

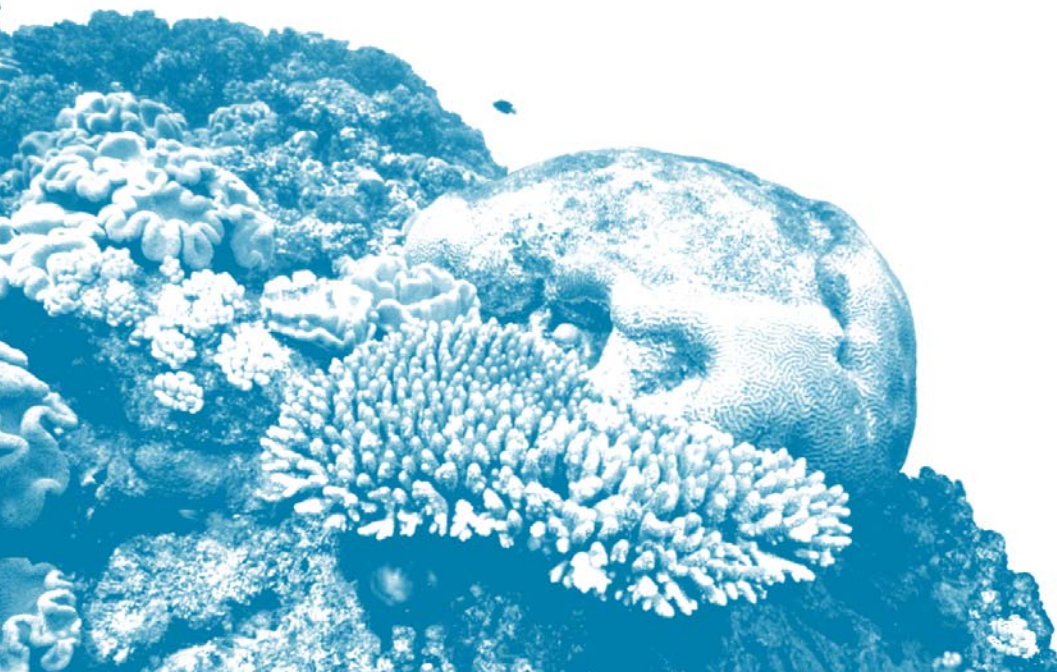


Australian Government
Great Barrier Reef
Marine Park Authority

RESEARCH PUBLICATION NO. 95

The recreational dive and snorkelling industry in the Great Barrier Reef: profile, economic contribution, risks and opportunities

Jim Binney



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Published by the Great Barrier Reef Marine Park Authority

ISBN 978 1 876945 86 2 (pdf)

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The National Library of Australia Cataloguing-in-Publication entry :

The recreational dive and snorkelling industry in the Great Barrier Reef [electronic resource] : profile, economic contribution, risks and opportunities /Jim Binney.

ISBN 978 1 876945 86 2 (pdf)

Research publication (Great Barrier Reef Marine Park Authority. Online) ; 95.

Recreational dive industry--Economic aspects--Queensland--Great Barrier Reef.

Scuba diving--Queensland--Great Barrier Reef.

Skin diving--Queensland--Great Barrier Reef.

Binney, Jim.

Marsden Jacob Associates.

Great Barrier Reef Marine Park Authority.

338.477972309943

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Executive Summary

BACKGROUND & APPROACH

Marsden Jacob Associates (Marsden Jacob) has been engaged by the Great Barrier Reef Marine Park Authority (GBRMPA) to undertake a study into the composition and economic contribution of the Great Barrier Reef recreational diving and snorkelling (RDS) industry. In addition, this report assesses key risks and opportunities faced by the RDS industry in the short to medium-term.

In undertaking the study, Marsden Jacob reviewed all existing available information and supplemented this with interviews of RDS operators. In total, Marsden Jacob interviewed 13 operators specifically selected by GBRMPA to provide a reasonably representative sample of operators across the Reef.

KEY FINDINGS

The RDS industry is a key component of the tourism and recreation sector in the Reef region, with over 1 million visitors undertaking RDS activities (predominantly diving and snorkelling) each year. These 1 million visitors undertook approximately 3.1 million RDS activities in 2007. While RDS takes place across all of the Reef regions, the Cairns and Whitsunday regions dominate.

As with Reef tourism in general, activity levels in the RDS industry have remained relatively stable since 2005. However, in the Whitsunday region there is evidence of a significant decline in activity over this period; a result largely attributed to a decline in the certified dive market.

The industry is very diverse, with products ranging from short half day snorkelling activities through to live aboard diving products that explicitly incorporate scientific research. There is also significant diversity in the size of operators, ranging from owner-operated single vessels providing services into niche markets, through to large multi-million dollar operators with fleets of larger vessels.

The level of competition in the industry is high and virtually all operators have been facing an increasing cost-price squeeze in recent years. While demand and prices received have not increased in recent years, many costs (e.g. fuel) have risen significantly. Reported profits from interview participants were rarely above five per cent of turnover, relatively low given the commercial risk and volatility of the industry. It is likely that the current difficult market conditions will continue for the short to medium-term, which may result in further consolidation in the industry.

As shown in table 1 below, Marsden Jacob estimate that the economic contribution of the RDS sector to the Reef catchment economy is \$470 to \$770 million a year. Flow-on impacts lead to a total contribution to the Queensland economy of \$560 to \$910 million, and to the national economy of \$670 to \$1 090 million.

Moreover, Marsden Jacob estimate that employment associated with the RDS industry is between 5 700 and 9 200 full-time equivalents (FTEs) within the Reef catchment and between 7 100 and 11 500 FTEs nationally.

Table 1. Economic contribution of RDS industry to economy

<i>Region</i>	<i>Total contribution (\$ M.)</i>	<i>Total employment (FTE)</i>
Reef catchment	470 – 770	5 700 – 9 200
Queensland	560 – 910	6 500 – 10 500
Australia	670 – 1 090	7 100 – 11 500

Source: Marsden Jacob estimates 2008

While these figures were estimated using a methodology consistent with previous estimates of the broader tourism sector, it is likely that they understate the actual importance of diving and snorkelling activities to tourism and recreation in the Reef. It is clearly not possible to estimate with any degree of accuracy the extent to which regional tourism would decline if RDS opportunities were no longer available. However, it is reasonable to assume that many prospective tourists to the Reef catchment would choose to go elsewhere if an option to undertake a quality RDS activity was not available.

It should be noted that the RDS industry is facing a number of key risks. In particular, softening demand, a loss of market share to overseas destinations and increasing operating costs, are all making for a difficult operating environment.

While the risks posed to the industry in the short-term are largely economic in nature and outside the control of industry, there are a number of opportunities available to mitigate risks, particularly those that are designed to slow or reverse the decline in market share. Foremost is the opportunity to ensure potential RDS visitors are aware of the superior attributes of the Reef RDS industry (better service, safety and reef condition) when compared to major competing destinations.

1. Introduction and approach

Marsden Jacob Associates (Marsden Jacob) has been engaged by the Great Barrier Reef Marine Park Authority (GBRMPA) to undertake a study into the composition and economic contribution of the Great Barrier Reef recreational diving and snorkelling (RDS) industry.

The goal of the project is twofold:

- **To scope and estimate the potential contribution of the RDS industry** to the economy. This is to better understand the relative contribution of the RDS industry to the broader tourism sector in the Reef region.
- **To provide insight into the diversity in economic activities within the RDS industry** and to better understand the industry's risks and opportunities. This should assist both GBRMPA and industry operators adapt to changes emerging in the tourism sector in the Reef and competing locations.

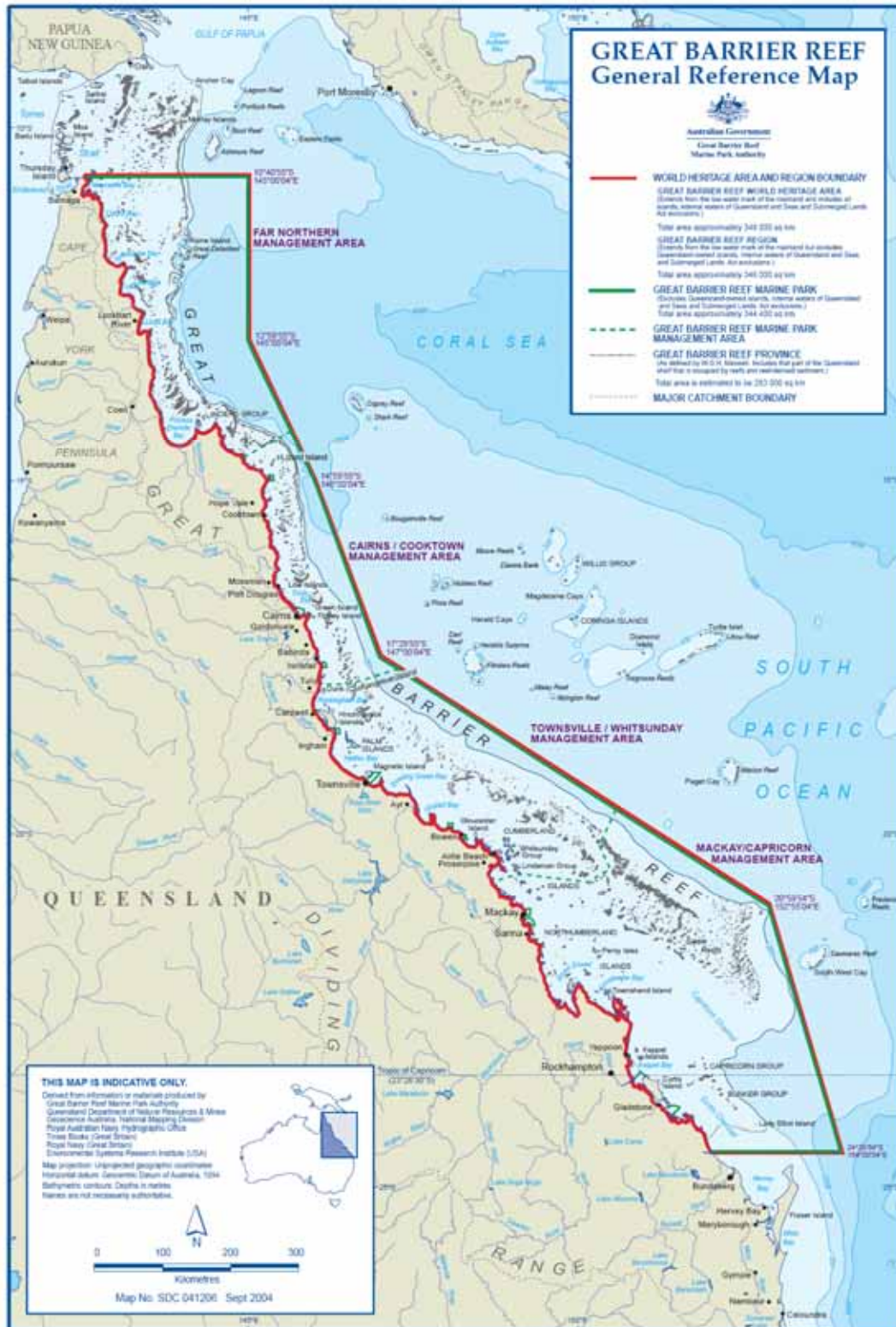
This report summarises findings from Marsden Jacob's research and analysis of the Reef RDS industry.

1.1. Study area

The Reef is approximately 2 300 km in length and varies between 60 km and 250 km in width. The Marine Park is one of the largest marine protected areas in the world (approximately 344 000 km²) and stretches from the northern tip of Queensland to just north of Bundaberg (Map 1.1).

The boundary of the Reef catchment area as defined in this study is essentially the catchment area for waters that flow into the Great Barrier Reef Marine Park and is defined geographically as a set of Local Government Areas (LGAs), where these LGAs have rivers that flow into the Marine Park.

For the purpose of the analysis in this study, the Reef catchment area is defined as consisting of the Australian Bureau of Statistics (ABS) Statistical Divisions of Far North, Northern, Mackay and Fitzroy. This is an approximation in that while the Statistical Divisions of Northern, Mackay and Fitzroy are wholly contained within the catchment area, only around 85 per cent of the Far North Statistical Division is within the catchment area; the other 15 per cent in the south west is sparsely populated.



Map 1.1. Great Barrier Reef
 Source: GBRMPA 2008.

1.2. Broad approach

Marsden Jacob's approach to this study relied primarily on existing information, supplemented with data from semi-structured interviews with relevant industry representatives. The study was undertaken in a number of systematic phases, outlined as follows:

- **Phase one: Literature and data review.** This included several previous research reports relating to the tourism and dive industries in the Reef region, as well as data sourced from the ABS, Tourism Queensland and GBRMPA
- **Phase two: Semi-structured interviews and surveys of industry.** 13 interviews were undertaken with RDS operators. The operators were specifically selected by GBRMPA to provide a representative sample of operators across the Reef. In addition, 11 participants in the interviews and a further nine RDS operators provided confidential financial data specific to their operations.¹ It should be noted that the sample size is too small to provide any statistically significant results²
- **Phase three: Data and information analysis.** Estimates were made of the economic value of the RDS market to the Reef catchment economy, Queensland and the national economy

Note that formal consultation with the Tourism and Recreation Reef Advisory Committee (TRRAC) was undertaken at various stages of the project to ensure the approach and findings were relevant to both GBRMPA and the industry.

The remainder of this Report is structured as follows:

- **Section 2** provides a profile of the RDS industry in the Reef region.
- **Section 3** presents Marsden Jacob's estimates of the economic contribution of the RDS industry to the Reef, Queensland and Australian economies.
- **Section 4** highlights some of the key risks and opportunities for the RDS industry in the Reef in the short to medium-term.
- **Section 5** provides a summary of the key findings.

¹ Care has been taken to ensure the confidentiality of commercially sensitive data is retained. The source of non-commercially sensitive information is referenced where appropriate.

² Furthermore, developing a robust and representative sampling strategy would be difficult as whilst GBRMPA data can indicate if a tourism operator *has* a license to provide RDS services, it cannot provide estimates of actual RDS activities.

2. Profile of the recreational dive and snorkel market in the Reef

The RDS industry is an important sub-sector of the broader tourism sector and primarily consists of businesses that offer day and live aboard services for recreational snorkelling and scuba diving and dive certification courses. In addition, the RDS industry provides scuba diving and snorkelling options for residents of the region. This section outlines key aspects of the dive and snorkel market in the Reef.

2.1. Tourism in the Reef

Reef based tourism has steadily grown since the early to mid 1990s and is a major source of economic activity and employment in the Reef catchments. Figure 2.1 shows monthly Reef visitation based on GBRMPA Environmental Management Charge (EMC) data. The data shows a significant degree of seasonality and a slow upward trend in visitation between 1997 and 2005.

However, since 2005, visitor numbers have been in decline. This is attributable to a number of largely external factors, the most important of which is the appreciation of the Australian dollar. This increases the relative cost of holidays on the Reef for international visitors and reduces the relative prices of competing overseas destinations for Australian holiday makers.

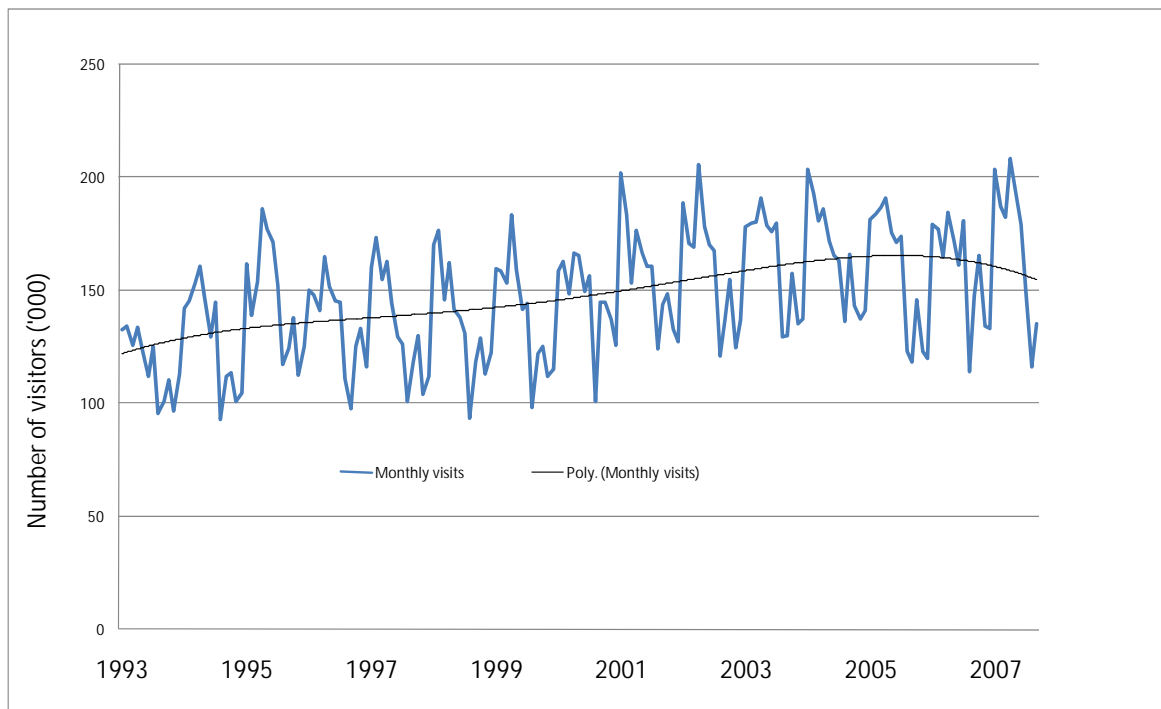


Figure 2.1. Reef visitation trends

Source: GBRMPA 2008.

As seen in figure 2.2, visitation statistics for the Reef as a whole disguise significant regional differences in visitation trends across the region. This figure shows Reef-wide data, as well as data for two Reef management areas where the bulk of RDS activity is concentrated (the Cairns and Whitsunday planning areas).

This illustrates that, while total Reef visitation has increased by around 40 per cent over the 1994 to 2007 period:

- Visitation in the Cairns planning area has only grown by around 15 to 20 per cent during the same period. Furthermore, visitation levels in the Cairns area, while fluctuating, have remained static since 2000.
- Visitation in the Whitsunday planning area grew rapidly between 2000 and 2003, but has since declined sharply. Total visitation however, remains 75 to 80 per cent higher than in the mid 1990s. Industry sources indicate that much of the decline has been specifically in the certification dive market.

To the extent that the RDS market approximately tracks the reef-based tourism market as a whole, it is reasonable to conclude that market growth has been minimal at best since 2000 and that the Whitsunday region has suffered a significant decline since 2003. This conclusion is consistent with anecdotal evidence provided by operators during interviews.

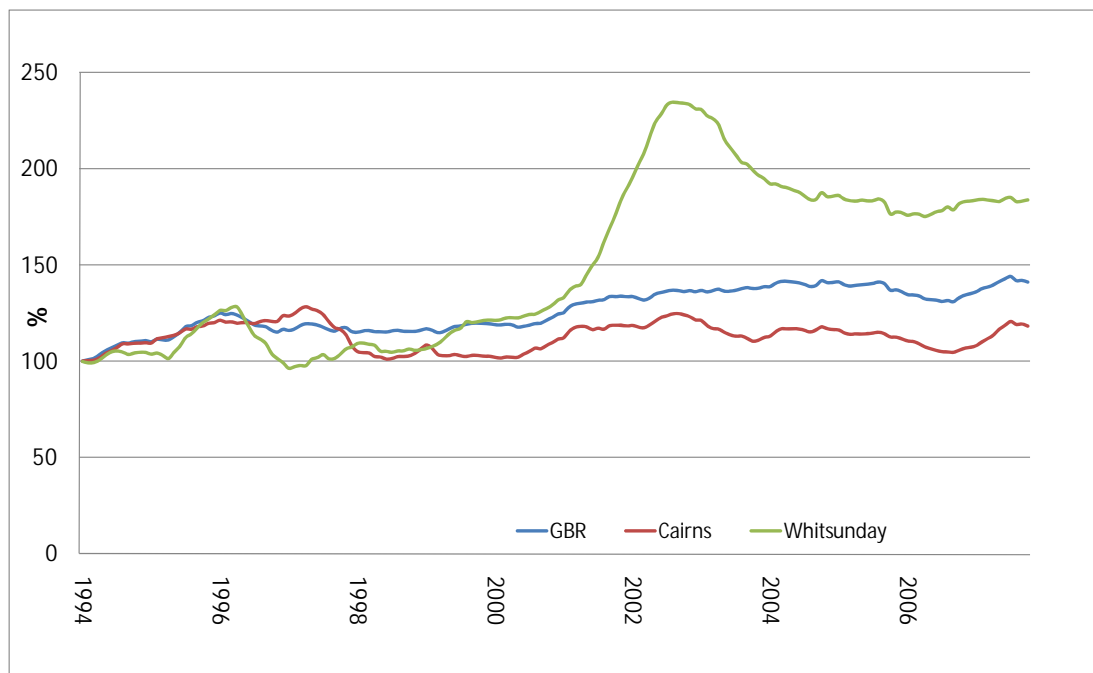


Figure 2.2. Trends in activity – Reef, Cairns planning area, Whitsunday planning area
Source: GBRMPA 2008.

2.2. The recreational dive and snorkelling industry

Research undertaken by Tourism Queensland³ indicates that around 1.2 million international and domestic overnight visitors went diving and/or snorkelling in Queensland during the year ending March 2007. This accounts for approximately six per cent of all overnight visitors to the State.

The research indicates that, for **international visitors**:

- Tropical North Queensland was the preferred destination, accounting for 55 per cent of RDS activities
- 24 per cent undertook both snorkelling and scuba diving activities, while 68 per cent only went snorkelling and eight per cent only went scuba diving

³ Tourism Queensland, 2008, *Queensland Scuba Diving and Snorkelling Report: Visitor activities and Characteristics*. Tourism Research Australia, Canberra.

- 11 per cent of scuba divers were certified and 33 per cent of snorkelers had never snorkelled before
- The majority (around 90 per cent) chose to dive as part of an organised activity on a boat trip
- 49 per cent of scuba divers and 62 per cent of snorkelers went just once during their trip

For **domestic visitors**, Tourism Queensland research found that:

- The Whitsunday planning area was the most popular destination, mentioned by 29 per cent of respondents
- 14 per cent undertook both snorkelling and scuba diving activities, while 77 per cent only went snorkelling and nine per cent only went scuba diving
- 44 per cent of scuba divers were certified and 88 per cent of snorkelers had previous experience – i.e. significantly more experienced than international visitors

2.3. Estimated recreational dive and snorkelling activity

As noted above, Tourism Queensland undertook a major survey of participants in the RDS market, primarily in 2007. This survey collected data on key trip characteristics including seasonality, visitor profiles, activities and locations, dive and snorkelling activity, and expenditure.

While the sample size⁴ constrains the accuracy of estimates drawn from the data, particularly for the domestic market, the data does allow approximate estimates of RDS activity to be established. Key data relating to the RDS industry are shown in tables 2.1 and table 2.2.

Table 2.1. RDS visitor numbers (2007)

<i>Activity</i>	<i>International visitors (‘000)</i>	<i>Domestic visitors (‘000)</i>	<i>Total visitors (‘000)</i>
Snorkel	536	416	952
Scuba dive	190	111	301
Total RDS ⁵	585	454	1 039

Source: Tourism Queensland 2008.

Slightly over 1 million visitors to the Reef undertook RDS activities, with the majority of visitors undertaking snorkelling.

⁴ 6 216 domestic and 14 863 international visitors to Queensland were surveyed as part of the National Visitor Survey undertaken by Tourism Research Australia. Of the domestic respondents, 273 reported having undertaken either scuba diving or snorkelling activities in Queensland. Of the international respondents, 1 685 had been scuba diving and 4 558 had been snorkelling on the current trip.

⁵ Note: Dive and snorkel do not add to the RDS total as some visitors participated in both types of activities.

Table 2.2. Estimated RDS activities (2007)

<i>Activity</i>	<i>International visitors (‘000)</i>	<i>Domestic visitors (‘000)</i>	<i>Total visitors (‘000)</i>
Snorkel	1 100	886	1 986
Scuba dive	706	381	1 087
Total RDS	1 806	1 267	3 073

Source: Tourism Queensland 2008.

Key points to note from the survey include:

- Over 60 per cent of international overnight visitors to the Reef catchment undertake some form of RDS activity, while almost 30 per cent of international overnight visitors to Queensland as a whole undertake some form of RDS activity.
- Approximately 85 per cent of tourists participating in RDS activities in Queensland undertake those activities in the Reef. However, the proportion of international visitors undertaking their RDS activities in the Reef is significantly higher (94 per cent), than for domestic tourists (75 per cent).

Frequency of visits

International visitors undertaking RDS activities in the Reef catchment are most likely to be first time travellers to Australia. Key differences in the proportion of first time visitors across major international tourism sub-sectors are shown in table 2.3.

Table 2.3. Percentage of first time visitors

<i>Market</i>	<i>% first time visitors</i>
Snorkel Reef	77
Scuba dive Reef	80
Snorkel Queensland	76
Scuba dive Queensland	79
All visitors Queensland	55
All visitors Australia	43

Source: Tourism Queensland 2008.

Given the fact that around 80 per cent of RDS international tourists to the Reef are first time visitors, the importance of winning international market share and providing a positive experience is vital to ensure the continued viability of the international RDS industry in the Reef. Strategies to attract subsequent visits are probably of a lower order priority, although the net benefits from first-time versus repeat visitors are largely unknown. As one operator stated:

“We should not be in the game of creating long-term scuba divers. Our primary focus should be on maximising the Reef’s share of the international RDS market for consumers that will probably be seeking their once in a lifetime dive adventure. This requires a major focus on destination marketing backed up by quality service to ensure the Reef’s reputation as a quality and safe dive experience is maintained.”⁶

⁶ Reef dive operator.

2.3.1. Market drivers

The dominant tourism market for the RDS industry in the Reef is the holiday leisure market, accounting for around 85 per cent of all visitors that undertook a RDS activity during the 12 months to March 2007. The remaining 14 per cent of visitors who undertook a RDS activity are business travellers (eight per cent) or were visiting friends and relatives (six per cent). This can be compared with visitors to Queensland as a whole, where 44 per cent of visitors are part of the holiday leisure market, 19 per cent are business travellers, and 31 per cent visiting friends and relatives (figure 2.3).

Key domestic markets are New South Wales and Queensland, while key international markets include Japan, the United States of America, Germany, and the United Kingdom. While most RDS operators stated that there were no underlying trends in the source of international RDS tourists, recent changes to airline policy was having a distinct impact in some regions, particularly Cairns, where the proportion of Japanese customers has dropped due to reductions in direct airline services between Japan and Cairns.

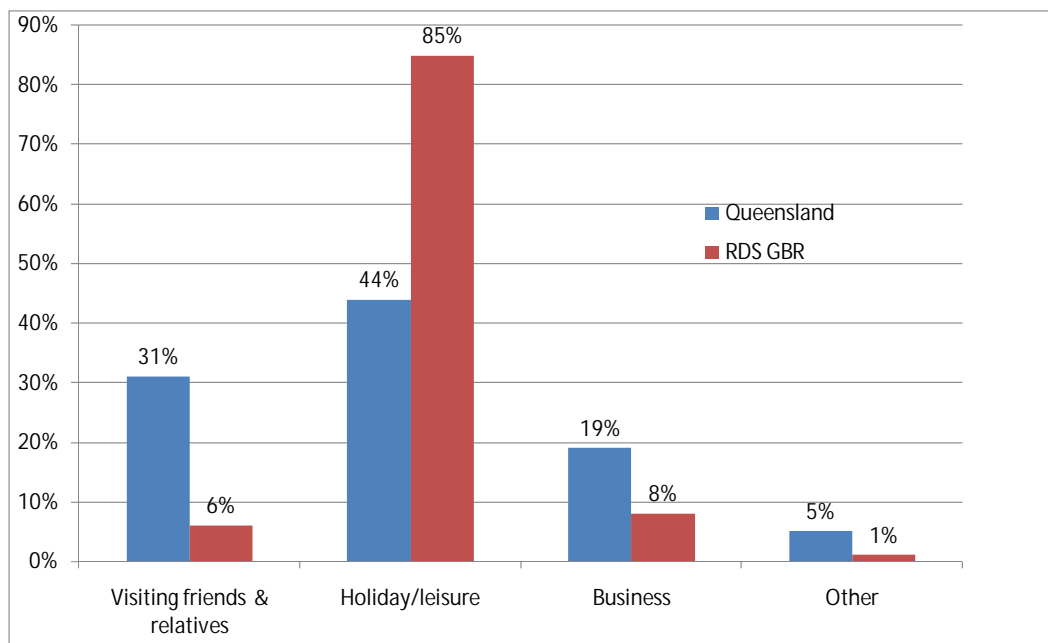


Figure 2.3. Market sources for RDS activities

Source: Tourism Queensland 2008.

2.4. Industry structure and dynamics

A brief overview of the RDS industry structure and dynamics is given below, information and data for this section were sourced from a number of published sources, as well as from interviews and surveys of industry operators. The presentation of some of the information from interviews/surveys has been limited due to commercial sensitivity concerns.

2.4.1. The spectrum of RDS activities

The RDS industry is extremely diverse, both in terms of activities offered, the size of operations, and the incorporation of RDS products/services into a broader tourism package. Table 2.4 summarises an indicative proportion of operators that offer specified RDS activities.⁷

While table 2.4 provides an indicative overview of the spectrum of activities offered by operators, quantitative data on the actual industry structure by activity (e.g. day dive, certification) is not available. In addition, the data collected through the interview and survey processes was not sufficient to develop any credible estimates. However, general conclusions from the interviews include:

- Day activities are likely to dominate the market in terms of the absolute number of RDS activities undertaken. In addition, day activities are predominantly snorkelling activities
- The industry structure differs across different regions, with the Whitsunday region more reliant on the certification market than other areas
- The live aboard industry is relatively smaller, but attracts a greater degree of experienced divers and provides the opportunities for more in-depth education and research opportunities for clients
- The levels of uptake for some services are relatively low. For example, while approximately 20 per cent of operators indicated that fishing was an option available to customers, that activity was rarely undertaken, largely because the focus of the consumer experience was RDS activities

Table 2.4. RDS activities offered

<i>RDS activity</i>	<i>% of operators offering RDS activity</i>
Snorkel	100
Dive	85
Day trip	40
Live aboard	70
Education and/or research ⁸	40
Fishing	20

Source: Marsden Jacob estimates 2008.

Products and services

The provision of different products and services is rarely mutually exclusive and most operators offer multiple products/services from the same trip in order to meet a broader range of market demand. For example, the majority of day trip activity is for snorkelling; however a relatively small number of customers on day trips undertake scuba diving. In addition, many operators enable customers to opt to ‘trade-up’ from a snorkelling to a scuba activity while on the vessel. Virtually all operators that offered a live aboard option also ran day trips on occasions, depending on market demand and vessel/staff availability.

⁷ This data was compiled from the outcomes of Marsden Jacob semi-structured interviews and surveys. Note: this analysis is based on operators, not the number of clients and GBRMPA EMC data does not distinguish between RDS activities and other activities undertaken on the Reef.

⁸ This is likely to be an overestimate and is largely a function of the sample taken.

Approximately 40 per cent of operators interviewed offered some educational aspect to the RDS experience. This ranged from a very simple briefing on key marine species prevalent in the area (usually while travelling to the Reef) through to detailed lectures on some live aboard trips. In addition, some niche operators actively participate in research (often as a contractor to a research institution) and research is a specific focus for some trips. A number of the operators interviewed had one or more staff with relevant tertiary qualifications (e.g. marine biology).

Diver certification was also offered by a number of operators. Dive training courses are undertaken by approximately 10 per cent of international and seven per cent of domestic RDS tourists.⁹ Courses ranged from a basic introductory course offered on a regular basis, through to highly specialised advanced courses (offered only once or twice a year). Often dive certification services are offered in conjunction with another RDS related businesses (e.g. retail outlets/backpackers) or on a contract basis.

The feature dive sub-sector of the market is becoming increasingly important, with significant interest by consumers in seeking out a unique experience such as wreck dives, cod holes and Minke whales. These feature dives have a greater tendency to be offered by smaller operators and often during a limited period.

Mix of divers and snorkelers

Day trip operators generally had a higher proportion of snorkelers within their mix of customers. This was largely due to their primary market being either: an RDS activity as one of many activities on a holiday within the Reef catchments; or customers simply seeking a 'taste' of a Reef water experience where fish and coral could be viewed.

Live aboard operations generally had a higher proportion of certified divers. In addition, live aboard operations had a higher proportion of customers that were on a repeat dive trip to the Reef.

RDS location variation

Operators that primarily concentrated on the day trip market or that had larger vessels tended to have a lower level of variability in the locations offered to consumers within any given year. Smaller operators tended to make RDS location changes more regularly due to seasonal or daily dive conditions. This was also due to many smaller operators offering charter services.

2.4.2. Other industry characteristics

Vessel size

There was a significant variance in the scale of operators across the Reef. Vessel sizes ranged from very small (e.g. less than six passengers per trip) to very large vessels (more than 60 passengers per trip). Key points to note include:

- Larger vessels were concentrated in the day trip market, with most activities centred on a snorkelling experience in regions where the water depth is relatively shallow. Larger vessels generally operated out of larger centres with direct air services (i.e. Townsville and Cairns).

⁹ Tourism Queensland, 2008, *Queensland Scuba Diving and Snorkelling Report: Visitor activities and Characteristics*.

- Smaller vessels were spread across the day trip and live aboard markets. Because the bulk of live aboard activities occur on relatively small vessels, the smaller vessels tend to attract a higher ratio of scuba diving and certification RDS activities.

Integrated products and services

RDS activities are often available as part of the broader suite of tourism products, either directly, or indirectly via a contractual relationship with another party. In some cases RDS products/services are effectively used as a ‘loss leader’ by resorts in order to maintain or increase market share, where the profits are derived by other segments of a ‘resort package’. As one interviewee indicated:

“Many resort operators include RDS as part of the broader suite of options available within the ‘resort package’. Rarely are these RDS operations commercially viable in their own right. However, they are necessary as part of the broad suite of products and services available at the resort that customers expect. Without the RDS product, the resort is likely to be less attractive to consumers within a very competitive market.”¹⁰

RDS activities in the Reef are significantly more likely to be undertaken as part of an organised activity delivered by a commercial operator than for RDS activities in Queensland as a whole (65 per cent compared with 53 per cent).

2.4.3. Industry competition and profits

While data on levels of competition and profits for the RDS industry are not publically available, information and data provided during the interviews and surveys provides some generalised findings.

Industry competition

Over the past five years the level of competition within most sub-sectors of the RDS industry has increased significantly. This is due to two key drivers. Firstly, the demand for RDS activity has grown little, if at all, and there is significant anecdotal evidence to suggest that some sub-sectors of the market have actually contracted in recent years. Secondly, there is evidence of a slight increase in capacity in some segments of the market in more recent years.

The international certification market was highlighted by a number of operators as a market where demand has declined considerably, with much of the demand now being met from competing destinations such as Thailand, where the total cost of a holiday including dive certification can be lower. As one RDS operator from the Whitsunday region advised:

“While the cost of undertaking a basic certification course in the Reef versus competing regions such as Thailand is not significantly different, the cost of the complementary products (food, accommodation, entertainment) are significantly higher in the Reef. This in conjunction with other external factors such as the exchange rate have seen significant market share lost overseas.”¹¹

¹⁰ Anonymous Reef tourism operator.

¹¹ Reef dive operator offering certification services.

Along with the certification market, there was also evidence of increased levels of competition in the day trip market (primarily snorkelling). Because many consumers of these activities are unable to easily differentiate between operators, competition based on price is prevalent. This results in prices within a region all gravitating towards the lowest price on offer. This can also result in heavy discounting during periods where capacity significantly exceeds demand. While this strategy may work in the short term, this can limit the ability of operators to meet longer term costs (such as vessel refurbishments).

The increased level of competition within the sector has already seen a certain degree of consolidation between larger operators. One operator interviewed was of the view that more consolidation was inevitable, stating:

“Given the underlying trend in tourism in general and the RDS market, a greater degree of consolidation within the sector is almost inevitable within the medium-term as the sector seeks further cost efficiencies.”¹²

The interviews generally indicated that, while competition within niche and live aboard markets was significant, those markets had not suffered from the recent downturn as much as the RDS market as a whole.

Industry profits

Industry wide data on profit levels is not readily available due to commercial confidentiality and the sample size used for the study was insufficient to develop quantitative estimates of industry profitability. However, selected information and data on profit levels obtained from operators during interviews provides a number of generalised findings. These include:

- Profit levels have generally been declining for several years as competition and operating costs have increased; one operator reported a 37 per cent decline in the profitability of their day trip operations in the past five years.
- Where financial data was provided, pre-tax operating profit levels were rarely above five per cent of turnover¹³ - a relatively low level of returns given the relatively high financial risks involved in the RDS industry. While low profit levels are often accepted for businesses with steady cashflows, the variability and uncertainty of cashflow for many operators in the RDS sector would suggest higher profit levels would be expected by commercial investors to compensate for the additional cashflow risks.¹⁴
- Reported returns on assets were typically lower than the cost of capital, constraining future investment.¹⁵
- Several operators reported very low profit levels or operating losses. Where operating losses were occurring, business were generally only continuing due to operators' external income sources, or where the losses of RDS operations are offset by profits from other product lines within an integrated business (such as a resort).

¹² Reef dive operator.

¹³ This compares to an operating profit level of 9.3 per cent for the Accommodation and Food Services Sector in 2006-07. See: ABS, 2008, Australian Industry, Cat: 8155.0.

¹⁴ It should be noted that there are no industry benchmarks against which the commercial performance of the Reef RDS sector can be compared.

¹⁵ The returns on a commercial investment should be commensurate with the levels of risk of a venture (i.e. investments with higher risks should ideally attract higher returns).

- While expenditure on direct marketing was often relatively low, particularly for smaller operators, many smaller operators stated revenues were often significantly reduced due to the commissions to third parties. Larger RDS firms tended to undertake more direct marketing expenditure to maintain market share and revenue streams were, generally, less impacted by the need to pay commissions.

2.4.4. Seasonality

Tourism in northern Queensland is subject to a great degree of variability between seasons, particularly in the tropical north where many visitors have a preference to visit in the dry season. Any seasonal downturns in activity during the wet season however, are likely to be at least partially offset by the timing of the domestic summer school holidays. Figure 2.4 shows the distribution of Queensland, Queensland RDS and Reef RDS guest nights during 2007-08.

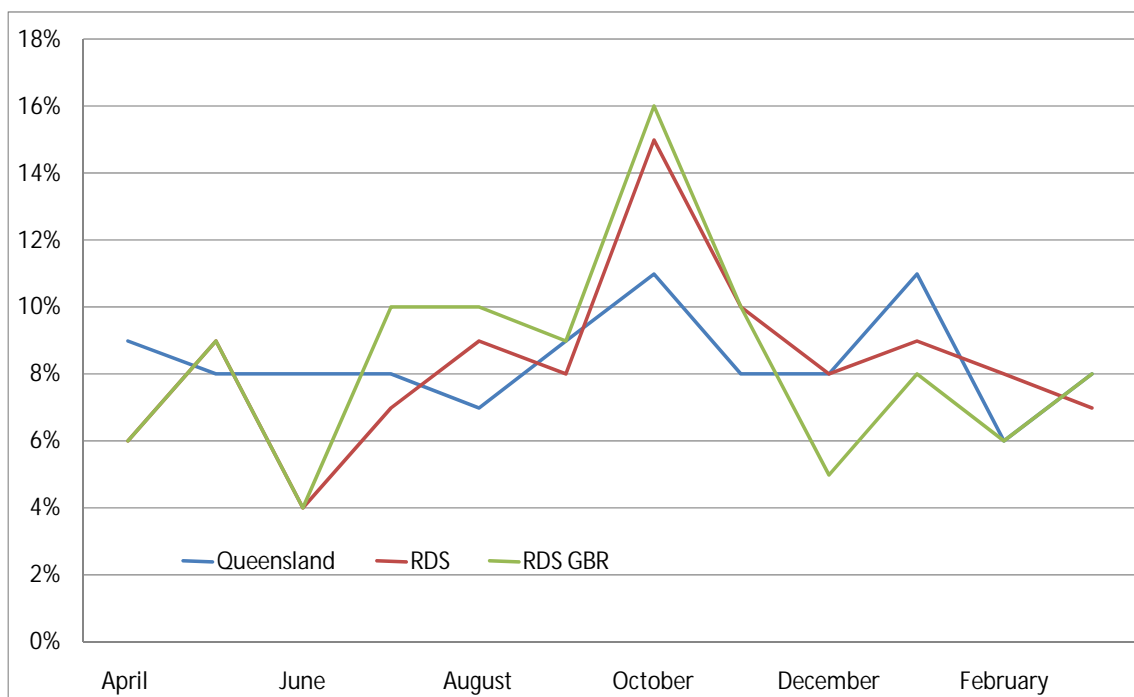


Figure: 2.4. Seasonality of total & RDS tourism 2007-08

Source: Tourism Queensland 2008.

Fluctuations in monthly guest nights provide a reasonable indicator of seasonality. Analysis of this data indicates that:

- Tourism in general across Queensland is relatively stable throughout the year
- The RDS market in the Reef is more variable than both the Queensland RDS market and the tourism sector as a whole¹⁶

While most RDS operators interviewed for the project acknowledge that there was a degree of seasonality in the market, industry has implemented a range of measures to mitigate the commercial impact of seasonal fluctuations, including:

¹⁶ Using the standard deviation as a measure of monthly variability indicates that the Reef RDS market is over twice as variable as the Queensland tourism market as a whole, and approximately 20 per cent more variable than the Queensland-wide RDS market.

- Scheduling significant repair and maintenance in slower periods
- Where possible, reducing variable costs in slower period (e.g. by hiring casual labour)
- Where multiple vessels were owned, consolidating trips offered to increase utilisation rates of a smaller number of vessels
- Actions to capture a greater market share through discounting (e.g. two for one specials) and product differentiation

3. Economic contribution of the dive and snorkel industry

3.1. Introduction and approach

To determine the importance of any given industry to a regional economy, it is typical to estimate the economic contribution of that sector. This is principally an economic accounting exercise, where the contribution is expressed as a measurement of Gross Domestic Product (GDP), or the state and regional equivalents; Gross State Product (GSP) and Gross Regional Product (GRP).¹⁷ More sophisticated approaches to the economic analysis were not possible given data and project resourcing constraints.

Estimating the economic contribution of the RDS industry at the scale of a region or state is complicated by limitations on data that measure the flows of goods, services, labour and capital across regional boundaries. Nonetheless, a range of estimates has been developed of the contribution to the Reef catchment GRP, Queensland GSP and Australia's GDP for the 2006-07 financial year. This is the same year as the latest Access Economics estimates¹⁸ of the value of tourism in the Reef region, allowing relevant comparisons to be made.

3.1.1. Approach to estimating economic contribution

The estimation approach employed in this study is based on the premise that the contribution of the RDS industry can be measured by the expenditure occurred during the period of the total trip where RDS activities occur.

To calculate this expenditure, the following steps were taken:

- Estimated the number of guest nights within the Reef directly associated with RDS activities for both the international and domestic RDS markets.
- Calculated the direct expenditure attributable to estimates of guest nights for the international and domestic RDS markets (based on average daily expenditure across the entire trip for the low estimate and daily expenditure adjusted to account for the higher than average expenditure attributable to RDS activities for the high estimates).¹⁹
- Utilising the same ratios of indirect effects that were used by Access Economics to estimate the value of tourism, estimates of value added, the contribution to GRP/GSP/GDP and employment were developed for the Reef catchment, the State and Australia as a whole.

Key assumptions

A number of assumptions have been necessary in developing these estimates. These assumptions are as follows:

¹⁷ Gross Domestic/State/Regional Product is the total of the market value of all final goods and services produced within a country/state/region within a specific period of time, usually one year.

¹⁸ Access Economics, 2008, *Economic Contribution of the GBRMP*.

¹⁹ Average daily expenditure was sourced from Tourism Queensland data. Estimates of expenditure for RDS days were obtained through a process of: a) Estimated total RDS expenditure per trip was removed from the average daily expenditure per trip, to obtain an adjusted daily trip expenditure figure. b) Direct expenditure for RDS activities was then added to the adjusted daily expenditure figures to estimate the total expenditure per RDS day.

- The RDS industry is a subset of the broader tourism and recreation sector to ensure estimates align with previous estimates established by Access Economics
- RDS activities total 3.1 million per annum, this is disaggregated as follows:
 - international visitors are assumed to account for 45 per cent of all dives and 55 per cent of all snorkelling activities²⁰
 - domestic visitors are assumed to account for 55 per cent of all dives and 45 per cent of all snorkelling activities
- Based on analysis of EMC activity and guest night data for Reef visitors, each RDS activity accounts for an average 1.05 guest nights within the Reef catchment
- Based on Tourism Queensland survey data, average daily expenditure by international guests undertaking RDS activities is \$87, while average daily expenditure by domestic guests is \$271^{21,22}
- For estimates at the lower end of the range, daily expenditures for days including RDS activities are not materially different from average daily expenditures for the entire trip
- For estimates at the higher end of the range, based on information provided by RDS operators, an average full day snorkel trip was costed at \$150, while an average daily scuba trip was costed at \$260 (including two dives)

3.2. Economic contribution of Reef tourism

The Access Economics study undertaken for the 2006-07 financial year indicates that tourism in the Reef contributed \$5.4 billion to the national economy and generated approximately 54 000 full-time equivalent (FTE) jobs.²³ This tourism contribution was attributable to tourism activity undertaken by Reef residents, visitors from other parts of Queensland and Australia, and international visitors. A breakdown of the importance of these tourism sub-sectors is shown in table 3.1. This indicates that, across the whole Reef catchment, the importance of Queensland (total), interstate and international visitors are relatively equal.

Table 3.1. Tourism – contribution to Australian GDP and employment

<i>Contributing visitors</i>	<i>GDP (%of total)</i>	<i>Employment (% of total)</i>
Reef residents	19	20
Rest of Queensland residents	13	11
Interstate residents	32	30
International	34	37
Reef residents travelling outside Reef	2	2
Total	100	100

Source: Access Economics 2008.

²⁰ The relative contribution of diving activities are averaged for the whole Reef. In reality, particularly for international visitors, diving activity is regionally variable. For instance, in Cairns, international visitors are more likely to account for an estimated 65 per cent of diving activity.

²¹ Average daily expenditures are the weighted average of expenditure for the dive and snorkel markets.

²² Note: there are a number of reasons for average daily expenditure from the domestic market being higher, including: flight costs being spread over a shorter trip; a higher propensity to undertake dives; and a lower proportion of backpackers within the mix of visitors.

²³ Access Economics, 2008, *Economic Contribution of the GBRMP*.

Unlike many other export-orientated industries within the Reef region, a significant proportion of the economic benefits and related jobs from tourism are captured within the Reef region, reinforcing the importance of tourism to the region as a significant source of economic activity and employment. For example, analysis of the Access Economics data reveals that:

- Approximately 70 per cent of the Reef related tourism GDP is generated within the region, with the remainder related to goods and services generated or supplied from outside the region
- Approximately 80 per cent of the Reef related tourism employment was within the region.²⁴

3.3. Economic contribution of recreational diving and snorkelling

Results from the analysis of the contribution of the RDS industry to economic activity and employment are outlined below. Given limitations with the data underpinning these estimates, they should be treated with caution. Other economic indices, such as trends in RDS activities, may be timelier and ultimately more relevant to informing industry strategy and Reef management.

It should be noted that these estimates relate to the time (guest nights) and associated expenditure from RDS activities alone, not all tourism within the Reef catchments. In effect, this is a subset of the value of tourism and recreation within the Reef catchment. While a dominant proportion of visitors to the Reef undertake RDS activities, the actual proportion of their trip time spent undertaking those RDS activities is much lower. Thus, the contribution estimates may actually understate the importance to the RDS industry. The degree to which visitors would visit the Reef catchment in the absence of RDS opportunities is essentially unknown. As noted by one operator:

“While the economic value of the RDS industry is probably quite modest in the broader scheme of things, I can’t imagine the Reef tourism industry would be anywhere near as big as it currently is if there was not the option to undertake diving or snorkelling. The option to dive or snorkel is still the dominant tourism drawcard for the region.”²⁵

However, the importance of the RDS industry as a key tourism drawcard has been recognised in previous studies²⁶. While it is not possible to ‘backcast’ the contribution of the RDS sector due to data limitations²⁷, it should also be noted that the economic contribution of the RDS sector has probably declined in recent years due to a number of factors:

- A flattening out or even a potential decline in RDS activity levels
- Flat prices and increasing costs reducing profit levels for operators
- Reduced investment
- Potentially a lower contribution via employment

²⁴ These ratios are based on the ratio of GDP / employment contributions to the Reef catchments to GDP / employment contributions to Australia as a whole.

²⁵ RDS operator.

²⁶ E.g. See: Moscardo G, Saltzer R, Galletly A, Burke A, Hildebrandt A. 2003. *Changing Patterns of Reef Tourism*. CRC Reef Research Centre Technical Report No. 49, CRC Reef Research Centre, Townsville.

²⁷ Key data limitations include: accurate data on RDS activities; changes in tourism expenditure patterns; changes in the composition of RDS activities over time; and a lack of any historical time series of estimates of the economic contribution of tourism.

It should be noted that the contribution of the RDS sector over time is highly unlikely to be directly proportional to actual RDS activity levels as small declines in activity will not have directly proportional decreases in profitability or employment.

3.3.1. Contribution to the Reef catchment, Queensland and Australian economies

Estimates of the economic contribution of the RDS industry are outlined in table 3.2. The estimates show that the contribution to the Reef catchment is substantial (around \$470 to \$770 million a year). This equates to approximately 13 to 21 per cent of the total contribution of the tourism industry.

Table 3.2. Contribution of RDS industry to economy

<i>Region</i>	<i>Total (\$ M.)</i>	
	<i>Low estimate</i>	<i>High estimate</i>
Reef catchment	470	770
Queensland	560	910
Australia	670	1 090

Source: Marsden Jacob estimates 2008.

In addition to the contribution to the Reef catchment economy, significant flow-on impacts contribute to the broader Queensland and Australian economies. In effect, almost 30 per cent of the economic contribution associated with the RDS industry occurs outside the Reef catchment area. The total contribution to the Australian economy is estimated at \$670 to \$1 090 million per annum.

3.3.2. Contribution to employment

The RDS industry is also a significant source of direct and indirect employment within the Reef catchment, Queensland and across Australia. It is estimated that approximately 5 700 to 9 200 FTEs are directly and indirectly associated with the RDS industry within the Reef catchment itself. The total contribution to Australia's employment (including the flow-on impacts) is between 7 100 and 11 500 FTEs. This is shown in table 3.3.

Table 3.3. Contribution of RDS industry to employment

<i>Region</i>	<i>Total employment (FTE)</i>	
	<i>Low estimate</i>	<i>High estimate</i>
Reef catchment	5 700	9 200
Queensland	6 500	10 500
Australia	7 100	11 500

Source: Marsden Jacob estimates 2008.

4. Sector risks and opportunities

The RDS industry faces a number of risks over the short to medium-term. Some of these risks are largely beyond the control of the RDS industry, however, there may be opportunities for both the RDS industry and/or GBRMPA to at least partially mitigate these risks as they arise.

4.1. Key risks identified

During interviews with operators and other industry representatives, a number of key risks, both on the demand and supply side of the RDS market were identified. These are discussed below.

4.1.1. Softening demand

Demand in the RDS industry and the tourism sector generally has been softening in the past two to three years. Key drivers of reduced demand identified by operators were the appreciating Australian dollar and reduced inbound airline capacity.

Exchange rate effects

During the current decade until the third quarter of 2008, the Australian dollar increased in value against most of the currencies of major inbound Reef tourism markets (e.g. United Kingdom, United States of America, Europe and Japan) as well as a number of international RDS destinations for Australian tourists (e.g. Thailand). This contributed to lower visitation levels by international visitors to the Reef and triggered a switch for many Australian RDS tourists to overseas destinations. Figure 4.1 shows the value of the Australian dollar against other key currencies (the Euro, the US dollar (USD), the Japanese Yen (JPY) and the British Pound (GBP)).

Key points to note include:

- The Australian dollar appreciated significantly against the USD, the GBP and the JPY between 2002 and late 2008.
- During interviews, RDS operators anecdotally indicated that the US, Japanese and British markets have all declined in the past 18 months, citing the exchange rate as a key driver.
- While the Australian dollar has depreciated sharply since the third quarter of 2008, any exchange rate induced international demand is likely to be at least partially offset by constrained disposable income for many potential travellers from the US, UK, Japan or Europe as those regions are generally more adversely impacted by the current economic downturn than Australia.

While medium to long-term exchange rate forecasts are not available, particularly given recent economic events, exchange rate sensitive sectors such as tourism will remain volatile in the short to medium-term, and a recovery in the international RDS market will be highly reliant on the timing and magnitude of economic recovery in key markets.

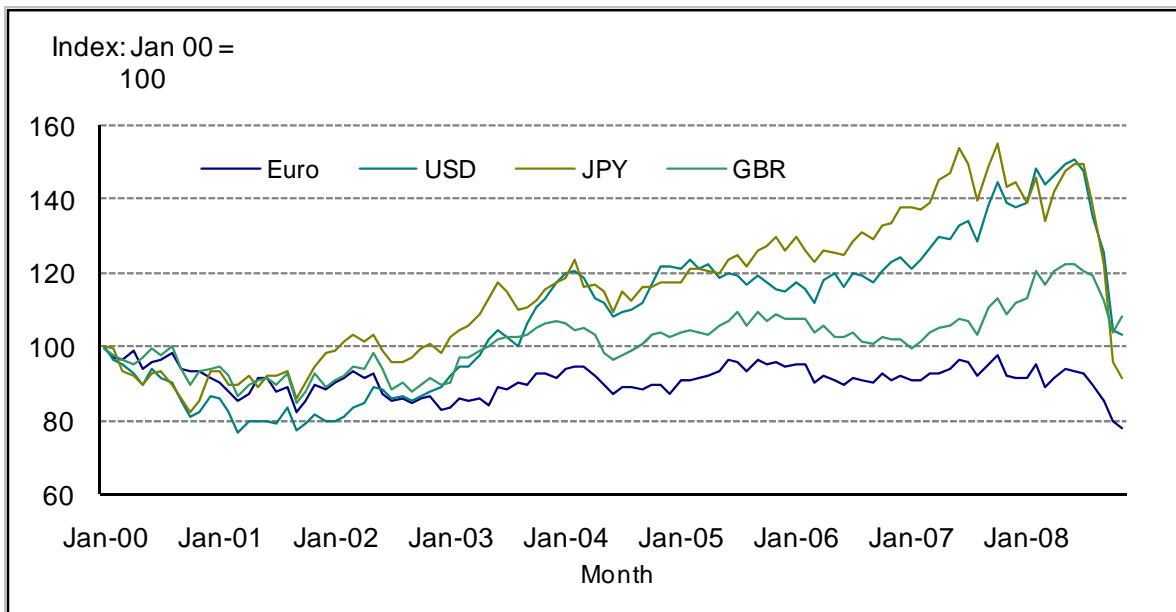


Figure 4.1. Key exchange rate trends

Source: Reserve Bank of Australia 2008.

Airline capacity

A downturn in the broader tourism sector, exchange rates and increasing fuel costs have all been cited by airlines as the key reasons for a decline in airline capacity into the Reef catchment.

Cairns in particular has been impacted by recent reductions in direct flights to Asia, and international passenger numbers into Cairns from some destinations have been declining for several years. For example, between 2000 and 2007, inbound passenger numbers between Hong Kong and Cairns declined 24 per cent, while traffic between Cairns and Osaka has also reduced.²⁸ One Cairns-based operator stated:

“The recent reduction in direct flights between Japan and Cairns has significantly reduced our total number of customers as well as the demographic makeup of customers in the Cairns region. Most Japanese tourists simply don’t have the time to take additional flights to Cairns simply to spend a day diving or snorkelling on the reef.”²⁹

Average international seat capacities into Queensland and Cairns are shown in figure 4.2. Key points to note include:

- Growth of approximately 53 per cent in the broader Queensland market for international passengers since 2002. This is primarily due to a 104 per cent increase in capacity into Brisbane as well as an increase into the Gold Coast.
- A significant decline in international services into Cairns (down more than 30 per cent since 2003). The Cairns market is particularly susceptible to fluctuations in the Japanese market, which accounts for around 63 per cent of all seat capacity into this destination.
- While total Queensland capacity has grown at six per cent per annum over the five years to 2008, the Cairns market has been declining at a rate of six per cent per annum over the same period.

²⁸ Tourism Queensland, 2008, *International Passenger Movements by Market*. Year ended December 2007

²⁹ Cairns based RDS operator.

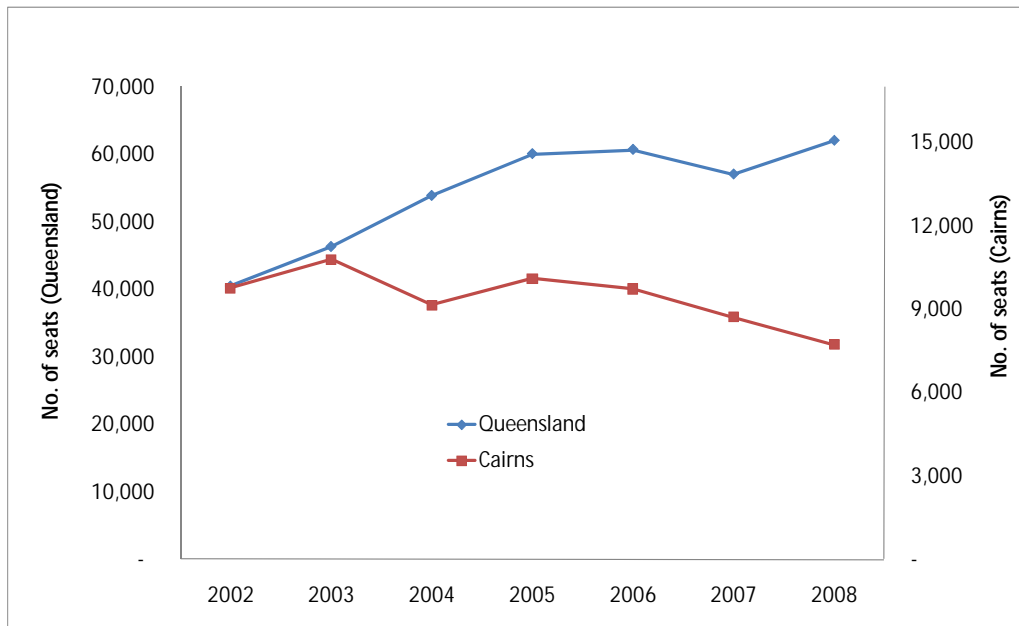


Figure 4.2. Average weekly international seat capacity – Queensland & Cairns

Source: *Tourism Queensland 2008*.

Similar trends are occurring with domestic flights. Recent reductions in domestic seat capacity have resulted in further softening of demand in some sections of the international and domestic markets. Evidence from operators' interviews indicated that the Whitsunday region had been significantly adversely affected. This is consistent with recent Tourism Queensland data that shows domestic seating capacity into Proserpine in January 2009 is down 22 per cent on January 2008 figures. In addition, domestic capacity into Cairns in January 2009 is down eight per cent on January 2008 capacity.

Reef condition

While short-term demand is largely impacted by the current economic environment, demand can also be impacted by the condition of the reef itself. In the shorter term, environmental conditions (particularly bleaching) may have an impact on the relative attractiveness of the Reef as a RDS destination for both international and domestic visitors. Previous research has indicated that there is a general perception that the quality of the reef is good³⁰ and this does not yet appear to have a material impact on visitation. This is consistent with the opinion of most interviewed operators' who stated that while there may be a decline in quality, there are options to mitigate any risk such as visiting other locations.

In the longer-term, maintaining the quality of the Reef will be vital to ensuring the Reef remains an attractive RDS destination. It should be noted that, in the longer-term, it will be the relative changes to reef condition in conjunction with economic trends between the Reef and competing destinations that drive decision making by potential RDS customers.

4.1.2. Increasing costs

In addition to softening demand, the RDS industry has been operating under a significant cost-price squeeze in recent years, and this trend is likely to continue in the short to medium-term.

³⁰ Moscardo G, Saltzer R, Galletly A, Burke A, Hildebrandt A. 2003. *Changing Patterns of Reef Tourism*. CRC Reef Research Centre Technical Report No. 49, CRC Reef Research Centre, Townsville.

Key drivers of increased operating costs include rising fuel costs, rising labour costs and interest charges.³¹

Fuel costs

Diesel fuel is a major input cost for all operators. During interviews some operators indicated that diesel costs can be as high as 30 to 40 per cent of trip operating costs, and that these costs increased significantly in the two years to mid 2008. For example, one operator advised:

“Our fuel bill has gone from 20 to 25 per cent to around 40 per cent of our operating costs in a little over a year, without any price increase for our tours. These costs don’t change whether we have one customer or 20.”³²

Figure 4.3 shows the change in diesel fuel prices for the period January 2004 to December 2008.



Figure 4.3. Wholesale diesel price index, January 2004 to December 2008

Source: Petroleum Institute of Australia.

The data indicates that the price increased significantly between January 2007 and July 2008 before the current economic crisis and has also eased significantly since then. While there is nothing the RDS industry can do about the price of diesel, opportunities to partially manage the risk of high prices could include:

- For larger operators (or a group of smaller operators), utilising diesel price hedging products to better manage for price volatility and incorporate hedged prices to develop seasonal prices
- Managing product offerings to increase vessel utilisation rates and thereby reduce fuel costs per customer.

³¹ The reported severity of increases in interest charges during interviews was highly variable, as many operators were operating under very low debt to equity ratios. Fuel and labour costs were raised by all operators as sources of cost pressure.

³² Reef RDS operator.

Labour costs and availability

Information and data provided by RDS operators indicates that labour costs typically range from 25 to 35 per cent of total operating costs. A key risk to the industry identified by some operators was the difficulty in attracting quality staff, both for on-board RDS service delivery and on-shore activities. To attract and retain key staff, some RDS operators have had to increase wages significantly to meet market rates, without the ability to pass on the additional costs to consumers.

This was identified as a particular problem where skills were highly transferrable and in demand by high paying sectors such as mining (e.g. diesel mechanics). In these cases the significant disparity in wages levels for similar skills has been widening during the past two to three years. As shown in figure 4.4, wage by sector data indicates that since early 2005 wages in Queensland have generally increased by around 14 per cent since early 2005. However, during this time wages in mining have increased by at least 20 per cent, while wages in the tourism sector have only increased by around nine per cent.

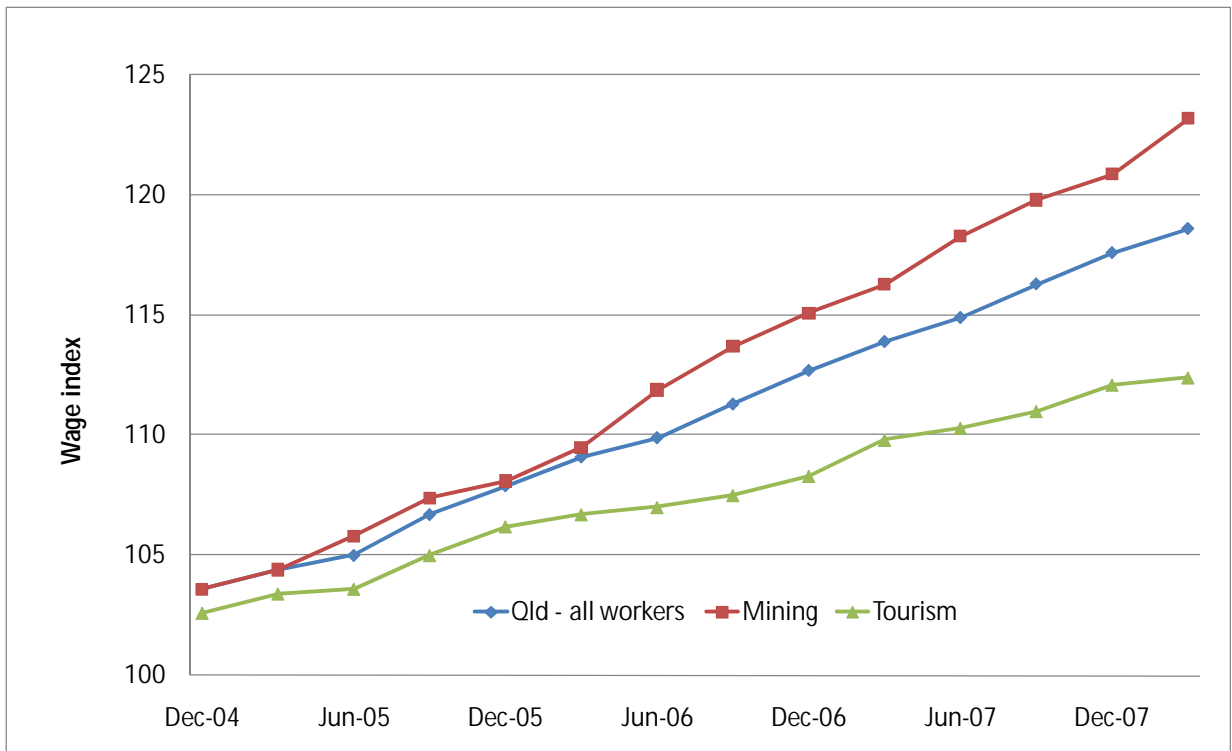


Figure 4.4. Change in wage and labour costs (ordinary time earnings)

Source: ABS Labour Cost Index 2008.

To counteract the commercial risks of increasing wages and difficulties in retaining key staff have on profits and commercial viability, a number of operators have undertaken actions to make employment more attractive, without the need to significantly increase wages. This has included providing for more flexible works hours, increased use of part-time roles and job sharing.

4.2. Key opportunities identified

While a number of risks have been identified, some opportunities have also been identified to potentially enhance the prospects for the RDS industry within the difficult market conditions. The majority of these opportunities are designed to exploit the Reef's competitive advantages within the (primarily) international RDS market. Potential actions include:

- Placing greater emphasis on the quality of the RDS product and service in the Reef
- Enhancing tourism information sources about destination choices.

Each of these should be underpinned by appropriately targeted and practical research to ensure timely and informed decisions can be made by both the RDS industry and GBRMPA.

4.2.1. Emphasising superior product attributes

Operators identified the superior level of product quality compared to many other RDS destinations as a key competitive advantage. Three key interrelated attributes of quality were identified:

- Service standards
- Safety standards
- The condition of the Reef itself.

A greater emphasis on these attributes is likely to enable the Reef to maintain RDS market share (or at least slow the decline) in the short to medium-term, while maintaining and enhancing product quality is likely to enhance market share in the longer term. In addition, a greater emphasis on these attributes may counteract areas where the Reef RDS may be at a competitive disadvantage (particularly price).

Service standards

The general consensus from the operator interviews was that the training of RDS operators and the standard of service provision in the Reef was superior to most competing destinations, particularly international destinations. This included attributes such as:

- Briefing customers on the activities they are about to undertake to enhance the enjoyment of the experience. This typically includes relevant information on the region where the dive or snorkelling experience will take place and on the coral and fish species that can be seen.
- A general desire by operators and staff to make sure customers had a quality and memorable experience. This is vital to maintaining the reputation of the RDS industry in the Reef.
- The diversity of products and services offered (ranging from snorkelling through to advanced dive certification or niche products).
- Operator accreditation (e.g. ecotourism certification³³), which provides a strong message to prospective consumers of the standard of operation available. This can be a strong marketing tool for individual operators and the Reef more generally, particularly where a significant proportion of operators are certified.

Superior service quality levels in the Reef should form a fundamental competitive advantage of the RDS industry in the Reef.

Safety standards

Safety is a key attribute of any RDS product or service. While any risks to personal safety may be broadly understood by RDS consumers, it is highly unlikely that prospective RDS consumers are able to differentiate safety risks between locations and operators.

³³ www.ecotourism.org.au/eco_certification.asp

The training and professionalism of the RDS industry, underpinned by relatively tight safety regulations have resulted in a suite of products and services that are amongst the safest in the world. As noted by one operator:

*Dive operators in the Reef are probably amongst the safest in the world. Many tourists undertaking dives in locations such as Thailand are probably not aware of the higher risks involved.*³⁴

This obvious competitive advantage of the RDS industry in the Reef and the opportunities to exploit this issue to attract market share does not appear to be currently utilised in any market development context.

Reef resource condition

Reef condition can have a significant impact on the RDS experience and any decline in the condition of the Reef is likely to have an impact on the RDS industry, particularly for repeat visitors. For example, one study found that if reef quality declined, around 75 per cent of potential repeat visitors would make fewer reef trips and 35 per cent of the visitors would not return at all.^{35,36}

However, as noted in Section 2.3, the majority of international RDS visitors to the Reef are first time visitors. Therefore a prior understanding of the condition of the Reef (e.g. likely visibility, coral cover, coral diversity, fish diversity) compared to alternative reef destinations is fundamental to a potential consumer's destination choice. While the physical risks to the Reef are acknowledged, it must be realised that the Reef is probably at less risk and in better condition than many of RDS sites.³⁷

RDS operators identified a potentially perverse outcome from the management of the Reef. Because the Reef is so well researched and managed, and information about the resource condition and trend is so readily available, potential visitors can be inadvertently discouraged from visiting the Reef. A number of operators identified the potential impact on demand from misinformation on the condition of the Reef versus competing destinations. As one operator stated:

*“Often only the negative news about the Reef gets out. So when a prospective diver in Europe is looking at the Reef versus the Caribbean versus Thailand, for a dive holiday, they end up going to the Caribbean or Thailand because all they find on the web about those destinations is good news and glossy pictures.”*³⁸

4.2.2. Provision of enhanced information to potential RDS consumers

To ensure that the Reef maintains or enhances its share of the RDS market, potential consumers need to be aware of the pros and cons of alternative RDS destinations to inform their choices.

³⁴ GBR RDS operator.

³⁵ Saltzer, R. 2002, *Understanding Great Barrier Reef Visitors: Factors that Contribute to Visitor Satisfaction*. CRC Reef research report B2.1.1.

³⁶ Kragt, M., Roebeling, P. and Ruijs, A. 2006, *The Effects of Great Barrier Reef Degradation on Recreational Demand: A Contingent Behaviour Approach*. Contributed paper presented at the 26th Conference of the International Association of Agricultural Economists, Gold Coast, Australia. (*Australian Journal of Agricultural and Resource Economics* 53(2), 213-229).

³⁷ Bryant, D., Burke, L., McManus, J. and Spalding, M. 2008, *Reefs at risk: a map-based indicator of threats to the world's coral reefs*. World Resources Institute, Washington.

³⁸ RDS operator.

Without useful information to allow comparisons, consumers are likely to make ill-informed choices and may not be aware of the superior attributes of Reef RDS experiences.

The delivery of information on RDS product attributes for multiple destinations needs to be targeted to media that are more likely to influence behaviour. Figure 4.5 indicates that the Internet is the key source of information for consumers that undertake RDS activities on the Reef. That is, over 70 per cent of RDS visitors to the Reef report using the Internet to access information in planning their trip, a substantially higher proportion than for visitors to Queensland generally. Travel agents and guide books are also important sources of information, as is information gained from previous visits.



Figure 4.5. Key sources of information

Source: Tourism Queensland 2008.

How this information is presented should be given careful consideration. Given the fact that the bulk of RDS tourists have little previous RDS experience and tend to be first time visitors to the Reef, information will generally need to be presented in a non-technical manner. As one RDS operator interviewed stated:

“What prospective dive tourists need is a one-stop-shop source of information that outlines the reef condition, the services, safety and prices so that they can make the right choice.”³⁹

The option of developing some form of simple reef divers ‘report card’ with information relevant to RDS consumers may have some merit as a key marketing tool for the RDS industry in the Reef. While it is likely to highlight the fact RDS activities may be more costly in the Reef than in some alternative locations, it is also likely to highlight that the Reef provides a superior location in terms of service, safety and reef condition.

A mock reef report card is outlined in table 4.1. It shows a 1 to 5 scale (5 being the best score).

³⁹ RDS operator.

Table 4.1. Mock reef divers' report card

	<i>Reef</i>			
	<i>Reef 1</i>	<i>Reef 2</i>	<i>Thailand 1</i>	<i>Caribbean 1</i>
<i>Reef quality</i>				
Visibility	4	5	4	5
Coral cover	5	5	3	4
Coral diversity	4	5	3	3
Fish diversity	5	4	2	2
Reef protected	5	5	1	3
<i>Service quality</i>				
Experience of operators	5	5	3	4
Safety	5	5	3	3
Environmental accreditation	3	4	1	2
<i>Financial</i>				
Cost of activities	3	3	5	3

Source: Marsden Jacob 2008.

5. Summary

The RDS industry is a key component of the tourism and recreation sector in the Reef region, with over 1 million visitors undertaking RDS activities each year. While RDS takes place across all of the Reef regions, the Cairns and Whitsunday regions dominate.

The economic contribution of the RDS sector to the Reef catchment economy is estimated at \$470 to \$770 million per annum. Flow-on impacts lead to a total contribution to the Queensland economy of \$560 to \$910 million, and to the national economy of \$670 to 1 090 million. Moreover, it is estimated that employment associated with the RDS industry is between 5 700 and 9 200 full-time equivalents (FTEs) within the Reef catchment and between 7 100 and 11 500 FTEs nationally.

The RDS industry however, is facing a number of key risks. In particular, softening demand due to the relatively high value of the Australian dollar, a decline in airline capacity into the Reef catchment and significant economic downturns in key international markets since the third quarter of 2008. On the supply side, increased fuel and labour costs are serving to increase operating costs and reported profits from interview participants were rarely above five per cent of turnover.

In addition, the economic fundamentals (exchange rate, fuel prices, market competition etc.) are likely to result in a continuation or potentially worsening of risks in the short to medium-term. This may result in:

- A reduction in the economic contribution of the RDS industry as activity levels fall in line with visitor numbers.
- An increase in the level of competition within the RDS industry, particularly in market segments and locations where excess capacity exists.
- Potential further consolidation of the RDS industry, as some operators choose to exit the industry and/or mergers and acquisitions occur in order to exploit potential efficiencies.

While the risks posed to the industry in the short-term are largely economic in nature and outside the control of industry, there are a number of opportunities available to mitigate risks, particularly those that are designed to slow or reverse the decline in market share. Foremost of these opportunities is to ensure potential RDS visitors are aware of the superior attributes of the Reef RDS sector (better service, safety and reef condition) compared to major competing destinations.