given that they are an important business type in the vicinity of the Marine Park they were contacted a second time by phone, sent the questionnaire again and encouraged to return it by the end of December. Again no questionnaires were received from bait and tackle stores.

Upon analysis of the data of the businesses that provided information about the year in which they commenced operations, 50 percent started before 1990, and the remainder after that year.

The mean number of full time employees per business was approximately 3.1 throughout the period since 2001, with initially about the same number of part-time staff being recruited. However over the period since 2001, the number of peak season part-time staff increased to approximately 5. Over this same period estimated annual turnover for the sample increased by about 20 percent. Based on a smaller sub-sample, the best estimate of sample turnover indicates that that turnover increased from about AUS$13 million to AUS$15.7 million during the period 2001 to 2005.

The businesses specified that most of this growth has come from increased visitation. Only a handful of businesses indicated any significant amendment of their operations by extending product range or introducing new products. The largest source of increased business seems to have been generated by out of region visitors, notably those who are described as general beach users, followed by beach users who are resident in the region. Surfers then follow with recreational fishermen being next.

There was little evidence that management changes in the Marine Park had adversely affected the turnover of the businesses surveyed. Only two respondents perceived building or development delays caused by new management regimes, and in the one case where these delays were costed, it was assessed that the delays cost the business AUS$10,000.

A list of 33 respondents provided a list of 96 reasons in the general external environment that had impacted upon their business; and together it was estimated that, with a score of 6.7 on an 11 point scale, these reasons in total had a moderately positive impact upon the business community.

In summary, there is little evidence to suggest that changes in Marine Park management have had a negative impact on the turnover and employment patterns of the local business community given that:

- other surveys have indicated high levels of satisfaction resulting from Marine Park visitation, and
- there is evidence of growing visitor numbers to the region and the Marine Park.

It can be concluded that the Marine Park continues to benefit local business by generating more potential customers and that the changes in management plans have neither adversely affected visitor flows nor overall levels of business activity in the local economy. These findings are premised on an assumption that respondents to the questionnaire are representative of the businesses in the region.

1.0 Introduction

1.1 This survey was commissioned by Ms Libby Sterling, the Manager of the Solitary Islands Marine Park, New South Wales, Australia.

1.2 The purpose of the research was to assess the extent to which changes in zoning and management regulations introduced in the Marine Park in 2002 impacted on small businesses within the economic activity zone of the Marine Park. As is often the case, the introduction of management changes had initiated a process of public consultation. During this period some sectors of the business community had expressed the concern that the new regulations would adversely impact on economic activity due to negative impacts on tourism and recreational usage patterns in the Marine Park.

1.3 Following a series of discussions with officers within the Marine Parks Authority, the local Coffs Harbour Chamber of Commerce and other interested individuals, a questionnaire was constructed to examine these issues. The questionnaire is reproduced as Appendix One to this report.

1.4 The key components of the questionnaire were to elicit:

1.4.1 Data on the nature of the respondents including a description of the business and when it had commenced;

1.4.2 Data on turnover and employment in the period since 2001;

1.4.3 Business assessments of changes in clientele, turnover and related business activity over the period 2001 to 2005;

1.4.4 Assessment of the degree to which adverse changes had occurred since 2001;

1.4.5 Establishment of a wider context of business change by considering factors other than changes in Marine Park management that had impacted on business; and

1.4.6 An overall assessment of changes in business conditions.

2.0 Methodology

2.1 Over a six week period from early September 2005 through to mid-October, a marine parks project officer conducted random face to face surveys with 248 local small businesses. Business owners/managers/staff were approached, their participation sought and survey questions explained where required. The majority of staff interviewed chose to complete the survey at a later time/date, because they were either tending to customers or they needed to check historical data.

2.2 Small businesses approached were primarily those in the areas adjacent to the Solitary Islands Marine Park (Figure 1). The breadth of the area of business locations targeted included the townships of Maclean in the north to Sawtell in the south. This encompassed towns such as Grafton, Brooms Head, Wooli, Corindi, Arrawarra, Woolgoolga, Sandy Beach, Emerald Beach, Moonee Beach, Sapphire, Coffs Harbour and Toormina. Although some of these locations, such as Grafton, were considerably inland from the Marine Park, they were still included under the assumption that they were important stop-off points for tourists and passing trade to the Marine Park.

2.3 A range of different business types were approached as represented in Table 1 below.

2.4 No bait and tackle stores returned the questionnaire, although all such businesses within the study area were approached for participation. Given that they are an important business type in the vicinity of the Marine Park they were contacted a second time by phone, sent the questionnaire again and strongly encouraged to return it by the end of December. Again no questionnaires were received from bait and tackle stores.

2.5 The data was collated and analysed using SPSS software (Statistical Package for the Social Sciences).

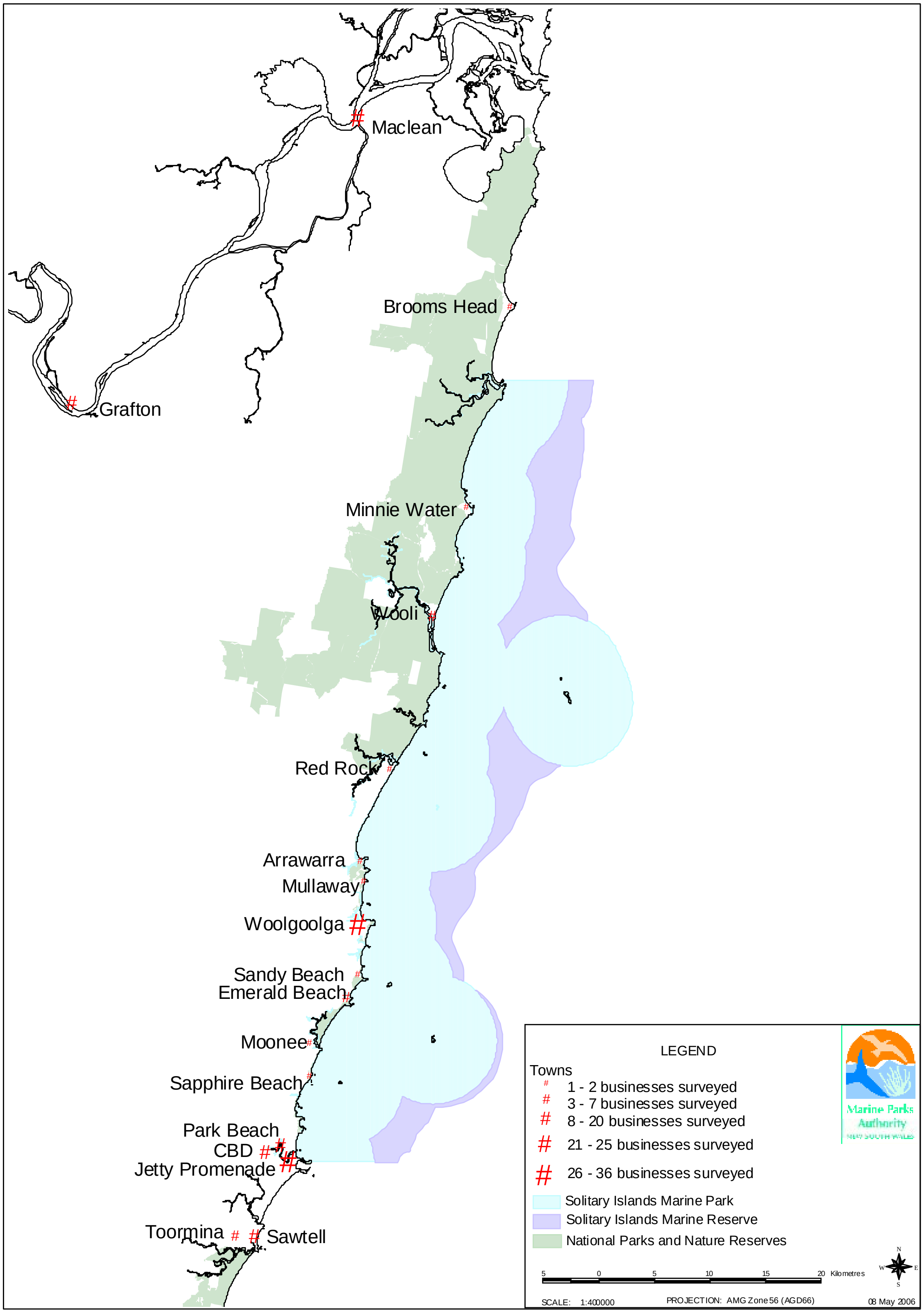

Figure 1. **Location of Businesses Approached**

Table 1. **Type and number of Businesses approached**

	Frequency
Dive Shop	5
Motel	22
General Store	13
Hotel	9
Commercial Tour Operator	22
Caravan Park	11
Estate Agents	8
Restaurant	13
Guest House/B&B/Home stay	2
Backpacker Hostel	3
Holiday home rentals	5
Fast food outlet	20
Resort	4
Bicycle Store	3
Car Wash	2
Fashion Boutique	8
Natural Therapies / Health	3
Video Hire	5
Cards and Gifts	1
Souvenirs	3
Pharmacy	2
Canoe Hire and Sales	2
Liquor Store	4
Slipway	1
Metal Fabrication	1
Supermarket	5
Repair Shop	1
Café	15
Surf shop	7
Hair salon	3
Post Office	1
Garage	2
Laundry	1
Chamber of Commerce	1
Camping store	6
Books / newsagent	3
Bait and tackle	5
Boating / marine	9
Pool / Aquarium	4
Sports store	7
Music / entertainment	2
Clubs	4
Butchery	1
Total	248

3.0 Nature of the Sample

3.1 The questionnaire was constructed to permit sub-sample analysis by factors such as the nature of the business, size of the business as measured by number of employees, duration of the period of trading and similar variables. Such analysis requires a significant sample size and a target of 400 businesses were sought. However, in spite of the persistent efforts to increase business participation, the final sample size was 51 respondents. The nature of the sample is described in Table 2 and the text below.

Table 2. Nature of the Sample (Type of Business)

	Frequency	Valid Percent	Cumulative Percent
Dive Shop	1	2.0	2.0
Motel	5	10.0	12.0
General Store	4	8.0	20.0
Hotel	1	2.0	22.0
Commercial Tour Operator	4	8.0	30.0
Caravan Park	7	14.0	44.0
Estate Agents	4	8.0	52.0
Restaurant	1	2.0	54.0
Guest House/B&B/Home stay	1	2.0	56.0
Holiday home rentals	1	2.0	58.0
Fast food outlet	6	12.0	70.0
Resort	1	2.0	72.0
Bicycle Store	1	2.0	74.0
Car Wash	1	2.0	76.0
Fashion Boutique	1	2.0	78.0
Natural Therapies	1	2.0	80.0
Video Hire	2	4.0	84.0
Cards and Gifts	1	2.0	86.0
Pharmacy	2	4.0	90.0
Canoe Hire and Sales	1	2.0	92.0
Liquor Store	1	2.0	94.0
Slipway	1	2.0	96.0
Metal Fabrication	1	2.0	98.0
Repair Shop	1	2.0	100.0
Total	50	100.0	
Missing or incomplete	1		
Total	51		

3.2 As shown in Table 2, the most common business enterprise type to respond was serviced accommodation providers followed by fast food outlets. Among the former were seven caravan park operators and five moteliers. Many respondents were sole representatives of a given business type.

3.3 Table 3 shows the year in which the businesses commenced. The oldest business was a caravan park, and two other caravan parks had opened before 1969. Three of the five motels had opened since 1990 while four fast food operators had opened since 1990, and of these, two had opened since 2000. A video hire business had opened since 2000 and a picture, albeit incomplete, is indicative of a growing community expanding into the service sector over time.

Table 3. Decade in which Business started

	Frequency	Valid Percent	Cumulative Percent
Before 1960	1	2.2	2.2
1960-1969	5	10.9	13.0
1970-1979	7	15.2	28.3
1980-1989	10	21.7	50.0
1990-1999	14	30.4	80.4
2000-present	9	19.6	100.0
Total	46	100.0	
Missing	5		
Total	51		

3.4 Of the businesses responding, 62 percent were family owned and managed, while a further 10 percent were run by families but with leased premises. Contrary to what is quite common experience, none of the motels fell into this latter category. Table 4 shows that only four of the respondents indicated that they were part of a national chain or franchise. The picture emerges of a sample dominated by proprietor managed businesses.

Table 4. Nature of Ownership

	Frequency	Valid Percent	Cumulative Percent
Family owned and managed	37	78.7	78.7
Leased and family managed	6	12.8	91.5
Owned by and part of a national chain	1	2.1	93.6
Part of a national franchise	3	6.4	100.0
Total	47	100.0	
Missing data on ownership	4		
Total	51		

3.5 Table 5 indicates that the sample was derived from quite a large geographical area as befits the extent of the Marine Park.

Table 5. Location of the Business

	Frequency	Valid Percent	Cumulative Percent
Not Provided	4	na	na
Bonville	1	2.1	2.1
Brooms Head	2	4.2	6.3
Coffs Harbour	14	29.7	36.0
Grafton	1	2.1	38.1
Korora	1	2.1	40.2
Maclean	4	8.5	48.7
Minnie Water	2	4.2	52.9
Coffs Harbour - Pacific Hwy	1	2.1	55.0
Coffs Harbour - Park Beach	3	6.4	61.4
Coffs Harbour - Promenade	1	2.1	63.5
Sawtell	7	14.9	78.5
Toormina	1	2.1	80.6
Woolgoolga	6	12.7	93.3
Wooli	3	6.4	99.7*
Total	51		

* does not add to 100 due to rounding

4.0 Employment

4.1 Family run businesses are traditionally small in size, and the data generated tended to support this view. Employment data were collected by both tourist season (peak and off-peak months) and by full-time and part-time numbers of employees. The full set of data is provided in Appendix Two to this report. Table 6 shows the figures for full-time peak employment. The statistics indicate that the sample is comparatively homogeneous in respect to size measured by employment in that the average number of staff is just over three, while the standard deviation over the years tends to be just below three staff.

Table 6. Peak Season Period Employment 2001-2005

	Sample Size	Minimum	Maximum	Mean	Std. Dev
Number of Employees - 2001	35	1	13	3.01	2.463
Number of Employees - 2002	36	1	13	3.04	2.636
Number of Employees - 2003	42	1	13	3.18	2.793
Number of Employees - 2004	43	1	13	3.19	2.704
Number of Employees - 2005	44	1	13	3.16	2.704

4.2 Appendix Two indicates that these full-time staff are helped by between four to five part-time staff during the peak season, but what is also of interest is that there tends to be a small increase in the mean number of part-time staff being employed over the period 2001 to 2005. This implies that an increase in turnover in turn promotes an increase in staff numbers. In 2001 the average number of employed part-time staff for the sample was 3.96, and by 2005 it is 5.07. However, such an assumption of increased business implies that the number of hours worked per employee remains at least constant, but other data also provide reasons for thinking that business may have expanded by about 20 percent. Given that most of the businesses are family managed, it can be argued that most full-time staff are family members, and will continue to be employed during the off-peak season. Some evidence to support this is also found in Appendix Two where it can be seen that the number of full-time staff tend to remain the same during both peak and off-peak periods. With reference to part-time staff, the difference in tourist seasons is indicated by the trend that part-time staff levels, on average, tends to be about half a person less during the off-peak period. Data on actual hours worked were not collected (in the interest of not creating too long a questionnaire), but it is feasible to assume that increases in part-time staff do reflect increases in business activity.

5.0 Levels of Turnover

5.1 Support for a thesis of growth in business during the period since the introduction of revised Marine Park management regimes in 2002 is provided by data on turnover. Respondents were asked to assume that in the year 2001 an index of turnover was 100, and then they were asked to provide an index for the remaining years. Table 7 provides the information.

Table 7. Index of Turnover – 2001-2005

	N	Minimum	Maximum	Mean	Std. Deviation
Turnover Index - 2001	51	100	100	100.00	.000
Turnover Index - 2002	36	95	175	108.67	16.844
Turnover Index - 2003	41	90	200	112.59	26.799
Turnover Index - 2004	42	80	300	116.21	37.153
Turnover Index - 2005	41	79	350	120.93	44.994

5.2 Respondents were also asked to give the current value of their turnover. Of the 51 respondents 32 provided that information.   This can be summarised as shown in Table 8. This shows that the average turnover was approximately AUS$489,725, but a significant range is also revealed from AUS$230 to over AUS$2.4 million. Using the above data, annual growth can be calculated and Figure 2 indicates that between 2001 and 2005 the total turnover for the sample providing data has increased from about AUS$13 million to about AUS$15.7 million, indicating growth of about 20 percent over the five years. These data are confirmed by the employment figures.

Table 8. **Current Value of Turnover**

Number of respondents	Answering	32
Number of respondents	Not answering	19
Mean		$489726
Median		$285000
Std. Deviation		$605527
Minimum		$230
Maximum		$2424000
Total		$15671230

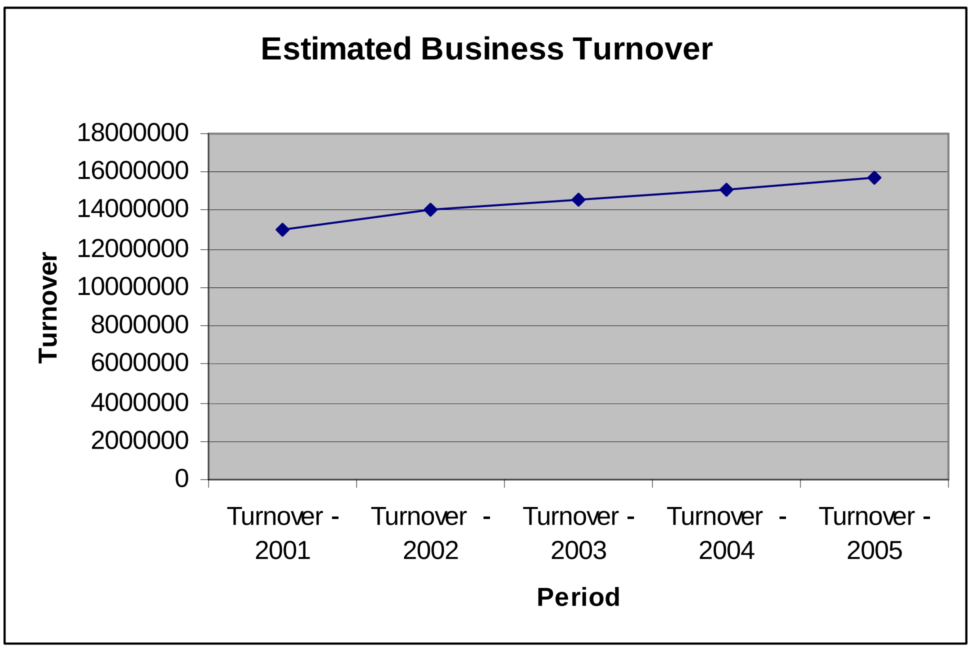

Figure 2 **Growth in Turnover – 2001 to 2005.**

5.3 While there is, therefore, evidence of business growth, it cannot automatically be concluded that this growth is wholly due to changes in Marine Park management. A series of questions were therefore asked to try to tease out the relationship between changes in Marine Park management and the growth in the local business economy.

6.0 The Relationship between Turnover, Growth and Marine Park Management

6.1 The first question required respondents to indicate what they thought the impact of changes to the Marine Park had been. Of the sample (51), only 15 made comments, and of these: one indicated that they had no knowledge of the changed management regime; two thought it had had no impact and two supported the changes while not indicating any consequences of the changes. Two respondents gave answers that indicated that the changes in management had deterred some recreational activity within the Marine Park that had led to a downturn in business, while the remainder made comments that pertained to environmental rather than business issues. These comments are summarised in Table 9.

Table 9. Perceived Impact of the Park

	Frequency	Percent
No comments	35	
Fish feeding restrictions in the Marine park have impacted business - loss of time and income	1	1.9
Appears to be no impact	2	3.8
Ban professional fisherman within 5 miles of the shoreline and creek mouths	1	1.9
Downward trend relates to Pacific Highway, extended drought, economy	1	1.9
Due to marine parks regulation, less people visit the area to feed fish at the Promenade	1	1.9
Fewer boats being washed in the car wash	1	1.9
Group bookings from recreational fishers have stopped in Coffs area	1	1.9
More recreational fisher families visiting	1	1.9
Only that I think it’s a good idea	2	3.8
Our guests are general beach users rather than fisherman	1	1.9
Positive result - increase in tourism and fishermen	1	1.9

Possibly an increase in tourists numbers - beneficial to whole business community	1	1.9
Sand build-up on boat ramp - disappointed that council did not rebuild boat ramp	1	1.9
Unaware of park management	1	1.9

6.2 The questioning then required respondents to think more specifically of their own businesses and to list any changes they had made in those businesses in the period since 2001. The responses are summarised in Table 10. Again the main thing to note is that almost 70 percent made no response, and a further 20 percent specifically indicated that no changes had been made in their businesses. This left just 6 businesses that recorded a change in business practice, and of these only two provided an indication of their moves being a response to changes in levels of business, while two others had made changes seemingly motivated by a wish to take advantage of a business opportunity – these being the introduction of a café to an existing bakery business and the second a video hire outlet choosing to sell games and phones.

Table 10. Changes Made in the Business

	Frequency	Percent
No comments	33	
5 yrs ago changed bakery to bakery café - positive outcome	1	1.9
Having recreational fishing preserved improved the tourism industry	1	1.9
Keep positive attitude, clean shop, improve and introduce new stock	1	1.9
Loss of income resulting from limited fish feeding	1	1. 9
More bait, more accommodation nights for fishermen who catch more fish on regular basis	1	1. 9
No changes made	12	23.5
Reduced use of Marine Park for tours, occasional tour at Red Rock / Corindi River	1	1. 9
Started selling games/movies/phones	1	1. 9
Total	51	100.0

6.3 However, this lack of evidence of adverse impacts was confirmed when businesses were asked if they had suffered any delays in building or development works as a direct result of Marine Park management. Forty two replied to this question, with only two indicating that they perceived to have had suffered such delays as a result of Marine park management. Both also indicated that the delays had affected them for about a year. One of the two respondents estimated the cost as being about AUS$10,000 relating to "unit strata" development – the second related to a "camp kitchen" and provided no cost estimate. It is not possible to verify if these impacts were actually a direct result of Marine Park management as the questionnaire was confidential and respondents anonymous.

6.4 In an attempt to assess whether changes in Marine Park management might have been associated with a positive increase in business conditions, respondents were asked whether they thought there had been an increase in eco-tourism within the area. About one-third thought there had been.

7. Tourism and Recreational Users of the Park

7.1 In an attempt to better assess the changing nature of the client base and from where growth was emanating, respondents were asked to consider the following categories of Marine Park users, namely scuba divers, recreational fishermen, general beach users, surfers and four wheel drive enthusiasts. Each category was divided into two more categories, namely residents and visitors. A seven-point category was then used to indicate levels of customer number growth, these being:

7 = an *increase* of **over 10 percent** in this client group since 2001.
6 = an *increase* of **5 to 10 percent** in this client group since 2001.
5 = an *increase* of **0 to 5 percent** in this client group since 2001.
4 = **no change** in patterns of client group since 2001.
3 = a *decrease* of **0 to 5 percent** in this client group since 2001.
2 = a *decrease* of **5 to 10 percent** in this client group since 2001.
1 = a *decrease* of **over 10 percent** in this client group since 2001.

7.2 Table 11 presents a summary of the results. For the most part it appears from the mean scores that respondents indicated comparatively little growth in numbers of client groups, other than among general beach users. Additionally, there appeared to be no difference between residents and visitors at statistically significant levels, other than among recreational fishers, where visitors recorded more growth than residents. However, given the value of the standard deviations, it is evident that there exists some divergence of opinion. Consequently Table 12 breaks down the frequency distribution by indicating what proportion of the sample provided scores of five or above to any group, thereby indicating a belief in faster growth rates.

Table 11. Comparing Changes in Clientele Base

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Scuba Divers - Residents	4.00	13	.577	.160
	Scuba Divers – Visitors	4.62	13	1.044	.290
Pair 2	Recreational Fishers - Residents	4.22*	18	1.353	.319
	Recreational Fishers - Visitors	4.72*	18	1.674	.394
Pair 3	General Beach Users - Residents	5.14	22	1.424	.304
	General Beach Users - Visitors	5.55	22	1.471	.314
Pair 4	Surfers - Residents	4.74	19	1.327	.304
	Surfers - Visitors	5.11	19	1.449	.332
Pair 5	4WD Enthusiasts - Residents	4.43	14	1.158	.309
	4WD Enthusiasts – Visitors	4.43	14	1.158	.309
Pair 6	All Residents	5.90	10	2.079	.657
	All Visitors	5.90	10	1.853	.586

* = $p<0.05$ between visitors and residents

Table 12. Identifying Growth Groupings

Category of Clientele	**Percent score 5 and above**
Scuba Divers – Residents	3.3
Scuba Divers – Visitors	10.1
Recreational Fishers – Residents	11.7
Recreational Fishers – Visitors	18.3
General Beach Users – Residents	25.0
General Beach Users – Visitors	30.0
Surfers – Residents	13.3
Surfers – Visitors	18.3
4WD Enthusiasts – Residents	5.0
4WD Enthusiasts – Visitors	8.3
All Residents	1.7
All Visitors	1.7

7.3 Table 12 indicates that the main groups that generated growth are firstly visitors from outside of the region rather than residents, although there is some inconsistency in the data set in that the scores for the overall categories are lower than for the specific clusters of identified users. Second, it indicates that the highest user groups are the general beach users, followed by surfers and then recreational fishers. Other surveys have indicated that general beach users are among the largest groups visiting the Marine Park and thus there is expectation that the highest level of growth is associated with the largest Marine Park user group – thereby possibly indirectly indicating the main source of the noted 20 percent growth in turnover noted above.

8.0 External Factors Impacting on Business Growth

8.1 Respondents were also asked to identify factors other than changes in Marine Park management that they felt had impacted upon their patterns of trade, and to assess the nature of that impact on an 11 point scale where '1' represented 'an extremely negative impact' and '11' an 'extremely positive impact'. Respondents were able to list up to 10 items, but none did so and only one was able to list nine items. A total of 33 respondents mentioned 26 items at the first stage, which was to identify the leading factor that had influenced their business. Table 13 provides a list of the items as being of first importance ('factor mentioned') and remaining factors, as well as levels of replication. Those items of first importance that were given the highest score of 11 were 'good service, word of mouth', 'telemarketing' and 'water restrictions in 1993-4'. The most commonly mentioned impact was G.S.T (with four respondents providing this item with a mean score of 3.8 indicating a negative impact).

Table 13. List of Factors Identified as Impacting on Levels of Business

	First factor mentioned		Remaining factors	
Impact	Mean Score /11	Number of responses	Mean Score /11	Number of responses
Boat ramp closure	5	2	4	1
Building boom	0	0	11	1
Building slump	0	0	1	1
Building work in area	8	1	0	0
Business revitalisation	0	0	10	1
Cheap airfares	0	0	3.5	2
Closure of fisherman's Co-op	0	0	3	1
Council strategies	3	1	1	1
Decreased duration of tourist season	0	0	3	1
Drought	2.5	1	0	0
Economics	0	0	3	1
El Nino	0	0	10	1
General downturn in 2004/05	1	1	0	0
Good service, word of mouth	11	1	0	0
Government regulations in other areas	6	1	0	0
GST	3.8	4	5	3
Highway	2.5	2	2.5	2
Hogbin Drive North	7.5	1	0	0
Housing rate increases	0	0	3	1
Increased competition	3	1	5	2
Increased cycle paths	0	0	7	1
Increased insurance	0	0	3	2
Interest rate increase	0	0	1	1
Internet	0	0	11	1
Local advertising	0	0	5	2
Magazines	0	0	7	1
Marketing initiatives	4.5	2	10	1
Newspaper advertise	8	1	7	1
NRMA	0	0	7	1
Overprice sites at local caravan park	0	0	3	1
Overseas Tourists	0	0	8	1
Pay TV	0	0	4	1
Petrol price increases	0	0	2.7	7
Pirating (video)	3	1	0	0
Popularity of cycling	7	1	0	0

Previous guests	0	0	10	1
Reduced access to Moonee Creek	1	1	0	0
Reduced backpacker travel	0	0	2	1
Refusal of SIMP to dredge	0	0	2	1
Road changes at Park Beach	0	0	1	1
Sanctuary Zones	0	0	2	1
Sewer spills in Oct 04 and Apr 05	1	1	0	0
Siltation of creek at entrance/river	0	0	2.5	2
State Gov't Taxes (land & vendor taxes)	3.5	2	3.5	2
State Government policies	0	0	1	1
Telemarketing	11	1	0	0
Terrorism	7	3	8.7	3
Water restrictions 1993-94	11	1	0	0
Waterways Policies	2	1	0	0
Weather	0	0	5.5	2
Web site	0	0	8	1

8.2 Of the remaining factors, the highest scoring items were ‘building boom’, ‘business revitalisation’, ‘El Nino’, ‘Internet’, ‘marketing initiatives’ and ‘previous guests’. The greatest level of replication by respondents for “remaining factors” were ‘GST’, ‘terrorism’ and ‘petrol price increases’, but the major findings is the diverse number of items that are being mentioned, and, to an extent, the limited amount of agreement being expressed about impact items.

8.3 Generally speaking a series of categories could be identified to account for about 15 percent of the list of impacts provided. These were tax/interest rate changes of various types (G.S.T., vendor taxes, state taxes), changes in competition and local business growth allied with new construction, and changes dependent upon government policies and plans. The inverse finding is that no factor dominated business plans during the period since 2001. The overall impact of all items as measured by the mean score was 6.7 out of 11; indicating that taken together the external impacts tended to be moderately supportive of business expansion.

8.4 Finally, respondents were asked what was the overall impact upon their business from the changes in the management plan on an 11-point scale where 6 represented no change. The mean score was 6.1, indicating that for the sample as a whole the changes in Marine Park management was neutral.

9. Summary

9.1 A total of 51 businesses within the estimated economic zone of the Solitary Islands Marine Park completed the questionnaire. They covered many types of business and the largest response was received from the commercial accommodation sector. The sample is assumed to be representative in nature.

9.2 Of the businesses that provided information about the year in which they commenced operations, 50 percent started before 1990, and the remainder after that year.

9.3 Results indicate an increase in both part time employees and annual turnover. The mean number of full time employees per business was approximately 3.1 throughout the period since 2001, with initially about the same number of part-time staff being recruited. However, over the period since 2001, the number of peak season part-time staff increased to approximately 5; and over the same period estimated annual turnover for the sample increased by about 20 percent. Based on a smaller sub-sample the best estimate of sample turnover indicates that that turnover increased from about AUS$13 million to AUS$15.7 million.

9.4 Most of this growth (staff and turnover) has come from increased visitation. Only a handful of businesses indicated any significant amendment of their operations by extending product range or introducing new products. The largest source of increased business seems to have been generated by out of region visitors, notably those who are described as general beach users, followed by beach users who are resident in the region. Surfers then follow with recreational fishermen being next.

9.5 There was little evidence that management changes in the Marine Park had adversely affected the turnover of the businesses surveyed. Only two respondents perceived delays to development projects were caused by new management regimes, and the one case where these delays were costed, it was assessed that the delays cost the business AUS$10,000.

9.6 A list of 33 respondents provided a list of 96 reasons in the general external environment that had impacted upon their business; and together it was estimated that, with a score of 6.7, these in total had a moderately positive impact upon the business community.

9.7 In summary, there is little evidence to suggest that changes in Marine Park management have had a negative impact on the turnover and employment patterns of the local business community. Given that other surveys have indicated high levels of satisfaction resulting from Marine Park visitation, the continuation of those levels that result from sustaining the environment of the Park may be said to contribute to the region's economic wellbeing to the extent that businesses have a dependency on tourism.

Appendix 1. Small Business Survey

The NSW Marine Parks Authority in conjunction with the Coffs Harbour Chamber of Commerce is seeking information to help it in the management of the Solitary Islands Marine Park and its relationship with the local community. This questionnaire collects information to make that assessment possible. The questionnaire will take about 10 minutes to complete. Your answers are anonymous and totally confidential. Your replies will be very much appreciated.

Section One — The nature of your business

Can you please describe the nature of your business by ticking the appropriate box?

Bait and Tackle Shop	☐ 1	Backpackers accommodation	☐ 2
Dive Shop	☐ 3	Motel	☐ 4
General Store	☐ 5	Hotel	☐ 6
Commercial Tour Operator	☐ 7	Caravan Park	☐ 8
Chandlery / boat sales	☐ 9	Supermarket	☐ 10
Estate Agents	☐ 11	Restaurant	☐ 12
Guest House/B&B/Home stay	☐ 13	Holiday home rentals	☐ 14
Fast food outlet	☐ 15	Resort	☐ 16

Other (please specify) ____

In which year was your business established? ______

Is your business

Family owned and managed	☐ 1
Leased and family managed	☐ 2
Owned by and part of a national chain	☐ 3
Part of a national franchise	☐ 4

Where is your business located?

____ postcode? ______

Section Two — The development of the business?

Over the past years, can you please indicate the average number of full-time and part-time staff you employed in a week during the summer peak tourism season (Dec/Jan/Feb) and the off-peak season (Jun/Jul/Aug)? Include yourself (and family members if appropriate) as an employee.

Year	Peak Season - Full-time	Off Season – Full-time	Peak Season – Part time	Off Season – Part-time
2001				
2002				
2003				
2004				
2005				

Using 2001 as the base year, can you please indicate how your turnover has changed over the period **using an index where 2001 = 100**. For example, if in 2002 your turnover went down 5%, then in 2002 the value would be 95, if in 2003 your business recovered to 2001 levels, the index would be 100, and if it grew by 5% in 2004 the index would be 105

Turnover Index 2001 100 2002 _____ 2003 ____

2004 ___ 2005 _____

What is the current value of your annual turnover $________ (approximately?)

Please turn over

Section Three Customer mix

There are different types of local people and visitors who use the Marine Park. Below are listed some categories who might be using your services. We would like to know if you have identified any possible changes in the *numbers* of these people. It is appreciated that some of these categories might not apply, but we would appreciate it if, at the very least, you could indicate changes in the *numbers* of local residents and visitors who use your business using the scale where:

7 = an *increase* of **over 10 percent** in this client group since 2001.
6 = an *increase* of **5 to 10 percent** in this client group since 2001.
5 = an *increase* of **0 to 5 percent** in this client group since 2001.
4 = **no change** in patterns of client group since 2001.
3 = a *decrease* of **0 to 5 percent** in this client group since 2001.
2 = a *decrease* of **5 to 10 percent** in this client group since 2001.
1 = a *decrease* of **over 10 percent** in this client group since 2001.

0 = Don't know, have no knowledge

Client Group – Local Residents	**Score**	**Client Group - Visitors**	**Score**
Local Residents		**Visitors**	
Scuba divers		Scuba divers	
Recreational Fishers		Recreational Fishers	
General beach users		General beach users	
Surfers		Surfers	
4 wheel drive enthusiasts		4 wheel drive enthusiasts	
Others (please specify below)		Others (please specify below)	
Total Local Residents		*Total Visitors*	

What percentage of your **current** business is due to local residents? _______

Section Four

If you have any comments (either positive or negative) you may want to make about the perceived impacts that Marine Park management changes have made on your business, please write them here.

How have you changed your business as a consequence of the above-perceived impacts or changes?

Please turn over

Section Five

Since the introduction of the revised zoning plan for the Marine Park in August 2002

Do you believe that there has been an increase in eco-tourism in the area?

No ☐ 1 Yes ☐ 2

If yes, by how much _________%

Have any of your building and / or development works been affected or delayed as a result of the zoning plan for the Solitary Island Marine Park or MPA management?

No ☐ 1 Yes ☐ 2

If yes,
Please estimate the length of the delay _____ days

Please estimate costs of delay or extra approval requirements $_______

Please specify what type of development ______________________________

Section Six

Since the introduction of the revised zoning plan for the Marine Park in August 2002, were there other factors that impacted on your business such as: the Coffs Harbour boat ramp closure in 2003/04 holiday period, terrorist activity overseas, council developments or strategies, implementation of GST, industrial relation reforms, new marketing initiatives, competition from local or interstate businesses, highway bypass issues etc.

No ☐ 1 Yes ☐ 2

If yes – please specify the impact and rate the impact in the box in accordance with the following scale:

Extremely Negative Impact 1 2 3 4 5 6 7 8 9 10 11 Extremely Positive Impact

Major factors impacting upon your business since 2002	**Rating**
• (Example – Advertising on radio)	8
•	
•	
•	
•	
•	
•	
•	
•	

Please turn over

In light of the above impacts, identify on the scale the impact (if any) of the implementation of the Zoning Plan for the Solitary Islands Marine Park on your business? (6 indicating no impact).

Extremely Negative Impact	1 2 3 4 5 6 7 8 9 10 11	Extremely Positive Impact

Thank you for your valuable time and assistance

Appendix 2. Mean Numbers of Employees

	N	Minimum	Maximum	Mean	Std. Deviation
Number of Employees - 2001 - FT Peak Season	35	1	13	3.01	2.463
Number of Employees - 2001 - FT Off Peak	32	1	13	3.02	2.579
Number of Employees - 2001 - PT Peak Season	36	1	20	3.96	3.888
Number of Employees - 2001 - PT Off Peak	32	1	20	3.77	4.054
Number of Employees - 2002 - FT Peak Season	36	1	13	3.04	2.636
Number of Employees - 2002 - FT Off Peak	33	1	13	3.08	2.739
Number of Employees - 2002 - PT Peak Season	35	1	22	4.19	4.298
Number of Employees - 2002 - PT Off Peak	32	1	20	3.95	4.352
Number of Employees - 2003 - FT Peak Season	42	1	13	3.18	2.793
Number of Employees - 2003 - FT Off Peak	39	1	13	3.06	2.884
Number of Employees - 2003 - PT Peak Season	41	1	23	4.82	4.932
Number of Employees - 2003 - PT Off Peak	36	1	21	4.35	4.766
Number of Employees - 2004 - FT Peak Season	43	1	13	3.19	2.704
Number of Employees - 2004 - FT Off Peak	41	1	13	3.09	2.770
Number of Employees - 2004 - PT Peak Season	43	1	25	4.86	4.997
Number of Employees - 2004 - PT Off Peak	39	1	21	4.28	4.808
Number of Employees - 2005 - FT Peak Season	44	1	13	3.16	2.704
Number of Employees - 2005 - FT Off Peak	41	1	13	3.11	2.774
Number of Employees - 2005 - PT Peak Season	43	1	28	5.07	5.758
Number of Employees - 2005 - PT Off Peak	39	1	26	4.56	5.568