



6. Tourism

6.1 Background

Tourism is a major contributor to the Australian economy. In 2005, tourism was valued at \$37.9 billion and the tourism Gross Value Added (GVA) for this period was worth more than the total of agriculture, fishing and forestry; electricity, gas and water; and communication services (Tourism Research Australia, 2007b). By 2016, it is expected that the tourism industry will be valued at over \$100 billion with 8.9 millions of inbound tourists arriving in Australia (Tourism Research Australia, 2007a).

Due to the aggregated nature of tourism statistics on Australian National Accounts, marine-based tourism is difficult to quantify (The Allen Consulting Group, 2004). The Australian National Accounts amalgamate land based and marine based activities for a number of reasons, mainly because a large proportion of the industry sectors overlap. Likewise, it is also difficult to distinguish between activities occurring within State waters and Commonwealth Waters. Nonetheless, The Allen Consulting Group (2004) used methodology developed by the Review Committee on Marine Industries and Science Council to quantify marine tourism and other marine industries based on value added and employment statistics for the periods 1995-96 to 2002-03. The Allen Consulting Group found marine tourism to be one of the largest marine industries.

Marine-based tourism in Australia comprises a broad range of activities that can be land-based or vessel-based:

- Water sports such as sailing;
- Surfing;
- Snorkelling;
- Scuba diving;
- Whale and dolphin watching; and
- Cruise ships.

Water sports and surfing are generally restricted to State waters as they are land-based activities.

6.2 Regional activity

Tourism in the East Marine Planning Region consists primarily of nature-based activities including dolphin and whale watching, and adventure based activities such as snorkelling and scuba diving. Most of these activities are expected to be seasonal, due to the time of year that marine life are active (ie whale migration timing) and if weather conditions are favourable for water based activities such as snorkelling and diving, yet are important contributors to the regional and local economy and employment market. Marine tourism in the region is primarily concentrated to the mainland of Australia due to transport linkages and accommodation needs of tourists. Therefore,



the majority of tourism activities operate from State waters and travel into Commonwealth waters, including the East Marine Planning Region.

The Great Barrier Reef Marine Park also supports an extensive tourism industry; however the marine park is not included in the Region as it has its own legislative framework – the *Great Barrier Reef Marine Park Act 1975*.

Cruise ships

Cruise ships were addressed in **Section 2.2.2: Shipping**.

Whale watching

A number of activities that take place in the East Marine Planning Region can be defined as nature based activities. Nature based activities as classified by Tourism Research Australia includes whale and dolphin watching which is an important marine tourism activity in the Region. Whale and dolphin watching along the east coast of Australia occurs at a number of locations off New South Wales and Queensland coasts.

According to a study conducted by the International Fund for Animal Welfare (IFAW, 2004) there was a total for 43 operators in Queensland and 28 in New South Wales in 2003 (see **Table 6-1**). Since the activity is seasonal, most of these operators run other businesses during off peak seasons (IFAW, 2004).

■ **Table 6-1 Whale watching activity in 2003**

State	Operators	Boat-based tourists	Land-based tourists	Total
Queensland	43	140,133	89,035	229,168
New South Wales	28	319,706	616,924	936,630
Victoria	10	21,200	118,048	139,248
Tasmania	3			
South Australia	9	30,580	129,320	159,900
Western Australia	197	46,717	106,364	153,081
Northern Territory	0			
Total	290	558,336	2,059,691	2,618,027

Source: Adapted from IFAW (2004)

The proportion of boat based operators and watchers conduct whale and dolphin watching activities within State waters, but may enter Commonwealth waters of the East Marine Planning Region when searching for whales. As this practice is dependent on whale movements it is difficult to quantify the proportion of operators working within the East Marine Planning Region. Nonetheless, data from IFAW (2004) provides an indication of boat based operations in Queensland and New South Wales regions that may include areas in the East Marine Planning Region.



In 2003, Queensland experienced the greatest number of whale watching operators to date with a total of 43 operators compared to 24 in New South Wales (see **Table 6-2**). However, New South Wales had a greater total number of tourists participating in boat based whale watching.

■ **Table 6-2 Whale watchers (no. of persons) in Queensland and New South Wales for 2003**

State/Region	Operators	Boat-based tourists	Land-based tourists
QLD Regions			
Great Barrier Reef Marine Park	27	60,000	Not available
Hervey Bay and South	16	159,168	Not available
Total (QLD)	43	229,268	Not available
NSW Regions			
North Coast	2	2,075	600,000
Central Coast	10	47,450	Not available
Sydney	3	20,181	16,924
South Central	9	319,706	Not available
South Coast	4	186,000	Not available
Total (NSW)	24	319,706	616,324

Source: Adapted from IFAW (2004)

The number of tourists participating in the activity has increased significantly since 1998. IFAW (2004) estimate a 37% increase for New South Wales between 1998 and 2003, and an 8% increase for Queensland during this period.

Snorkelling and Scuba Diving

The number of visitors participating in snorkelling and scuba diving in the East Marine Planning Region is difficult to quantify due to the manner in which tourism statistics are displayed on Australian National Accounts. Nonetheless, Tourism Research Australia (2007b) used available data from the National Visitor Survey to quantify domestic adventure based activities including snorkelling and scuba diving for 2006 (see **Table 6-3**).

In 2005, approximately 393,000 visitors to Queensland participated in snorkelling, whilst 95,000 participated in scuba diving (see **Table 6-3**). It is most likely that the majority of snorkelling and scuba diving occurred in the Great Barrier Reef Marine Park. New South Wales accounted for 159,000 visitors involved in snorkelling and 40,000 visitors involved in scuba diving. However, it is most likely that the majority of these trips would have taken place in State waters.



■ **Table 6-3 Domestic adventure tourism nature-based activities for 2006**

Activity	Visitors to QLD	AAGR (Yea End Dec 04 – Year End Dec 05)	Visitors to NSW	AAGR (Yea End Dec 04 – Year End Dec 05)
Bushwalking, rainforest walks	138,000	3.6%	2,279,000	9.5%
Water activities or sports	681,000	5.4%	967,000	3.8%
Other outdoor activities	535,000	-21.0%	693,000	-23.5%
Surfing	408,000	8.7%	704,000	10.6%
Snorkelling	393,000	9.5%	159,000	18.1%
Scuba diving	95,000	3.9%	40,000	17.4%
All adventure activities	2,758,000	0.3%	4,131,000	2.4%

Source: Adapted from Tourism Queensland (2007)

6.3 Economic context

Originally the tourism industry was not included in Australian National Accounts as the industry is depended upon the consumer not on industry outputs like other industry listed in Australian National Accounts. In 2000, the Australian Bureau of Statistics developed the Australian Tourism Satellite Account (TSA) to overcome this issue and quantify the contribution of tourism to the Australian economy. The TSA presents growth rates based on current price terms, taking into consideration the underlying volume of tourism activity for a given period.

Use of the TSA for understanding the economic contribution of marine-based tourism is limited as land-based and marine-based tourism industry sectors are not differentiated in the TSA. Nonetheless, the TSA provides an overview of the economic status of tourism in Australia.

For the period 2005-2006, tourism accounted for \$37.6 billion of Australia's Gross Domestic Product (GDP). The 2005-2006 period accounted for a 5.5 per cent increase over 2004-2005 (ABS, 2007).

The Allen Consulting Group (2004) attempted to value Australian marine tourism for the period 2002-2003. Based on value added, employment and exports, marine-based tourism for the period 2002-2003 contributed \$11.3 billion to the Australian economy (The Allen Consulting Group, 2004). The Allen Consulting Group (2004) also examined marine tourism by State for the same period:

- New South Wales was estimated to be worth \$4.5 billion and provided employment to approximately 82% of all NSW marine industry employees; and



- The Queensland industry was valued at \$2.2 billion and employed 76.9% of marine industry employees, although tourism in the Great Barrier Reef Marine Park is likely to have a significant role in these figures.

These estimates are based on income from such industries as accommodation, tour operator services, air and water transport, restaurants and food outlets, hotels and bars and other retail outlets.

However, a research paper by the Productivity Commission (2005) suggests that the estimates by the Australian Bureau of Statistics are inflated due to the inclusion of expenditure by Australian travellers on items such as food which would be incurred regardless of whether they are travelling. Business travel is also included in value estimates such as from accommodation, which would also inflate tourism output estimates in such areas. It is also suggested by the Productivity Commission (2005) that while an important contributor to the economic output from tourism, revenue generated by industries such as accommodation, restaurants/cafes, air passenger transport and taxi transport, is made up by a smaller percentage from tourism than is generally predicted.

Nonetheless, tourism is agreed to contribute significantly to the Australian economy, and regardless of what method of analysis is used to understand the nature of the tourism sector, this industry is very important to East Marine Planning Region.

Whale and dolphin watching

An estimated expenditure of approximately \$1.9 million was spent directly on whale watching activities based from inshore regions from the East Marine Planning Region in 2003 (IFAW, 2004). Total direct expenditure for NSW increased 52% from \$5.8 million to \$10.1 million between 1998 and 2003. Similarly in Queensland, direct expenditure totalled \$11.3 million, which is a 49% increase over the same period (IFAW, 2004).

In 2005, an estimated 41,000 people enjoyed the spectacle of whale watching in Sydney alone. Whale watching in Sydney has developed into a significant tourism attraction worth around \$2.9 million to the local tourism economy annually (NSW DECC, 2007).

Snorkelling and scuba diving

A number of marine-based tourism activities are categorised under the domestic adventure tourism market, such activities include water activities or sports, surfing, snorkelling and scuba diving. A major component of the Queensland statistics for snorkelling and diving would relate to tourism on the Great Barrier Reef, which is outside the East Marine Planning Region.

6.4 Impacts on the environment

Impacts of marine tourism on the marine environment have been broadly categorised by Harriott (2002) including:



- Coastal tourism development and associated construction impacts such as increased suspended solids;
- Island based tourism infrastructure including sewage outflow;
- Marine-based tourism infrastructure;
- Damage as a result of boating activity including ship grounding and waste discharge; and
- Wildlife interactions which can include cetacean collisions.

More detailed impacts for a number of tourism activities that occur in the East Marine Planning Region are provided below.

Whale and dolphin watching

Impacts associated with whale and dolphin watching are direct impacts on the whales and dolphins themselves. The animals may be disturbed by the presence and noise of people in boats, aircraft or in the water. The potential impacts resulting from these disturbances include (Natural Resource Ministerial Council, 2006):

- Behaviour changes (eating, resting, mating)
- Displacement from habitat areas
- Reduced breeding success
- Stress and injury.

To minimise distress and impacts to the animals, The Australian National Guidelines for Whale and Dolphin Watching 2005 (Natural Resource Ministerial Council, 2006) have been created to assist governments in making policy or legislation decisions regarding whale and dolphin watching, and allows operators to ensure safe distances are kept and speed and vessel numbers are controlled. Swimmers and aircrafts are also included in the guidelines.

Other potential environmental impacts associated with the industry include waste and emissions from vessels and aircraft and collisions between vessels.

Snorkelling and scuba diving

Traditionally snorkelling and scuba diving was not considered environmentally damaging. However, increasing dive numbers has resulted in physical and ecological damage to the marine environment. The major environmental impacts associated with the scuba diving and snorkelling industry are:

- Damage to coral reefs;
- Disturbance to marine life – stress, injury, change in behaviour and ecology; and
- Waste and pollution from the operating boats.



One of the largest impacts of snorkelling and scuba diving on the environment is the direct damage to coral reefs through accidental contact with the divers' or swimmers' fins and feet (Zakai & Chadwick-Furman, 2002). Small areas of coral reefs are located within the East Marine Planning Region but the largest proportion of scuba diving and snorkelling tourists visit the neighbouring Great Barrier Reef Marine Park. Therefore the greatest damage to corals is likely to be concentrated within the Park off the coast where the largest contingent of dive operators are found, including reef areas offshore from Cairns, Port Douglas, Townsville, Mackay and the Whitsunday Islands.

Stress and injury to other marine life through contact with divers and swimmers may also be an adverse impact resulting from this industry. Feeding of fish, which is not unusual during dives, has the potential to cause adverse ecological effects by attracting predators and scaring smaller fish (Davenport & Davenport, 2006).

Other potential environmental impacts associated with the industry include waste, littering and emissions from diving and snorkelling boats. However, there is a growing awareness of the need to educate scuba divers and snorkellers, rotate dive sites and rotate routes to minimise cumulative damage.

6.5 Future uses

Whale and dolphin watching

Reports have suggested that whale and dolphin watching is a rapidly growing industry. The demand for the whale and dolphin watching is increasing at an average annual growth rate between 10-15% (IFAW, 2004). Numerous media releases from the NSW Department of Environment and Conservation (now the NSW Department of Environment and Climate Change) have indicated that whale migration numbers in Australian waters are rising. Subsequently, record sightings by the NPWS official whale watching program at Cape Solander have increased most years. The increase in whale numbers equates to growth of the industry for the Region, with whale and dolphin sightings likely to increase tourist numbers.

Snorkelling and scuba diving

Scuba diving and snorkelling are the two of the fastest growing past times, with an estimated one (1) million recreational divers being trained each year. These divers are primarily attracted to warmer waters commonly found in north eastern Australian regions (Davenport & Davenport, 2006). The increase in divers and snorkellers is likely to result in the establishment of additional dive sites and locations to reduce the pressure on existing sites. Some of these new sites may occur within the East Marine Planning Region. In addition, successful artificial reefs are being studied and may be used as a template for potential additional artificial reefs. If such reefs are created within the Region, there is capability for greater economic benefits, however the increase in these



dive and snorkelling activities will require more stringent controls to minimise impacts to both the physical and biological environment.

SCUBA Diving on the Cochrane Artificial Reef, Bundaberg

Cochrane Artificial Reef is located approximately 2.5 to 3 nautical miles off Bundaberg, Queensland. The artificial reef is located within Woongarra Marine Park and extends for 400m by 800m, bordering the East Marine Planning Region. The reef consists of ships, airplanes, steel structures and concrete pipes and has become a top local dive site. Abundant fish life inhabits the reef as most of the wrecks are now well covered in growth. Large shoals of fish, turtles, dolphins and rays are frequently encountered. There are three access points to the reef and local dive operators run regular dive trips several times a week.

Source: BADARAI (2007)



Source: Bargara Dive (2007)

6.6 Information gaps

Information on marine tourism is limited due to the nature in which data is reported on the Australian Tourism Satellite Account. Therefore, data used in this report was primarily sourced from the National Visitor Survey which was conducted by Tourism Research Australia (2007). However, the National Visitor Survey does not provide a true indication of the marine tourism industry in the East Marine Planning Region as categories are very broad and data on water based activities such as scuba diving includes data for the Greater Barrier Reef Marine Park. The Great Barrier Reef Marine Park encompasses the majority of tourists involved in scuba diving in Queensland and therefore the figures for the East Marine Planning Region are expected to be significantly smaller.

Similarly, data provided on cruise ship expenditure are largely based on port calls in New South Wales and Queensland and not primarily on expenditure during ship passage through the East Marine Planning Region. However, the data cited within this report does provide an overall view of the expenditure, visitation and cruise ship traffic throughout the Region.



6.7 References

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