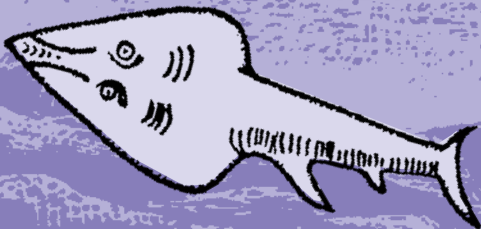




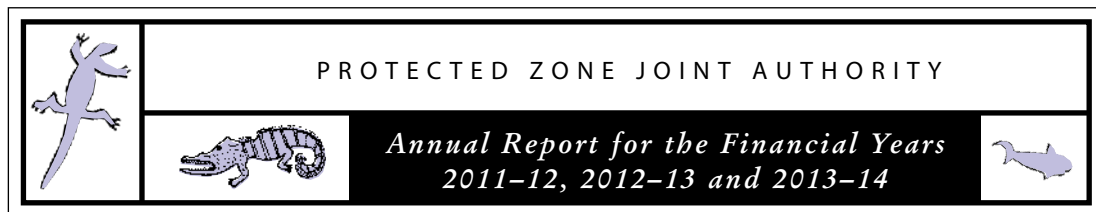
TORRES STRAIT PROTECTED ZONE JOINT AUTHORITY



*Annual Report for the Financial Years
2011-12, 2012-13 and 2013-14*



Torres Strait Fisheries Act 1984 (Commonwealth)



ANNUAL REPORT

FOR THE FINANCIAL YEARS

1 JULY 2011 TO 30 JUNE 2012

1 JULY 2012 TO 30 JUNE 2013

1 JULY 2013 TO 30 JUNE 2014

PRESENTED TO PARLIAMENT PURSUANT TO SECTION 41 OF THE ACT

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1 INTRODUCTION

This, the twenty-sixth Annual Report of the Protected Zone Joint Authority (PZJA) describes PZJA activities and the condition of the fisheries in the Torres Strait Protected Zone (Figure 1) during three financial years ending, 30 June 2012, 30 June 2013 and 30 June 2014.

The PZJA is responsible for management of commercial and traditional fishing in the Australian area of the Protected Zone and designated adjacent Torres Strait waters.

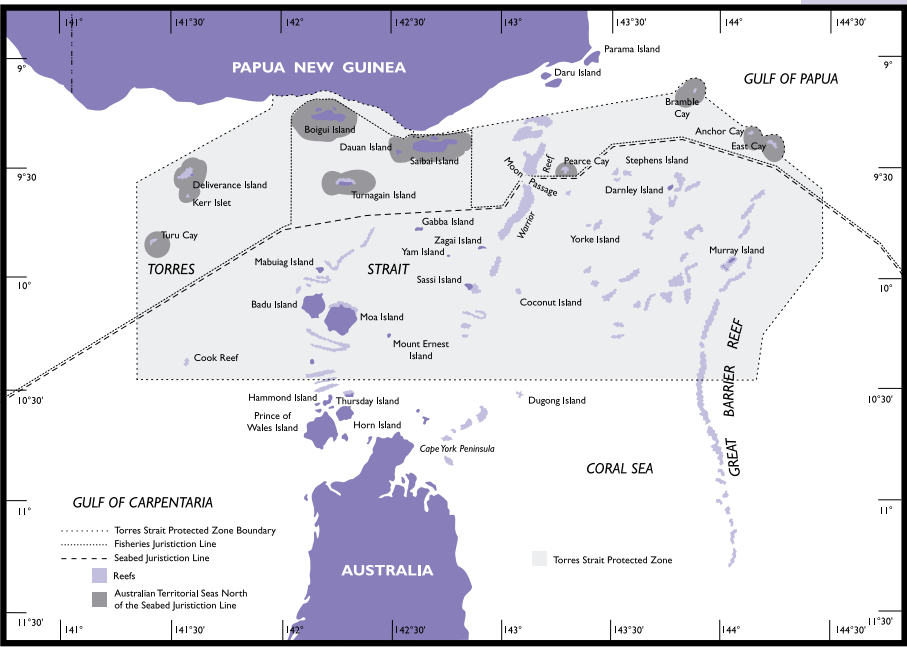


Figure 1. Area of the Torres Strait Protected Zone



2 BACKGROUND

THE TORRES STRAIT

The Torres Strait is located between the tip of Cape York Peninsula and Papua New Guinea. It consists of over one hundred islands and reefs which have evolved from four major origins: volcanic and alluvial processes, coral cays and flooded land bridges which were once part of the Great Dividing Range. Geographically, the islands are divided into inner, eastern, central, western, and top-western island groups; 18 of which are inhabited.

THE TORRES STRAIT TREATY

The Torres Strait Treaty (the Treaty) is concerned with sovereignty and maritime boundaries in the area between Australia and Papua New Guinea. Both countries signed the Treaty in Sydney, New South Wales, on 18 December 1978 and it was ratified by Australia on 15 February 1985.

The Treaty establishes the Torres Strait Protected Zone which aims to protect the traditional way of life and livelihood of the traditional inhabitants of the Torres Strait and adjacent coastal areas of the two countries. Australia and Papua New Guinea are obligated to cooperate in the conservation, management and utilisation of the Protected Zone fisheries and both countries enjoy sovereign rights within the Protected Zone. This includes the right to a share of the commercial harvest of swimming fish and sedentary species on the respective sides of the agreed fisheries and seabed jurisdiction lines (see Figure 1).





TORRES STRAIT FISHERIES LEGISLATION

Management of Protected Zone fisheries In the Australian jurisdiction is subject to the *Torres Strait Fisheries Act 1984* (the Act). The Act came into force on 15 February 1985. The purpose of the Act is to give effect, in Australian law, to the fisheries elements of the Treaty. Section 8 of the Act specifies the objectives to be pursued in the management of Torres Strait fisheries. Section 8 states:

“In the administration of this Act, regard shall be had to the rights and obligations conferred on Australia by the Torres Strait Treaty.”

The Act also establishes the PZJA and outlines which agencies are able to administer day to day functions. The PZJA consists of the Commonwealth Minister, the Queensland Minister and the Chair of the Torres Strait Regional Authority. The members for the reporting period are outlined in Section 3 on page 4. The PZJA member agencies are the Australian Fisheries Management Authority, Fisheries Queensland, Torres Strait Regional Authority and the Australian Government Department of Agriculture. Under the Act these agencies can be provided the delegation to undertake day to day administrative decisions; currently the Australian Fisheries Management Authority and Fisheries Queensland have been provided with delegation.

In addition to the above Act, Protected Zone fisheries are subject to assessment under three parts of the *Environment Protection and Biodiversity Conservation Act 1999* for fisheries where:

- a formal management plan or regime is to be determined (part 10)
- there are interactions with listed threatened species and ecological communities (part 13)
- fisheries product is to be exported (part 13A).





3 THE PROTECTED ZONE JOINT AUTHORITY

The PZJA, established under the Act, is responsible for the management of PZJA fisheries. Its members comprise the Commonwealth and Queensland Ministers responsible for fisheries, and the Chair of the Torres Strait Regional Authority. During 2011–12, 2012–13, and 2013–14 the members of the PZJA were:

- Senator the Hon. Joe Ludwig, former Australian Government Minister for Agriculture, Fisheries and Forestry (July 2011 to September 2013)
- Senator the Hon. Richard Colbeck, Australian Government Parliamentary Secretary to the Minister for Agriculture (September 2013 to June 2014)
- The Hon. Craig Wallace MP, former Queensland Government Minister for Main Roads, Fisheries and Marine Infrastructure (July 2011 to March 2012)
- The Hon. Dr John McVeigh MP, Queensland Government Minister for Agriculture, Fisheries and Forestry (April 2012 to June 2014)
- Mr John T. Kris, former Chair of the Torres Strait Regional Authority (July 2011 to November 2012)
- Mr Joseph Elu AO, Chair of the Torres Strait Regional Authority (November 2012 to June 2014).

The Australian Government Minister is the Chair of the PZJA.

The PZJA made a number of decisions during the reporting period; these are detailed at Annex A on page 59.

ROLES AND RESPONSIBILITIES

The PZJA is responsible for monitoring the condition of the designated fisheries and for the formulation of policies and plans for their management. The PZJA has regard to the rights and obligations conferred on Australia by the Treaty, in particular the protection of the traditional way of life and livelihood of the traditional inhabitants, including the capacity to engage in traditional fishing.



Prior to 1999, the PZJA managed the following designated fisheries in accordance with Commonwealth law in the Australian component of the Protected Zone:

- traditional fishing
- those fisheries which Australia and Papua New Guinea have agreed to jointly manage in the Protected Zone under Article 22 of the Treaty including prawns, Spanish mackerel, pearl shell, tropical rock lobster, dugong and turtle
- the barramundi fishery in the territorial waters adjacent to the six Australian islands near the Papua New Guinea coastline: Saibai, Boigu, Moimi, Kaumag, Aubusi and Dauan.

In October 1996 the PZJA agreed that all fishing in Torres Strait would come under PZJA management. Arrangements were introduced on 1 April 1999 to include the former Queensland managed Torres Strait commercial fisheries.

The following fisheries were incorporated:

- finfish (including barramundi)
- crab
- trochus
- bêche-de-mer (sea cucumber).

Details on the management arrangements for each of the fisheries are provided in Section 5.

In December 2005, the then Commonwealth Minister for Fisheries, Forestry and Conservation issued a formal Direction to the Australian Fisheries Management Authority stating that:

“The Australian government considers that decisive action is needed immediately to halt overfishing and to create the conditions that will give overfished stocks a chance to recover to an acceptable level in the near future.”

A key element in implementing the Minister’s directive is the development and application of a harvest strategy framework which sets ‘goalposts’ for managing catches by setting agreed target and limit reference points and clear decision rules for each species.

The PZJA has developed a long term harvest strategies for both the Torres Strait prawn and rock lobster fisheries with a range of rules that control the intensity of fishing activity according to





the biological conditions of the fishery. The harvest control rules are in line with the *Commonwealth Fisheries Harvest Strategy Policy and Guidelines*.

Recreational fishing, charter fishing and aquaculture are managed by Queensland under Queensland law. Information on these activities can be obtained from Fisheries Queensland.

CONSULTATIVE STRUCTURE

To assist in the management of the PZJA fisheries, the PZJA has established a consultative process including a structure of advisory bodies (Figure 2). The consultative structure includes the following:

- Australian traditional inhabitant fishers (commercial and traditional fishing)
- non-traditional inhabitant commercial fishers
- Australian and Queensland government officials
- other technical experts.

The PZJA is advised by several forums on issues associated with Protected Zone fisheries; these are the PZJA Standing Committee, management advisory committees, the Torres Strait Scientific Advisory Committee, working groups, and resource assessment groups. Whilst these committees and groups are the main avenue for the PZJA to obtain advice and information, the PZJA may also only source advice and views from others with relevant expertise or interest. These include PZJA agencies and other government agencies, independent consultants, operators in fisheries more broadly and representatives of the broader community.

Consultation and communication can be difficult across all islands of the Torres Strait, but is important for the effective management of the region's fisheries. Consultative committees are therefore complemented by meetings between fisheries officers and fishers in communities around the Torres Strait. These meetings are occasionally supplemented by programs broadcast on radio and articles/advertisements in newspapers.

The PZJA *Fisheries Management Paper No. 1* sets out the policy for the membership, operation, administration and key decision making processes of the advisory bodies (other than the



PZJA Standing Committee). This paper is on the PZJA website at: www.pzja.gov.au/wp-content/uploads/2011/06/fisheries-management-paper-no1.pdf.

The Torres Strait Regional Authority is responsible for administering and supporting indigenous representation on all PZJA consultative forums. The dates on which the groups met during the reporting period are set out in Annex B on page 70.

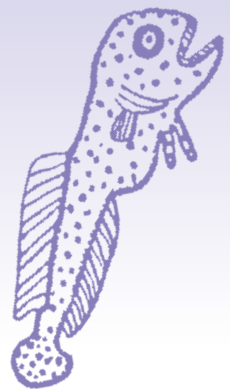
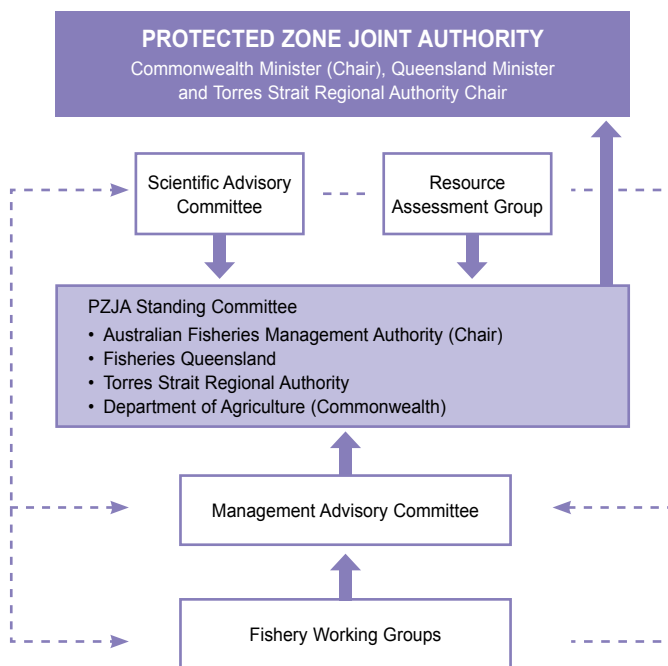


Figure 2. The consultative structure of the Torres Strait Protected Zone Joint Authority (Solid lines and dashed lines indicate primary and secondary lines of communication respectively)

The PZJA Standing Committee

The PZJA Standing Committee consists of senior representatives from the PZJA member agencies (Table 1). Its function is to provide strategic and operational recommendations to the PZJA on the management of the fisheries in accordance with the



PZJA's statutory obligations and to oversee the implementation of the PZJA's agreed policy commitments.

Table 1: The Protected Zone Joint Authority Standing Committee

REPRESENTATION	MEMBER
Australian Fisheries Management Authority (Chair)	Chief Executive Officer
Fisheries Queensland	Deputy Director-General, Fisheries
Torres Strait Regional Authority	Chief Executive Officer
Department of Agriculture	General Manager, Fisheries

Management advisory committees

Management advisory committees are the principal source of advice on fishery-specific management issues which support the PZJA decision making process. In this forum fishery issues are discussed, problems identified and possible solutions developed. These deliberations determine the recommendations that will be made to the PZJA.

More specifically the committees advise on matters relating to fishery objectives, harvest strategies, policies and management arrangements in pursuit of PZJA objectives.

There are two management advisory committees; the Torres Strait Prawn Management Advisory Committee and the Torres Strait Fisheries Management Advisory Committee (for all fisheries other than prawn).

The Torres Strait Scientific Advisory Committee

The Torres Strait Scientific Advisory Committee's main role is to advise on the strategic direction, priorities and funding for research undertaken by the Australian Fisheries Management Authority across all PZJA fisheries in the Protected Zone. This advice gives consideration to meeting research gaps in line with the objectives of the Torres Strait Fisheries Act.

The committee normally provides a review process for research conducted by research providers to ensure that milestones are





met and that the research outcomes represent good value for money. The committee may also be called upon to make its own assessments of fisheries data and comment on stock assessment results. The committee may directly engage with researchers to address knowledge gaps.

Working Groups

Working Groups are established to assist and provide recommendations to all PZJA forums. Ordinarily working groups deal with the fishery specific issues, including input to research gaps and, operational issues and compliance issues.

It is ensured that these groups are an appropriate blend of knowledge, expertise, and are capable of operating in a non-biased manner.

There were three working groups during the reporting period, these were the:

- Torres Strait Finfish Working Group
- Torres Strait Tropical Rock Lobster Working Group
- Torres Strait Hand Collectables Working Group

Resource assessment groups

The main role of resource assessment groups is to provide advice on stock assessment related matters that address biological, economic and social/cultural factors affecting the fishery. These matters include; the status of fish stocks, sub-stocks, species (target and non-target species) and on the impact of fishing on the marine environment.

There was one resource assessment group during the reporting period; the Torres Strait Tropical Rock Lobster Resource Assessment Group.





4 COOPERATION WITH PAPUA NEW GUINEA

The Treaty requires Australia and Papua New Guinea to cooperate and consult in the conservation, management and optimum utilisation of Protected Zone commercial fisheries (Article 21) and give any necessary protection to traditional fisheries (Article 20).

The Treaty also enables subsidiary conservation and management arrangements for particular commercial fisheries where either country considers it necessary (Article 22). The Treaty also defines the catch sharing arrangements for these fisheries (Article 23). The fisheries which are subject to joint management are the:

- Torres Strait Prawn Fishery
- Torres Strait Tropical Rock Lobster Fishery
- Spanish mackerel sector of the Torres Strait Finfish Fishery
- Torres Strait Pearl Shell Fishery
- Torres Strait turtle and dugong fisheries.

Arrangements between the countries, including those related to catch sharing are negotiated at annual Australia—Papua New Guinea fisheries bilateral meetings. These meetings were in:

- Kavieng, Papua New Guinea for 2012 on 18 October 2011
- Cairns, Australia for 2013 on 24 October 2012
- Port Moresby, Papua New Guinea for 2014 on 10 October 2013.

For the calendar years 2012, 2013 and 2014 neither Australia nor Papua New Guinea requested catch sharing arrangements in the other's jurisdiction for the prawn, Spanish mackerel and pearl shell fisheries. However, for the tropical rock lobster fishery Papua New Guinea requested access to the Australian jurisdiction, in line with the Treaty. The maximum of dory fishing days agreed was:

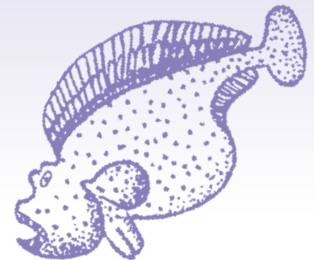
- 525 days in 2012 (all days were used)
- 656 days in 2013 (42 days were used)
- 714 days in 2014 (no days were used).



OUTSIDE BUT NEAR AREAS

Fish stocks can extend across jurisdictional boundaries. The Treaty provides for the two countries to agree to management and conservation measures in areas extending beyond the Protected Zone boundaries. Additionally, the *Torres Strait Fisheries Act 1984*, and its Papua New Guinean equivalent—the *Fisheries Management Act 1998*—also allow Australia and Papua New Guinea to extend their Protected Zone management arrangements into “outside but near areas” to the Protected Zone.

One of the management and conservation measures in place is a prohibition on the incidental taking and carrying of tropical rock lobster by prawn trawlers in the prawn fishery and in certain waters outside but near the Protected Zone. This measure has been in place since 1988.





5 FISHERIES

Traditional inhabitants of the Torres Strait have always exploited a diverse range of marine animals for subsistence and use in cultural activities including dugong, turtle, tropical rock lobster, finfish, shellfish, crab, and octopus. As such sea-based resources are important to Torres Strait Islanders and Aboriginals.

The most important are dugong, green turtle and a variety of finfish and shell fish. The relative importance of each group varies between island communities. With respect to commercial and artisanal fishing activities, fishery resources such as tropical rock lobster, Spanish mackerel, reef fish and pearl shell remain important to these communities.

Generally, men fish from boats away from the home island, and women and children fish on fringing reefs around the island. The most common subsistence fishing activities undertaken by traditional inhabitants include hand lining for finfish and diving for many species including tropical rock lobster. Other means of gathering seafood include:

- spearing
- reef gleaning (gathering of benthic macro invertebrates in intertidal areas)
- cast-netting
- traditional hunting for dugong and turtle
- gill netting
- trolling from dinghies
- crabbing
- seining
- jigging for squid
- hand collection for species such as trochus
- trading with Papua New Guinea.

There were no changes to formal management arrangements for traditional fishing activities during the reporting period. Management restrictions on traditional fishing relate to the hunting of dugong and turtle, and on the collection of tropical rock lobster and sea cucumber (bêche-de-mer).



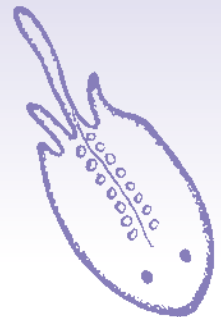


Commercial fishing is the most important economic activity in the Protected Zone for traditional inhabitants; it provides significant opportunities for financial independence of traditional inhabitant fishers. A priority of the PZJA is to enhance opportunities for traditional inhabitants through participation in all sectors of the fishing industry.

The PZJA is responsible for the management of all commercial fisheries in the Protected Zone. Whilst both traditional and non-traditional inhabitants participate in commercial fisheries, expansion in the number of licenced fishers has been reserved for Torres Strait traditional inhabitants. For a non-traditional inhabitant to gain access to a fishery they can only purchase or lease an existing Torres Strait Fishing Boat Licence or lease a Torres Strait Sunset Fishing Boat Licence. An exception to this is the prawn fishery where there are only Torres Strait Fishing Boat Licences which can be owned by either traditional or non-traditional inhabitants. Further information about licencing for fisheries in the Australian jurisdiction of the Protected Zone can be found in the licencing section of this report (Section 6 on page 39).

The fisheries managed under the *Torres Strait Fisheries Act 1984*, in accordance with the Act's objectives, are the:

- Torres Strait Prawn Fishery
- Torres Strait Tropical Rock Lobster Fishery
- Torres Strait Finfish Fishery
- Torres Strait Pearl Shell Fishery
- Torres Strait Crab Fishery
- Torres Strait Trochus Fishery
- Torres Strait Bêche-de-mer (Sea Cucumber) Fishery
- Torres Strait dugong and turtle fisheries.





TORRES STRAIT PRAWN FISHERY

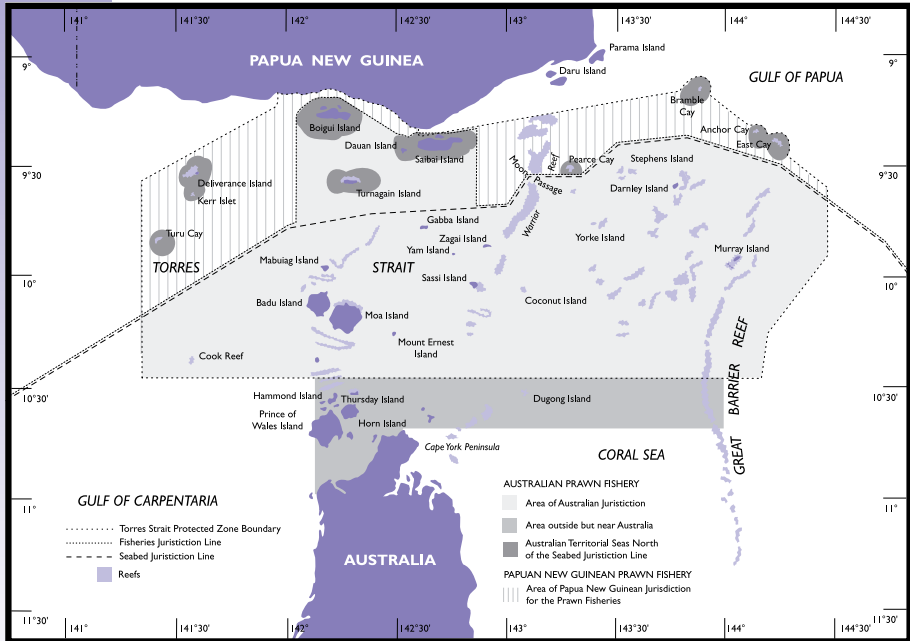


Figure 3. Area of the Torres Strait Prawn Fishery

Description of the fishery

The Torres Strait Prawn Fishery (Figure 3) is one of the more valuable commercial fisheries in the Torres Strait. The key species for the fishery are brown tiger prawns and blue endeavour prawns. Species that are also taken as by-product include red spot king prawns, Moreton Bay bugs, scallops and squid. This fishery is subject to management and catch sharing arrangements under the Treaty.

Prawn and bug catch and gross value of production for the fishery in the 2011, 2012 and 2013 seasons are detailed in Tables 2 and 3.



Table 2. Prawn and bug catches in the prawn fishery for the 2011, 2012 and 2013 seasons (Source: Logbook data)

Species	Catch (tonnes)		
	2011	2012	2013
Blue endeavour prawns	73.7	115.4	102.9
Brown tiger prawns	203.5	398.3	418.1
Red spot king prawns	0.8	1.0	1.0
King prawns	3.8	2.1	3.0
Total prawn	281.8	516.8	525
Bugs	11.7	19.1	19.8
Other	0.9	0.3	0.3
	294.4	536.2	545.1

Table 3: The gross value of production for the Torres Strait Prawn Fishery by financial years 2011–12, 2012–13 and 2013–14

Financial Year	Value ¹
2010–11	\$3.80 million
2011–12	\$6.72 million
2012–13	\$5.92 million

The prawn fishery is the only cost recovered fishery in the Torres Strait. Fishers are charged a levy to recover the certain costs of management.

To ensure the amount of prawns caught each year is sustainable the total number of fishing days is capped and the length of boats and the size of nets that fishers can use are restricted through parameters outlined in the harvest strategy.

Fishers use the otter trawl method where two, three or four trawl nets are towed behind the fishing vessel. Fishing occurs in the eastern part of the Torres Strait at night and only during the fishing season (from 1 March to 1 December every year).

Every year Torres Strait prawn fishery handbooks are produced as a guide for fishers on the management arrangements. These handbooks are available on the PZJA website (www.pzja.gov.au).



1 Value is gross value of production (GVP) and are in Australian dollars.



A prawn fishery bycatch action plan has been in place since 2005. The action plan aims to:

- reduce the catch of large animals such as turtles and stingrays
- substantially reduce the ratio of bycatch to prawns.

To achieve this, the main strategies include:

- modifying fishing gear, including mandatory use of turtle excluder and bycatch reduction devices
- monitoring bycatch
- making the information available to fishers and the community.

A harvest strategy for the fishery was approved by the PZJA on 8 July 2011. The strategy provides a transparent management framework to set the annual total allowable effort in the fishery to achieve the maximum sustainable take of prawns. Under these rules the annual effort has been set at 9 200 fishing days in the Australian jurisdiction of the Protected Zone. This is shared with Papua New Guinea through catch sharing arrangements under the Treaty: 75 per cent of the effort is allocated to Australian licence holders (6 867 fishing days) and 25 per cent is reserved for use by Papua New Guinea (2 333 fishing days).

Condition of the fishery

For 2011, 2012 and 2013, the Australian Bureau of Agricultural and Resource Economics and Sciences evaluated the status of the brown tiger and blue endeavour prawns in the fishery as ‘not overfished’ and ‘not subject to overfishing’ (Georgeson et al. 2014; Woodhams et al. 2013).

Prawn stocks are abundant and operators are fishing well below the allocated fishing days. The number of fishing days used by Australian fishers was 1 309 in 2011, 2 081 in 2012 and 1 990 in 2013 (source: logbook data). The Papua New Guinean fishers did not use their allocation during the reporting period.

The amount of prawns caught in the fishery has declined since 1999 (Figure 4). This decline is a direct result of decreasing fishing activity.

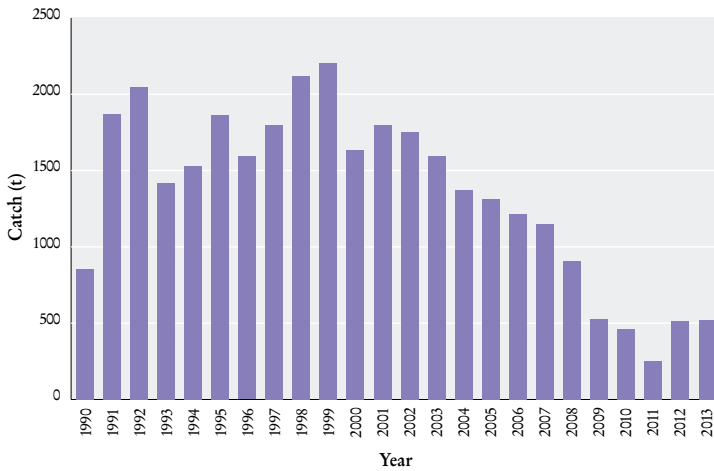


Figure 4. Annual catches of all prawn species in the prawn fishery 1989 to 2013, data is presented by fishing season— 1 March to 1 December (Source: Logbook data 1989 to 2013)

Given the significant decline of effort in the fishery, PZJA agencies are investigating ways to stimulate effort back to more economically productive levels. A review of current boat size and gear limits which are considered to restrict the economic efficiency of boats is being conducted. Traditional inhabitant views on the fishery and its linkages with the communities were gauged through consultation undertaken with four Torres Strait island communities in May 2013. A report titled *Targeted Indigenous Community Consultation in the Torres Strait; gaining an understanding of Indigenous communities perceptions regarding boat and gear length in the Torres Strait Prawn Fishery* is available on the PZJA website (www.pzja.gov.au).

Strategic assessment—update

The prawn fishery was re-accredited under the Environment Protection and Biodiversity Conservation Act as a Wildlife Trade Operation in 2013, valid until 18 March 2016.





TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY

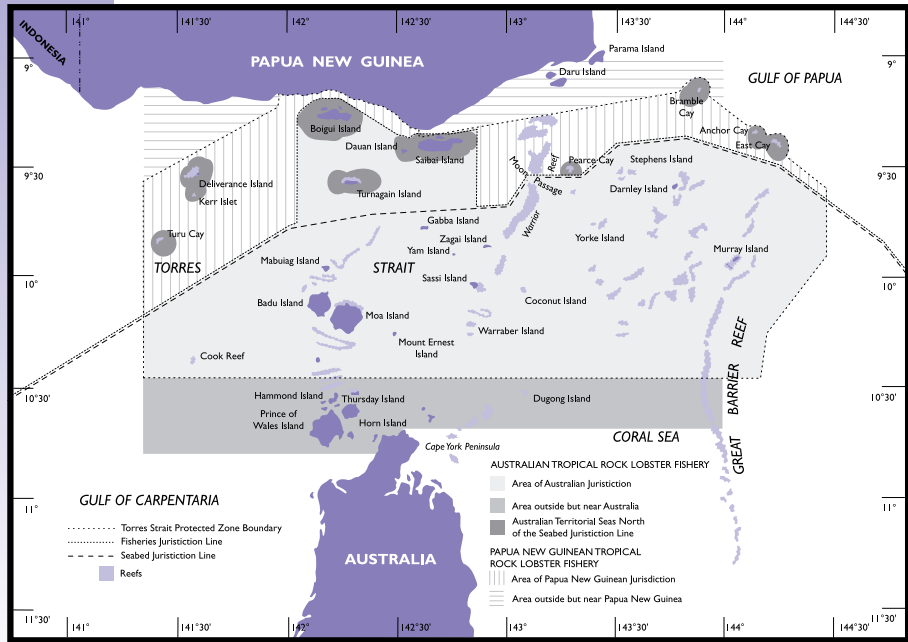


Figure 5. Area of the Torres Strait Tropical Rock Lobster Fishery

Description of the fishery

The Torres Strait Tropical Rock Lobster Fishery (Figure 5) is the most valuable commercial fishery in the Torres Strait. Only one species is targeted, the ornate tropical rock lobster and is an important species to both traditional and non-traditional inhabitants. This fishery is subject to catch sharing arrangements under the Treaty.

Divers work from dinghies to free dive on shallow reef tops or use hookah equipment (surface supplied air) to dive deeper areas of the Torres Strait. They collect the lobster by hand, short hand spear or loops; scoop nets are also used during neap tides when currents ease and underwater visibility improves.



The commercial fishing season for lobster is from 1 December through to 30 September the following year; and the use of hookah gear is permitted from 1 February. Most lobster is collected between March and August. In comparison, traditional inhabitants fishing for subsistence (traditional catch) can take lobster at any time of the year with restrictions being either:

- up to three lobsters per person without the use of a boat, or where there is only one person aboard the boat, or
- up to six per boat where there is more than one person aboard the boat.

Management arrangements

New management arrangements as outlined in *Fisheries Management Notice No. 9* were made on 26 August 2011. The arrangements include:

- limiting the method of taking lobster to either hand or with the use of a hand held implement, such as a spear or scoop net
- seasonal closures—complete closure from October to November (inclusive) and hookah equipment closure from October to January (inclusive)
- size limits for all commercial and recreational take—minimum tail size of 115 mm or minimum carapace length of 90 mm
- carrying limits for traditional fishers—three lobsters per person or six per boat if there is more than one person in the boat
- a prohibition on the processing or carrying of lobster meat that has been removed from any part of the lobster on any boat.

In addition to the above-mentioned management arrangements, expansion in the fishery is limited to traditional inhabitants. Aside from limited licence numbers, there are a range of provisions in place to prevent the expansion of the non-traditional inhabitant sector including:

- a boat replacement policy which aims to control fishing capacity by preventing the introduction of larger more efficient boats
- a ban on trawlers taking lobster to prevent pressure on the lobster resource from the prawn trawling fleet.





Since 2003, a number of interim measures have been implemented annually to manage effort in the non-traditional inhabitant sector. During the reporting period interim measures included:

- a 30 per cent reduction in the number of months that tenders were allowed to operate for licence holders that have two or more tenders associated with a primary vessel. In practice, this meant that licence holders could work some of their tenders for the entire season but others ceased operation at various times
- a prohibition on the use of hookah equipment three days before, on, and three days after either the full or new moon each month from February to September.

Condition of the fishery

During the reporting period the Australian Bureau of Agricultural and Resource Economics and Sciences evaluated the status of the lobster stocks in the Protected Zone as ‘not overfished’ and ‘not subject to overfishing’ (Georgeson et al. 2014; Woodhams et al. 2013).

Each year notional catch limits were set for the fishery based on mid-season surveys and harvest control rules were recommended by the resource assessment group. The level of catch was allocated across fishers in the fishery and was also allocated to Papua New Guinea fishers as per the catch sharing arrangements under the Treaty. Details regarding the fishery of catch limits, actual catch and value are outlined in Table 4 and a graph showing the annual level of catch in the fishery since 1989 is at Figure 6.



Table 4: Statistics for the tropical rock lobster fishery

	2011			2012			2013		
	Australia	Papua New Guinea	Total	Australia	Papua New Guinea	Total	Australia	Papua New Guinea	Total
Catch limit (tonne) ²	542	261	803	651	313	964	588	283	871
Catch (tonne) (TVH/TIB ³)	704 (504/201)	165	869	558 (370/188)	173	731	475 (327/148)	108	586
Value ⁴	\$29.0 million			\$16.1 million			\$18.4 million		

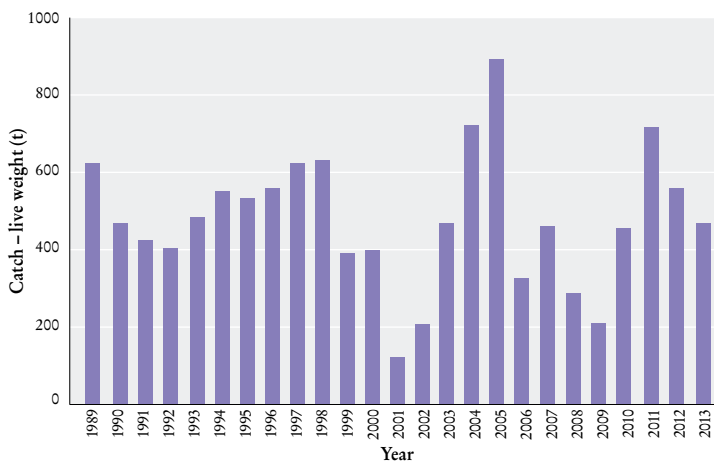


Figure 6. Annual catch of the rock lobster 1989 to 2013 in the Australian Jurisdiction (source: Logbook data 1989 to 2013, docket book data 2004 to 2013 and other records)

Strategic assessment—update

The fishery was reaccredited as an approved wildlife trade operation on 7 May 2014 until 9 May 2017 under the Environment Protection and Biodiversity Conservation Act. This accreditation is subject to the conditions and recommendations that were developed by the Department of Environment.

- 2 The fishery is currently managed through restrictions on effort, as management is moving to catch limits notional catch limits are set.
- 3 TVH—commercial fishing boat licence, TIB—traditional inhabitant commercial boat licence.
- 4 Value is gross value of production (GVP), are in Australian dollars and are by financial year (2010–11, 2011–12, 2012–13).



TORRES STRAIT FINFISH FISHERY

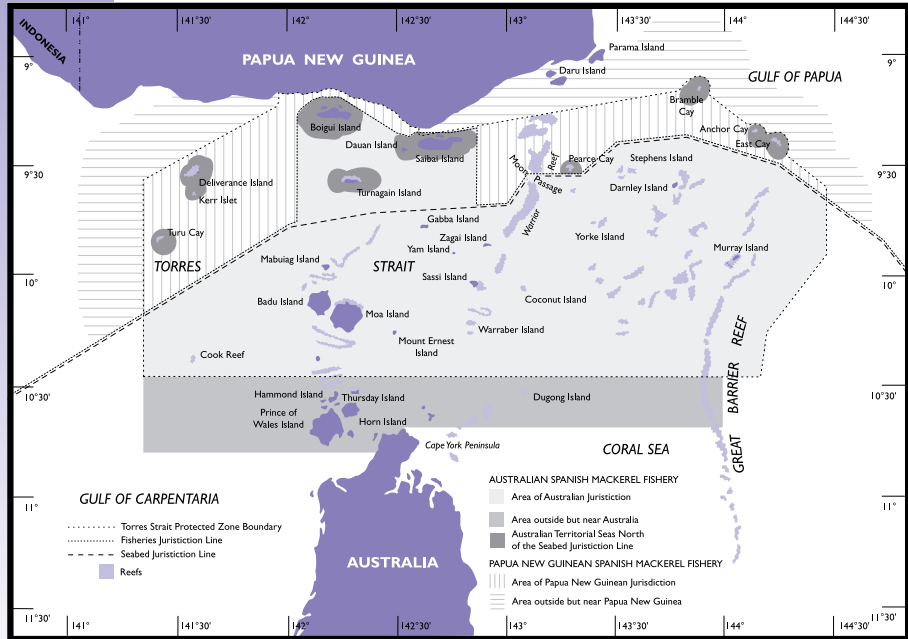


Figure 7. Area of the Spanish mackerel fishery

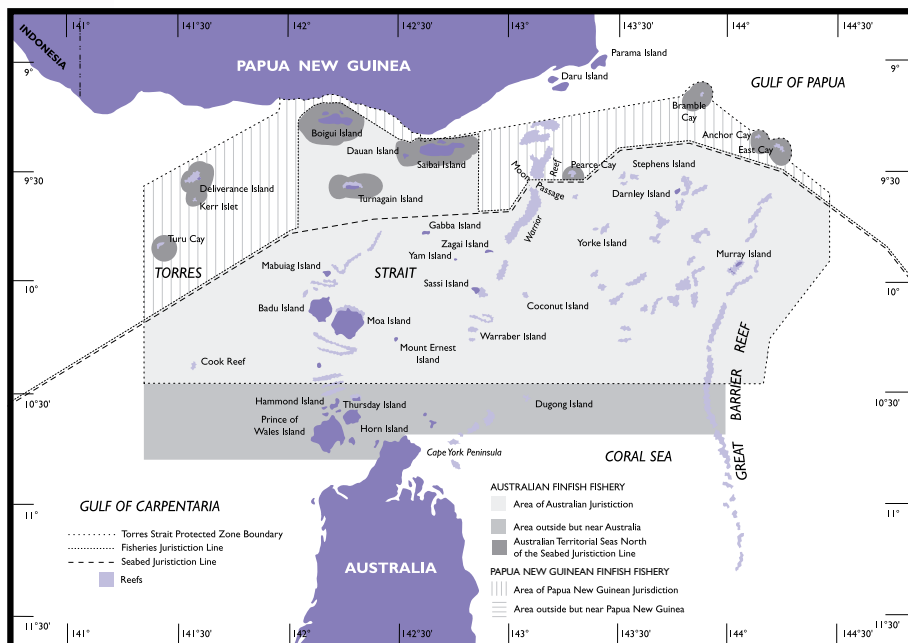


Figure 8. Area of the reef line fishery



Description of the fishery

The Torres Strait Finfish Fishery is a multi-species commercial fishery where a range of target and by-product species are harvested. Several fishing methods are used in the fishery including trolling and hand lining. The use of nets has been banned in the Protected Zone and the outside but near area.

The finfish fishery comprises two components: the Spanish mackerel fishery (Figure 7) and the reef line fishery (Figure 8). The Spanish mackerel fishery is subject to catch sharing arrangements under the Treaty. Both the Spanish mackerel and reef line fisheries operate in the eastern Torres Strait. The western Torres Strait is closed to fishing.

The target species in the Spanish mackerel fishery is the narrow-barred Spanish mackerel. Other species caught in the fishery include school mackerel, grey mackerel, spotted mackerel, and shark mackerel. Mackerel are fished by trolling baits and lures, or on handlines, generally from dories/dinghies operating either to a primary vessel or alone.

Reef line fishers target the coral trout species which have the greatest value. Also caught are small numbers of medium value species including barramundi cod, mixed reef fish in the *Lutjanus* and *Lethrinus* genus's, and several species of rock cod. These species are fished on handlines generally from dories/dinghies operating either to a primary vessel or alone.

All commercial finfish catch entitlements are held by Australian traditional inhabitants. However, non-traditional fishers can lease sunset licences—with catch limits for Spanish mackerel and coral trout—and 40 per cent of the Spanish mackerel entitlements are made available to Papua New Guinean fishers (in accordance with the Treaty).

Whilst mackerel and reef line species are commercially targeted by a small number of traditional inhabitants a large number of traditional inhabitants fish opportunistically.

Catch reporting by the traditional inhabitant sector through the docket book system is voluntary. As such the catch data for this sector is an incomplete representation of finfish harvest. The quantity of finfish taken for traditional purposes is





unknown. Anecdotally, only a small proportion of the endorsed traditional inhabitant fishers with licences participated in the finfish fishery⁵.

The level of traditional inhabitant commercial fishing in this fishery may increase due to the high value of the target species and the important economic development opportunity this fishery provides.

The statistics for the finfish fishery during the reporting period are provided in Table 5.

Table 5: Catch limit, catch and gross value of production for the Torres Strait Finfish Fishery

	2011	2012	2013
Spanish mackerel			
Catch limit	188	188	188
Catch	77.0	99.9	136.9
Coral trout			
Catch limit	135	135	135
Catch	32.9	32.5	37.1
Value⁶	\$1.16 million	\$0.78 million	\$2.0million

Since 2005 catches of Spanish mackerel and coral trout have declined substantially (Figures 9 & 10). This reflects the reduced effort by non-traditional inhabitant fishers during the lead up and implementation of the 2008 buyout of transferable licences in the finfish fishery. Now, 100 per cent of the Australian allocation of commercial finfish resources is to the traditional inhabitant sector.

5 This is based on data collected from fish buyers; noting that catch reporting by the traditional inhabitant sector is voluntary therefore estimated from Torres Strait docketbooks completed by processors/buyers.

6 Value is gross value of production (GVP) across all species in the fishery, in Australian dollars and by financial year; 2011–12, 2012–13 and 2013–14.

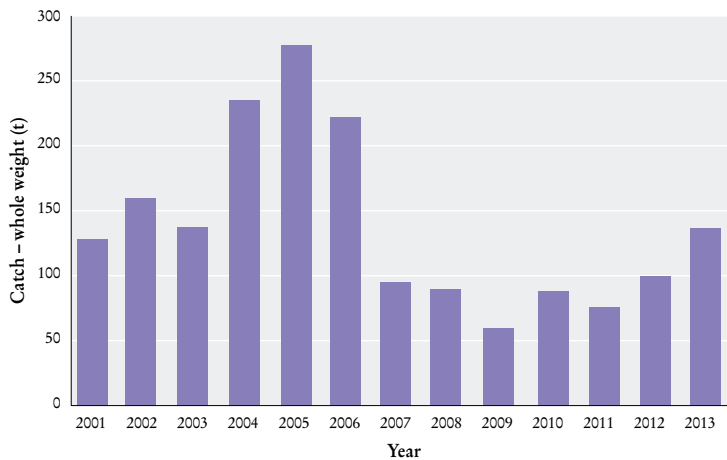


Figure 9. Catch history for Spanish mackerel in the Torres Strait Finfish Fishery (Source: Logbook data docket book data 2004 to 2013 and other records 2001 to 2013)

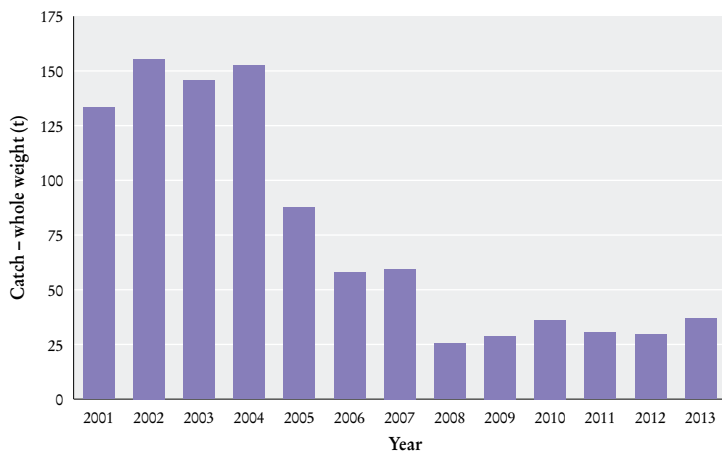
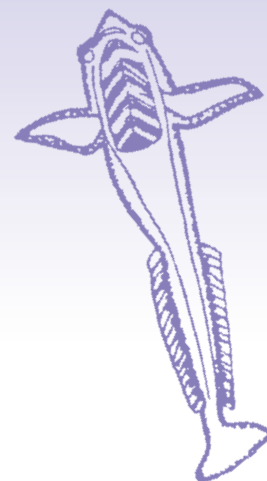


Figure 10. Catch history for coral trout in the Torres Strait Finfish Fishery (Source: Logbook data 2001 to 2013, docket book data 2004 to 2013 and other records)





Management arrangements

A new management plan was introduced in 2013 (*Torres Strait Finfish Fishery Management Plan 2013*).

Both components of the fishery are subject to additional requirements under separate fishery management notices which define the activities gear types and restrictions. The Spanish mackerel fishery species are managed in accordance with *Fisheries Management Notice No. 79* and reef line fishery species with *Fisheries Management Notice No. 8*.

Management controls for the harvest of finfish species include:

- gear restrictions
- minimum and maximum size limits
- no-take species
- restriction on shark finning
- temporal and spatial closures.

Condition of the fishery

During the reporting period the Australian Bureau of Agricultural and Resource Economics and Sciences evaluated the status of the Spanish mackerel stocks and coral trout species in the Protected Zone as ‘not overfished’ and ‘not subject to overfishing’ (Georgeson et al. 2014; Woodhams et al. 2013).

Strategic assessment—update

The fishery was accredited as a wildlife trade operation under the Environment Protection and Biodiversity Conservation Act in July 2013. The then Australian Government Department of Sustainability, Environment, Water, Population and Communities provided a number of accreditation recommendations to improve the sustainability of the fishery. The export accreditation is valid until 26 May 2016 at which time the fishery will be re-assessed.

TORRES STRAIT PEARL SHELL FISHERY

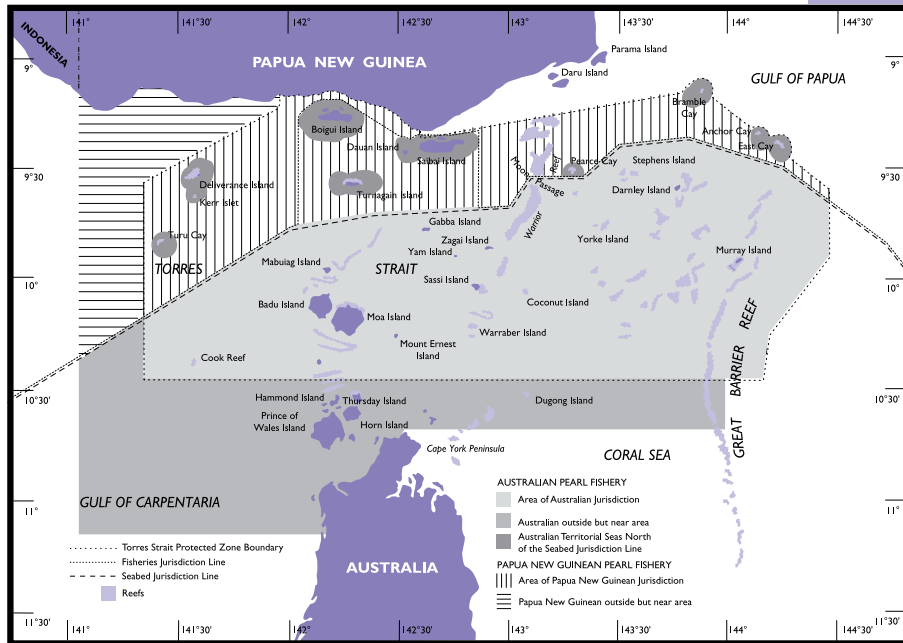


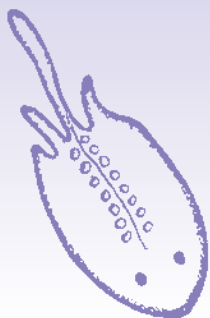
Figure 11. Area of the Torres Strait Pearl Shell Fishery

Description of the fishery

In the Torres Strait Pearl Shell Fishery (Figure 11) wild pearl shell is collected mostly by divers using hookah equipment (surface supplied air). The gold-lipped pearl shell is the main species, although at least another six species, including the black-lipped pearl shell and the winged pearl oyster are also collected. The fishery is subject to catch sharing arrangements under the Treaty.

Pearl shell is collected through the months of October to March with only a few licence holders that specialise in collecting pearl shell. However, a number of licence holders also have lobster endorsements and collect pearl shell whilst fishing for lobster.

Pearl shell is collected live for pearl culture farms. Aquaculture farming of pearl shell in the Torres Strait is regulated and managed by Fisheries Queensland.



Management arrangements

Expansion of licence numbers in the pearl shell fishery is limited to traditional inhabitants in order to maximise their opportunities. Additionally, provisions applying to the non-traditional inhabitants operating in the fishery include strict boat replacement policies and linking of tender boats with specific primary boats.

Current management regulations require a licence to take of pearl shell in the pearl shell fishery. Divers must adhere to size limits between 130 mm minimum and 230 mm maximum for gold-lip pearl oyster, and over 90 mm for black-lip pearl oyster. There is a ban on the taking of shell by any method other than collecting by hand.

Condition of the fishery

Based on past surveys, the abundance of pearl shell on the main fishing grounds is low, and the stock status remains uncertain. Noting that there have been insignificant amounts of pearl shell harvested since at least 2006.

Strategic Assessment—update

The pearl shell fishery has not undergone a strategic assessment due to insignificant pearl shell harvesting. However, depending on the level of activity in the fishery it may in the future.

TORRES STRAIT CRAB FISHERY

Description of the fishery

In the Torres Strait Crab Fishery mud crabs and small quantities of blue swimmer crab are caught. Crabs are generally captured by hand or using scoop nets.

All fishery participants are traditional inhabitants. The level of participation in the commercial fishery is low and restricted mainly to Saibai and Boigu islands where there are large areas of crab habitat.

Management arrangements

A number of management arrangements (under *Torres Strait Fisheries Management Notice No. 50*) apply including:



- a prohibition on the take or possession of female crabs
- a limit of 50 prescribed crab apparatus per operator
- no vessels greater than 14 m in length
- a minimum carapace where available length of 150 mm.

Condition of the fishery

No commercial activity was recorded during the reporting period. The status of crab stocks in the Protected Zone is uncertain due to the lack of catch data.

Strategic assessment—update

The crab fishery has not been strategically assessed under the Environment Protection and Biodiversity Conservation Act. It may in the future, depending on activity in the fishery.

TORRES STRAIT TROCHUS FISHERY

Description of the fishery

The Torres Strait Trochus Fishery is a small, commercial and traditional fishery for a single-species. The marine snail ‘trochus’ is generally collected opportunistically while fishing for other marine animals. Trochus is usually taken by free diving with fishers generally operating from dinghies with two or three crew. Reef top collection of trochus is also possible at low tide.

Access to the fishery is reserved for traditional inhabitants of the Torres Strait. Between 1920 and 1950, and more recently during the 1980s, the fishery was an important source of income for some traditional inhabitants, especially in the central and eastern Torres Strait communities.

The fishery is characterised, like trochus fisheries elsewhere, by fluctuating fishing activity related to the economic value of the shell. Trochus shell is sold when the shell is in demand for items such as buttons for clothing and relies upon fashion trends. Since the mid 1980 the shell has been in demand three times, this was in the late eighties, the mid to late nineties and from 2005 to 2006. Trochus meat is often consumed by fishers’ families or other members of the community and there is interest to find a viable market for the meat as well as the shells.





Management arrangements

Participation in the trochus fishery is limited to traditional inhabitants. The take of trochus is restricted to hand collection—the use of underwater breathing apparatus is not permitted.

The size of trochus collected during commercial fishing must be between 80 mm and 125 mm. The catch limit for the fishery was 150 tonnes annually for the reporting period.

Condition of the fishery

The Australian Bureau of Agricultural and Resource Economics and Sciences classified trochus in the Protected Zone as not subject to overfishing, but acknowledged uncertainty about the biomass of the stock from 2011 to 2013 (Georgeson et al. 2014; Woodhams et al. 2013).

The reason for the uncertainty is because of the fishery's small size and the sporadic nature of market demand. This resulted in a lack of fishery data and as such a stock assessment of the fishery has not been possible.

Whilst there have been from 39 to 80 traditional inhabitant boat licences with a trochus endorsement during the three financial years there has been no reported catch. Data collected from the irregular sale of the product indicates that a total of 280 tonnes of trochus has been collected since 1988, with an average of just over 10 tonne per year; well below the catch limit of 150 tonnes.

Additionally, a survey in 2009 of the eastern Torres Strait trochus population indicated that trochus stocks are stable or increasing in abundance. However, there is some uncertainty due to the patchy distribution of trochus. Further investigation of this uncertainty is not warranted at this time with the low level of effort in the fishery.

Strategic assessment—update

The trochus fishery was reaccredited as a wildlife trade operation under the Environment Protection and Biodiversity Conservation Act in October 2012 for continued export approval until 16 October 2015. The declaration is subject to the conditions and recommendations developed by the then Australian Government Department of Sustainability, Environment, Water, Population and Communities.



TORRES STRAIT BÊCHE-DE-MER (SEA CUCUMBER) FISHERY

Description of the fishery

The Torres Strait Bêche-de-mer (Sea Cucumber) Fishery has a long history that dates back to at least the 19th century. In 1916–17 558 tons (567 tonnes) of bêche-de-mer was exported from Thursday Island with 124 boats registered to collect it. There have been several “booms and busts” in the fishery, which is characteristic of these fisheries throughout the world. Bêche-de-mer is an important source of income for some Torres Strait traditional inhabitants.

Sea cucumber is mainly collected from dinghies by free-diving or by walking along reefs at low tide and picking them up by hand. Once collected, the animal is gutted, graded, cleaned, boiled, smoked and dried. This is a labour-intensive process carried out on processing vessels or at shore-based facilities.

Management arrangements

With one exception, only traditional inhabitants can participate in the fishery. The non- traditional inhabitant was active in the fishery prior to the introduction of licence limitations in 1995.

Sea cucumber may only be collected by hand. The use of hookah (surface supplied air) or scuba diving gear is not permitted. Boats that are used to collect sea cucumber must be under seven metres in length.

A bag limit of three per person with a maximum of six per boat applies to traditional fishing. Catch is limited for the year across the fishery (measured in wet weight gutted) and size limits of sea cucumber also exist. Additionally, three species are closed to fishing. The details of restrictions for each species are outlined in Table 6.





Table 6: Catch limits and size limits of commercially harvested species in the Torres Strait Bêche-de-mer Fishery (source: Fisheries Management Notice No. 64)

Commercial Value	Common name	Catch limit ⁷ (tonnes)	Minimum size limit (mm)
High	Sandfish	nil	180
	White teatfish	15	320
	Black teatfish	nil	250
Medium	Surf redfish	nil	220
	Deepwater redfish	Combined 80	120
	Blackfish	Combined 80	220
	Prickly redfish	20	300
Low	Stonefish	Combined 80	
	Lollyfish	Combined 80	150
	Elephant's trunkfish	Combined 80	240
	Greenfish	Combined 80	
	Curryfish	Combined 80	270
	Amberfish	Combined 80	
	Brown sandfish	Combined 80	
	Leopardfish*	Combined 80	
	Pinkfish	Combined 80	

* also known as tigerfish

Condition of the fishery

Because sea cucumbers are easily collected they are susceptible to overfishing. However, the fishery was assessed in 2011, 2012 and 2013 as not subject to overfishing. Where sea cucumbers have been overfished in the past there is some evidence that these stocks are now recovering. The value of sea cucumber is increasing and as a result it is expected that there will be increasing pressure on these stocks.

⁷ Catch limits are implemented through licence conditions/all species listed as 'Combined 80' have a combined catch limit across the species of 80 tonnes.



During the 1990s, the fishery was based primarily on sandfish, a high-value species occurring in relatively shallow waters, which as a result is vulnerable to over-harvesting. Serious overexploitation and resource depletion of sandfish stocks has occurred on Warrior Reef. This has been confirmed through several fishery-independent surveys that were conducted to assess the level of reduction in sandfish abundance. The harvest of sandfish has been prohibited on the reef since 1998. Despite this, further decline in stock abundance was found in 2004 and may have been the result of illegal harvesting.

There was no recorded increase in stock of sandfish until 2010, where a survey of sandfish at Warrior Reef and surrounding area was conducted and results indicated signs of stock recovery. The survey also identified potential uncertainty in the estimates of stock abundance due to difficulties in the survey techniques for recording sandfish that have burrowed into the seafloor.

Illegal fishing incursions by Papua New Guinea nationals at Warrior Reef have been reduced as a result of a closure of Papua New Guinea's bêche-de-mer fishery since October 2009. Australia will continue to conduct surveillance of the reef and maintain a response capability in the area through the Australian Fisheries Management Authority's Foreign Compliance program. Coastwatch flights also cover the area daily.

When the sandfish harvest was closed in 1998, fishing then focussed on other high value species—surf redfish, black teatfish, white teatfish and some lower-value species. In 2002 it was found that the black teatfish and surf redfish had experienced significant declines in abundance on the eastern reefs of Torres Strait. As a result the PZJA set zero catch limits for surf redfish and black teatfish, effectively closing the fishery for these two species. By 2005 restrictive catch limits were also set for the white teatfish and prickly redfish.

In 2009 a stock abundance survey undertaken by the CSIRO showed signs of recovery of black teatfish with higher numbers and larger individuals being found. It was also found that other sea cucumber species were either stable or increasing in abundance. The catch limits that were set for the various species of sea cucumber to ensure that the stocks either remain healthy or improve are outlined in Table 6.





The status of species in the fishery varies. Table 7 provides a summary of species status as assessed by the Australian Bureau of Agricultural and Resource Economics and Sciences.

Strategic assessment—update

The fishery was formally accredited under the Environment Protection and Biodiversity Conservation Act as a wildlife trade operation in June 2014 until 15 June 2017. It is subject to the conditions and recommendations that were developed by the Department of Environment.

Table 7. Summary of species status within the Torres Strait Bêche-de-mer Fishery (Georgeson et al. 2014; Woodhams et al. 2013; Woodhams et al 2012)

<i>Species</i>	<i>Comments</i>
Black teatfish	The species has been assessed as not overfished or subject to overfishing. No catch reported in 2011, 2012 or 2013. The most recent survey estimates (2009) indicate a recovered stock.
Prickly redfish	The species has been assessed as not overfished or subject to overfishing. Catch was reported in 2011 of 9.9 t, 2012 of 10 t and in 2013 of 2.8 t which are less than the catch limit. There are relatively stable densities through recent history of fishery.
Sandfish	Whilst the species has been assessed as overfished it is not subject to overfishing. Most recent published survey (2010) showed density is still below 1995 density estimate. No catch reported in 2011 or 2013. In 2012 there was 2.1 t harvested during an experimental fishing trial.
Surf redfish	The species has been assessed as not subject to overfishing. No catch reported in 2010. Historical density estimates and historical catch are uncertain due to identification issues.
White teatfish	This species was assessed as not overfished or subject to overfishing. Catch was reported in 2011 of 14.6 t, 2012 of 15.7 t and in 2013 9.9 t. There were relatively stable densities in 1995, 2002 and 2005 surveys, potentially increasing between 2005 and 2009 surveys.
Other sea cucumber species (18 species)	There is uncertainty of the catch composition and basket composition of stock. Catch was reported across these species in 2011 of 1 t, 2012 of 4.1 t and 2013 of 3.3 t.



TORRES STRAIT DUGONG AND TURTLE FISHERIES

Description of the fisheries

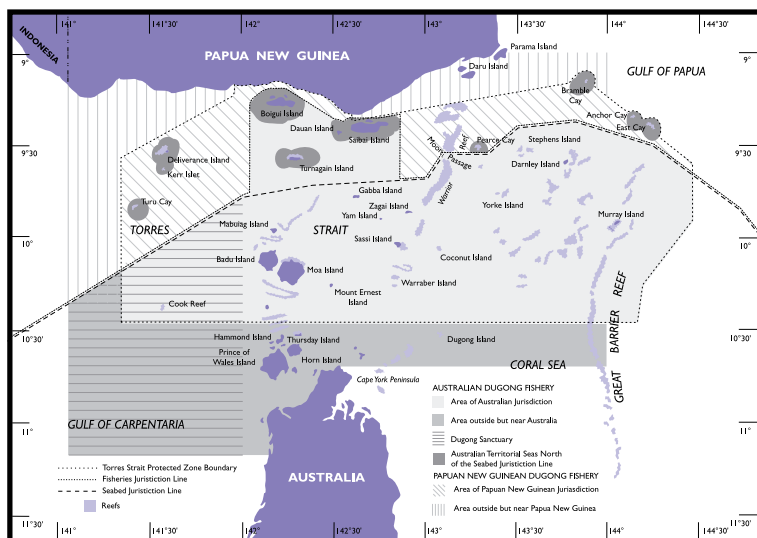


Figure 12. Area of the Torres Strait Dugong Fishery

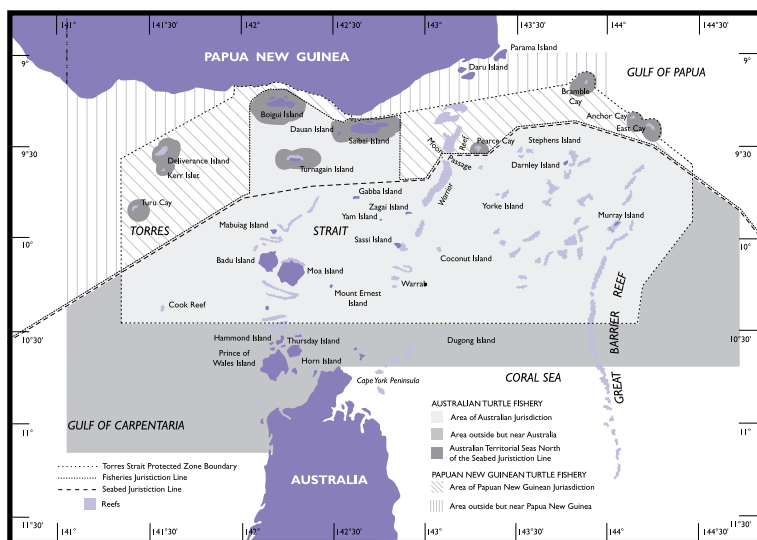


Figure 13. Area of the Torres Strait Turtle Fishery





The Torres Strait dugong and turtle fisheries (Figures 12 and 13) are traditional subsistence fisheries. Hunting for dugong and turtle is an important part of the traditional way of life and source of protein in the diet of traditional inhabitants of the Torres Strait. Whilst the importance of the hunting of this species is recognised, measures are still implemented to ensure the conservation of these species through the management arrangements across both Australia and Papua New Guinea.

Dugong and turtles are hunted using a wap (traditional spear) thrown by hand from a dinghy. Turtles are also caught by hand both from a dinghy and on the beach during nesting in some areas of the Torres Strait. Turtle eggs are also harvested.

Strong partnerships have been established for research, management and sustainable take on dugongs and turtles between Torres Strait island communities, the Torres Strait Regional Authority, relevant registered native title prescribed bodies corporate, research providers and state and Commonwealth agencies. Research projects that are undertaken include dugong aerial surveys, turtle tagging, turtle foraging population surveys, nesting turtle tagging and hatching success surveys and migration surveys through satellite tracking for both dugongs and turtles.

There are specific Torres Strait community developed objectives for the fisheries which are outlined in the community based turtle and dugong management plans. These are administered by the individual prescribed native title bodies corporate at each community with technical assistance from the Land and Sea Management Unit of the Torres Strait Regional Authority.

Community-based dugong and turtle management plans have been rolled out in the 14 Torres Strait island communities. Each community dugong and turtle management plan integrates a range of cultural hunting protocols and traditional knowledge with contemporary fisheries management arrangements appropriate to each community.

Management arrangements

Participation in the fishery is restricted to traditional inhabitants of the Torres Strait and Papua New Guinea Treaty villages for traditional purposes.



There are several restrictions on the take of dugong and turtles including:

- only traditional inhabitant licensed boats less than six meters in length are permitted to take and carry dugong and turtle
- dugongs may only be hunted using a wap (a spear thrown by hand)
- there is no take of dugong in the dugong sanctuary which has been established in the south-western area of the Torres Strait.

Habitat

Seagrass meadows are the primary food resource for turtle and dugong and habitat for fish species. Approximately 30 per cent of Queensland's seagrass meadows are in the Torres Strait—with one of the largest single continuous seagrass meadows recorded in Australia in the Torres Strait dugong sanctuary. These meadows continue to be assessed and monitored by the Torres Strait Regional Authority in partnership with James Cook University, Centre for Tropical Water and Aquatic Ecosystem Research (TropWATER).

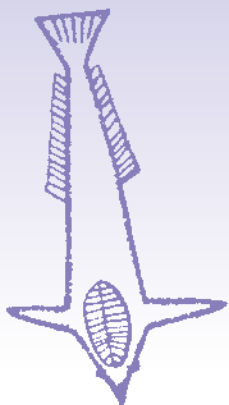
Intertidal seagrass sites are also being monitored by Torres Strait Regional Authority and TropWATER. Results from these sites indicate that seagrass is in a good condition with improving abundance at some locations. The large areas of seagrass found in the shallow waters means that the Torres Strait is an important refuge for dugong and turtle.

Condition of the fisheries

Dugong: The population of dugongs in the Torres Strait is considered to be substantial and genetically healthy (Marsh *et al.*, 2011). The highest dugong population estimate was in 2013 at about 16 000 individuals. Additionally, it is believed that there are excellent breeding conditions as there are a high proportion of calves in the population (17.9 per cent) (Sobtzick *et al.* 2014).

Aerial surveys of the Torres Strait (in whole or in part) to estimate the dugong population were conducted in 1987, 1991, 1994, 1996, 2001, 2005, 2006, 2011 and 2013. These surveys largely include waters of the central Torres Strait, and adjacent coastal waters of Cape York and Papua New Guinea. Since 2011 they also included areas of the western waters of the Torres Strait.





The surveys have not detected a decline in the dugong population of Torres Strait over the surveys, particularly since 2000, suggesting that the level of anthropogenic mortality may be sustainable (Sobtzick et al. 2014).

Estimated annual catches have ranged from 240 to more than 800 individuals (Marsh 1999). Obtaining accurate data from the Torres Strait communities on harvest rate levels is a priority to ensure that the level of catch remains sustainable. The community-based turtle and dugong management plans include community-based catch monitoring.

Turtle: There are no population estimates for turtle stocks in the Torres Strait. However, the monitoring of key turtle nesting sites in north Queensland has raised concerns about the green turtle and hawksbill turtle stocks. To ensure the long term viability of these populations there is a growing awareness of the need to manage the traditional take of green turtles and the harvest of turtle eggs; the eggs of the hawksbill, flatback and green turtles are regularly harvested by traditional inhabitants. Other turtle species are not generally taken for food.

No current estimate exists for the harvest of turtles however the implementation of the community-based management plans includes community-based catch monitoring.

Strategic assessment—update

The *strategic assessment report of the Torres Strait turtle and dugong fisheries* was submitted in 2007 to the then Australia Government Department of Sustainability, Environment, Water, Population and Communities after consideration by the Torres Strait Fisheries Management Advisory Committee, the Australian Fisheries Management Authority Environment Committee and the PZJA. The then Australian Government Department of Sustainability, Environment, Water, Population and Communities made several recommendations in consultation with Torres Strait communities and relevant Government agencies. The strategic assessment is yet to be finalised.



6 LICENSING

There are different types of licences that permit commercial fishing in PZJA fisheries. These can be split into three different categories, those that:

- permit fishers to access particular PZJA fisheries (fishing boat licences)
- permit non-traditional inhabitant commercial fishing operations to fish in the Torres Strait (master fisherman's licences)
- dictate what species can be received, carried or processed on the vessel. (processor/carrier licences)

FISHING BOAT LICENCES

All commercial fishing boats, including both primary and tender vessels, require a fishing boat licence to be able to access any commercial fishery in the Torres Strait. These licences are issued with an endorsement which identifies the fishery/fisheries in which a licence holder can operate.

There are three types of fishing boat licences in the Australian jurisdiction of the Protected Zone:

- Traditional Inhabitant Fishing Boat Licence
- Torres Strait Fishing Boat Licence
- Torres Strait Sunset Fishing Boat Licence.

Only traditional inhabitants are eligible for Traditional Inhabitant Fishing Boat licences. Traditional inhabitants are defined under the Treaty (in relation to Australia) as persons who:

- are Torres Strait Islanders who live in the Protected Zone or in the adjacent coastal area of Australia
- are citizens of Australia, and
- maintain traditional customary associations with areas or features in or in the vicinity of the Protected Zone in relation to their subsistence or livelihood or social, cultural or religious activities.

Papua New Guineans who are on the amnesty list under the Torres Strait Treaty are also eligible for a traditional inhabitant licence.





All capacity building in Torres Strait commercial fisheries is reserved for traditional inhabitants only and no new licences are issued to non-traditional inhabitants. Additionally, some fisheries only have traditional inhabitant fishers.

Torres Strait Fishing Boat licences and Torres Strait Sunset Fishing Boat licences are the only avenue that non-traditional inhabitants can access commercial fishing in the Torres Strait. Non-traditional inhabitants can access to the fisheries by purchasing or leasing an existing Torres Strait Fishing Boat licence (transferable) or by leasing a Torres Strait Sunset Fishing Boat licence. Note that non-traditional inhabitants also require a Torres Strait Master Fisherman's licence to operate a commercial fishing operation (including for both primary and tender vessels).

During the reporting period Torres Strait Fishing Boat licences were held in the prawn, tropical rock lobster, pearl shell and bêche-de-mer fisheries.

In the finfish fishery, all endorsements held by Torres Strait Fishing Boat Licence holders were surrendered in the 2007–08 financial year. Now, only traditional inhabitants can own a licence. However, non-traditional inhabitants can gain temporary access through a 'quota leasing system' via the issuing of Torres Strait Sunset Fishing Boat Licences.

The leasing process that applies to these licences is administered by the Torres Strait Regional Authority and enables the temporary transfer of unused effort in the fishery. The intent of this system is to maintain the market for these fisheries by ensuring ongoing supply of product from the Protected Zone until a point where the traditional inhabitant effort increases.

The revenue raised through the leasing process is invested in community initiatives to further develop the traditional inhabitant commercial fishing sector.

The numbers of the different types of fishing boat licences issued or renewed by the PZJA at 30 June each year during the reporting period are provided in Tables 8 to 10. Numbers provided for boat licences exclude those held in "no boat" status, where there are no registered vessels attached to the licence.

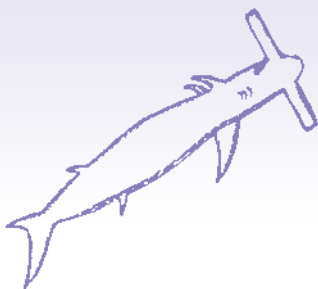




Table 8. Number of Traditional Inhabitant Fishing Boat Licences in each Torres Strait fishery⁸ (at 30 June).

<i>Fisbery</i>	2012	2013	2014
Bêche-de-mer	58	30	50
Crab	78	37	75
Tropical rock lobster	308	215	268
Finfish—reef line	134	103	133
Finfish—Spanish mackerel	150	103	136
Pearl shell	43	28	47
Trochus	68	39	53

Table 9. Number of Torres Strait Fishing Boat Licence in each Torres Strait fishery (at 30 June).

<i>Fisbery</i>	<i>Primary</i>			<i>Tenders</i>			<i>Total</i>		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Bêche-de-mer	1	1	1	2	2	2	3	3	3
Tropical rock lobster	13	11	11	34	30	30	47	41	41
Pearl shell	10	9	8	17	17	12	27	26	20
Prawn	47 ⁹	50	42	0	0	0	47	50	42
Other	3	3	0	13	13	2	16	16	2

Table 10. Number of Torres Strait Sunset Fishing Boat Licences in each Torres Strait fishery (at 30 June).

<i>Fisbery</i>	<i>Primary</i>			<i>Tenders</i>			<i>Total</i>		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Finfish—reef line	1	1	1	4	4	4	5	5	5
Finfish—Spanish mackerel	4	4	5	9	9	12	13	13	17

8 Note that not all licenced boats with commercial fishery endorsement were active in their fishery.

9 This number includes 16 licences which were under a repayment agreement and were not valid until the payment was made in full.



MASTER FISHERMAN'S LICENCES

A non-traditional inhabitant who is in charge of a boat licensed by either a Fishing Boat or Sunset Licence must hold a Torres Strait Master Fisherman's Licence endorsed for the relevant fishery. This applies whether the licensed boat is a primary boat, a tender or a dinghy.

Commercial fishers do not need to have prerequisite qualifications to be able to get a Master fisherman's licence. These licences were introduced in the Protected Zone as a way to increase the number of traditional inhabitants working on non-traditional inhabitant vessels. As such fishers have the choice of either getting a Master Fisherman's licence or employing traditional inhabitants as crew thereby negating the requirement.

Table 11 outlines the number of Master Fisherman's licences held in the different fisheries. The number of licences provides an indication of the potential activity level (fishing effort) that could occur in a fishery.

Table 11. Number of Master Fisherman's licences by combinations of Torres Strait fisheries (at 30 June).

<i>Fishery</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Tropical rock lobster	20	25	23
Tropical rock lobster, reef line, Spanish mackerel and pearl	4	4	4
Tropical rock lobster, reef line and prawn	1	1	1
Tropical rock lobster, reef line, Spanish mackerel, pearl and prawn	5	4	4
Tropical rock lobster and Spanish mackerel	2	2	2
Tropical rock lobster, Spanish mackerel and pearl	32	30	29
Tropical rock lobster and pearl	5	4	3
Reef line	2	1	1





<i>Fisbery</i>	2012	2013	2014
Reef line and Spanish mackerel	5	6	4
Reef line, Spanish mackerel and prawn	4	4	4
Reef line and prawn	35	23	22
Spanish mackerel	5	4	3
Pearl	2	2	3
Prawn	36	37	42
Bêche-de-mer	4	4	7
Total	162	151	152

PROCESSOR/CARRIER LICENCES

There are three classes of processor/carrier boat licences that control how commercial seafood products are carried and/or processed in the Torres Strait:

- Class A licences allow a licenced primary vessel of a fishing operation to receive, carry and process product from its associated tenders.
- Class B licences allow vessels to carry and process product caught by licenced fishing vessels. However, a Class B license does not allow the licensee to change the form of the product i.e. you cannot collect whole dead lobster then tail or freeze them, whole fish cannot be collected and then filleted and unfrozen product cannot be frozen.
- Class C licences allow the licence holder to collect product from vessels that are licenced to fish in the Torres Strait and change the state of the product. However, unlike the other classes of processor/carrier licences the vessel cannot be used to fish commercially.





7 SURVEILLANCE AND ENFORCEMENT

The PZJA has a responsibility to enforce the provisions of the Act through the surveillance of the fishing industry and enforcement of rules and regulations in the Protected Zone. The Queensland Boating and Fisheries Patrol conduct these activities on behalf of the PJZA through the Protected Zone Compliance Program. The purpose of the program is to:

- enforce fisheries legislation in a manner that results in a high level of compliance
- educate and advise both traditional and commercial fishers on the need for fishing laws in manner that results in a high level of voluntary compliance
- undertake duties as required by the PZJA to protect Protected Zone resources.

Queensland Boating and Fisheries Patrol officers, based on Thursday Island and in Cairns delivered the 2011–12 and 2012–13 Domestic Compliance Program through at-sea inspections using a number of vessels and community visits. Officers based in Cairns delivered the 2013–14 program patrols.

PATROLS

The Queensland Boating and Fisheries Patrol aims to conduct patrols for 60 sea days within the Protected Zone annually; noting that additional patrol days may also be needed to conduct specific investigations.

Queensland Boating and Fisheries Patrol conducts joint patrols using the Queensland Police Service vessel as a patrol platform and staff may be teamed alongside police officers when performing field duties. This agreement commenced in March 2010. Using other government resources such as Police improves the ability to patrol and enforce fisheries legislation throughout the Protected Zone.





Additionally the district has a number of resources that may be used to accommodate a response when the need arises. These platforms can include other Government resources such as the Royal Australian Navy and other private commercial vessels that may be chartered.

Queensland Boating and Fisheries Patrol achieved a total of 59, 52 and 68 Protected Zone patrol days in 2011–12, 2012–13 and 2013–14 respectively. Table 12 provides details about which vessels were used and how often they were used to conduct the patrols.

Table 12. Vessels used for undertaking patrol days.

Vessel	Patrol days		
	2011–12	2012–13	2013–14
Queensland Police vessel	46	52	64
Queensland Police rigid inflatable boat	0	0	4
Queensland Boating and Fisheries Patrol vessel <i>Pelagic</i>	13	0	0
Total	59	52	68

COMMUNITY VISITS

Whilst not a key role of the Queensland Boating and Fisheries Patrol, extension and education services are undertaken during Torres Strait community visits. Table 13 outlines the frequency that these visits occurred during the reporting period. They are vital for achieving voluntary compliance and are conducted when possible during at sea patrols on board the police vessel.





Table 13. Queensland Boating and Fisheries Patrol community visits in the Protected Zone.

Community	Number of Visits		
	2011–12	2012–13	2013–14
Badu Island	4	2	2
Boigu Island		4	
Coconut (Poruma) Island	1	6	
Darnley (Erub) Island	1	2	1
Dauan Island	1	3	
Gabba Island	1		
Horn (Ngurapai) Island	1		
Mabuiag Island	3	1	
Moa Island	1	3	3
Murray (Mer) Island	1	7	
Saibai Island	6	9	
Stephen Island	4	3	
Sue Island	1	10	
Tuesday Island	1		
Thursday Island		5	
Warraber Island		1	
Warrior Reef		1	
Wednesday Island	1		
Woody Island	1		
Yam (Iama) Island	5	19	1
Yorke (Masig) Island	5	1	1
Zoggil Island	1		
Total	39	77	8



The visits also enable community members to raise matters relating to commercial, traditional and recreational fishing and boating safety issues. Issues discussed during community visits include:

- licensing procedures
- unlicensed fishing
- confusion about the licensing requirements for traditional inhabitants who wish to exercise their traditional rights in regards to traditional fishing.

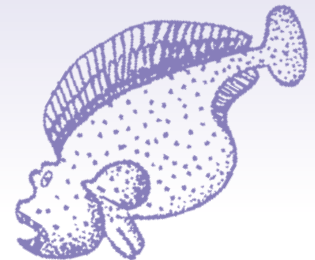
Community visits also provide useful information to schedule Protected Zone patrols. These may include trends in commercial fishing and hot spots for commercial fishing activities.

PROTECTED ZONE COMPLIANCE PRIORITIES

Patrols, which include educating fishers in the field, have been focused on several fisheries, the issues identified in these fisheries during the patrols and community visits are summarised in Table 14.

Table 14. Compliance issues identified for the individual fisheries.

<i>Fishery</i>	<i>Issues</i>
Bêche-de-mer	<ul style="list-style-type: none"> • Take of no take species (sandfish, black teatfish, surf redfish) • Unlicensed fishing.
Pearl shell	<ul style="list-style-type: none"> • Nil.
Prawn	<ul style="list-style-type: none"> • Failure to produce documentation (vessel's fishing authority, vessel's fishing and safety manuals including manning certificates) • Failure to carry safety equipment in accordance with registration requirements • Awareness of current regulations including those contained within Fisheries Management Notices (FMN).





<i>Fishery</i>	<i>Issues</i>
Reef line/Spanish mackerel	<ul style="list-style-type: none"> • Low knowledge of current fishery legislation (take/no take species) • Failure to carry safety equipment in accordance with registration requirements.
Tropical rock lobster	<ul style="list-style-type: none"> • Failure to hold a Torres Strait Master Fisherman's Licence • Failure to complete a variation when replacing tenders • Failure to comply with conditions of a licence • Lack of knowledge of relevant licensing conditions; • Taking/retaining undersized lobster • Failure to produce documentation (manning certificates) • Failure to carry safety equipment in accordance with registration requirements.
Dugong/turtle	<ul style="list-style-type: none"> • Lack of knowledge of the fishery sanctuary • Non-traditional persons participating in activity • Reported sale of dugong and turtle products • Failure to carry safety equipment in accordance with registration requirements.



As a result of surveillance and community visits the following key compliance priorities in the Protected Zone identified by the Queensland Boating and Fisheries Patrol are set out in Table 15 below.

Table 15. Key compliance priorities

<i>Fisbery</i>	<i>Compliance Priorities</i>
Bêche-de-mer	<ul style="list-style-type: none"> • Unlicensed (Papua New Guinea nationals taking sea cucumber within Protected Zone) • Take of no take species
Reef Line/ Spanish mackerel	<ul style="list-style-type: none"> • Unlicensed • Excess tenders
Pearl shell	<ul style="list-style-type: none"> • Unlicensed
Prawn	<ul style="list-style-type: none"> • Vessel Monitoring System • Bycatch Reduction Device/Turtle Exclusion Device • Gear restriction • Shark finning • Bycatch of tropical rock lobster
Tropical rock lobster	<ul style="list-style-type: none"> • Unlicensed tenders • Size restriction • Closures
Turtle and dugong	<ul style="list-style-type: none"> • Non-traditional inhabitant take • Gear restriction





8 RESEARCH PROGRAM

The Torres Strait Scientific Advisory Committee continued to assess and prioritise strategic research activities for Torres Strait fisheries. To reflect changes in fisheries status, tactical research needs and direction, annual operational plans were developed.

To ensure that research is conducted in a culturally appropriate manner in the Torres Strait a *guide to researchers working in the Torres Strait* (2012) is provided to people undertaking research.

Projects for the three financial years were funded by the Australian Fisheries Management Authority based on recommendation by the scientific advisory committee. Many reports from the projects can be accessed at www.cmar.csiro.au/datacentre/torres/tsmr_other.htm. Table 16 provides the details of the projects conducted during the reporting period.

Table 16. Research projects conducted in the Protected Zone presented by the financial year they were commenced

<i>Research project</i>	<i>Research provider</i>	<i>Principal Investigator</i>	<i>Financial year completed</i> ¹⁰
<i>Commenced prior to July 2011</i>			
2013 Refined stock assessment and total allowable catch estimation for the Torres Strait tropical rock lobster	CSIRO	Eva Plaganyi-Lloyd	2011–12
Assessing benefits and develop protocols for “reef gardens” in the Torres Strait—community based management in action.	CSIRO	Nicole Murphy	2011–12
Assessing stock recovery using experimental fishing for sandfish on Warrior Reef, Torres Strait.	CSIRO	Nicole Murphy	2011–12

¹⁰ Financial years in brackets indicate when the project is due for completion



<i>Research project</i>	<i>Research provider</i>	<i>Principal Investigator</i>	<i>Financial year completed¹⁰</i>
Management Strategy Evaluation for the Torres Strait Tropical Rock Lobster Fishery.	CSIRO	Eva Plaganyi-Lloyd	2011–12
<i>Commenced in 2011–12</i>			
2014 stock assessment and total allowable catch estimation for the Torres Strait tropical rock lobster	CSIRO	Eva Plaganyi-Lloyd	2012–13
Empowering Torres Strait Islanders to have greater engagement in the Research Development and Extension process.	C-Aid Consultancy	Chris Calogeras	2012–13
Perceptions of traditional inhabitants on boat and gear length in the Torres Strait Prawn Fishery	Independent researcher	Anthony de Fries	2012–13
Characterisation of the traditional subsistence fisheries in the Treaty communities (Torres Strait and Papua New Guinea).	CSIRO	Sara Busilacchi	2013–14
<i>Commenced in 2012–13</i>			
Desktop study of the effects of climate change on Torres Strait Fisheries and Supporting Habitats	C20 Fisheries	David Welch	2012–13
Desktop Study of turtle and dugong research in the Torres Strait	Independent Researcher	Nicholas Pilcher	2012–13





<i>Research project</i>	<i>Research provider</i>	<i>Principal Investigator</i>	<i>Financial year completed¹⁰</i>
Environmental sustainability assessment update for habitats, assemblages and bycatch species in the Torres Strait Prawn Fishery	CSIRO	Roland Pitcher	2013–14
Torres Strait Marine Research Repository	CSIRO	Tonya van der Velde	2012–13
Smart phone technology for remote data collection in Torres Strait traditional inhabitant finfish fisheries.	UTAS	Dan French & Klass Hartmann	(2014–15)
<i>Commenced in 2013–14</i>			
Production of an identification guide for sea cucumber species in the Torres Strait	CSIRO	Nicole Murphy	2013–14
2015 stock assessment and total allowable catch estimation for the Torres Strait tropical rock lobster	CSIRO	Éva Plagányi	(2014–15)
Defining the Status of Torres Strait Spanish mackerel to inform future fisheries allocation and sustainable fishing	James Cook University	Andrew Tobin	(2015–16)
Improved Torres Strait Prawn Fishery profitability and pathways for a sustained flow of benefits to Torres Strait Island communities	Cobalt Marine Resource Management	Andy Bodsworth	(2015–16)



9 FINANCIAL ARRANGEMENTS

COST SHARING

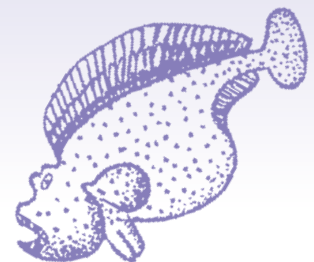
The Australian Government (represented by the Australian Fisheries Management Authority) and the State of Queensland (represented by Fisheries Queensland) have joint responsibilities for administering certain PZJA fishery functions (e.g. fisheries management, licensing and compliance). A cost share arrangement exists between the two parties was initially signed in January 1986; it was updated in 1999 and in 2010 to suit changing needs.

The arrangement outlines how PZJA functions and costs are shared and how assets are managed. The agreement was ratified in June 2010 by; the Chief Executive Officer of the Australian Fisheries Management Authority and the Managing Director of Fisheries Queensland. It applied to the 2009–10 financial year onwards.

CAPITAL ITEMS

Implementation of the initial capital items program, fully funded by the Commonwealth, began in 1985–86 and was completed in the first half of the financial year 1991–92. Each agency tends to its own capital items. The Commonwealth's capital items held on 30 June 1999 and still held include:

- a joint fisheries/quarantine administrative centre on Thursday Island
- three residences on Thursday Island for the use of regional fisheries staff.





OVERALL FINANCES

The costs for managing PZJA fisheries are incurred by the:

- Australian Fisheries Management Authority for fisheries management and PZJA committee administrative functions
- Fisheries Queensland for compliance and licencing functions
- Torres Strait Regional Authority for capacity building and traditional inhabitant representation facilitation.

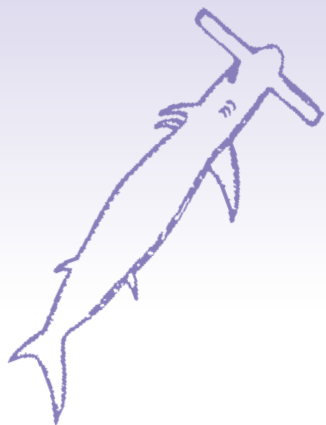
To support activities associated with PZJA fisheries levies and/or licence fees are collected from traditional and non-traditional commercial fishers that offset costs.

Funds from the traditional inhabitant boat licence fees are provided to the Torres Strait Regional Authority. The remainder is divided between the Australian Fisheries Management Authority and Fisheries Queensland based on the cost share arrangement between the two agencies. In addition, where relevant, rent is collected from office and residential accommodation in buildings held by agencies on Thursday Island.

Costs, and revenue, for the Australian Fisheries Management Authority and Fisheries Queensland during the financial years 2011–12, 2012–13 and 2013–14 are outlined in Tables 17 to 19 noting that:

- The financial performances of the Australian Fisheries Management Authority and Fisheries Queensland are reported through their respective annual reports
- For Fisheries Queensland actual expenditure has been recorded where possible, otherwise the budget for the period has been recorded. There may be some slight difference between the two; however, it is unlikely to be significant

During the previous 2010–11 financial year the Australian Fisheries Management Authority provided \$1 070 000 to Fisheries Queensland to enable a voluntary buy-out of the Torres Strait Tropical Rock Lobster Fishery non-traditional inhabitant licence holders. Very few licence holders sold their licences and as such the funds were returned to the Australian Fisheries Management Authority during the 2011–12 financial year.





During the reporting period Torres Strait Regional Authority met its financial obligations associated with the PZJA from its own appropriation funding. The Authority's financial statements are audited annually by the Australian National Audit Office and included as part of their annual reports. The Torres Strait Regional Authority does not report the financial costs associated with PZJA activity separately as it forms part of the day to day normal program activity.

In addition to appropriation funding, Torres Strait Regional Authority also received money from the traditional inhabitant licence fees for capacity building for the relevant community fisher group, the amounts were:

- \$42 210 in 2011–12
- \$31 920 in 2012–13
- \$40 500 in 2013–14

The Australian Government Department of Agriculture also incurs costs when providing policy and legislative support when needed. However, there is not a dedicated Torres Strait section in the Department and any expenditure is not directly recorded against the PZJA and as such is not reported here.





Table 17: 2011–12 Australian Fisheries Management Authority (AFMA)—Fisheries Queensland (FQ) cost-sharing details

<i>Description</i>	<i>AFMA</i>	<i>FQ</i>	<i>Total</i>
Direct Costs			
Salaries & on-costs	\$763 910	\$941 796	\$1 705 706
Consultants and contractors		\$100 000	\$100 000
Travel & subsistence	\$97 445	\$224 000	\$321 445
Research contracts	\$683 455		\$683 455
Other administrative costs	\$404 847	\$37 000	\$441 847
Total direct costs	\$1 949 657	\$1 302 796	\$3 252 453
Indirect Costs			
Logbook program	\$14 672		\$14 672
Data management	\$2 444		\$2 444
Observers	\$42 558		\$42 558
Vehicle lease/ operating costs		\$10 000	\$10 000
Information services (VMS polling)		\$18 000	\$18 000
Leased asset costs		\$10 000	\$10 000
Overheads	\$460 659	\$493 629	\$954 288
Total indirect costs	\$520 333	\$531 629	\$1 051 962
Total costs	\$2 469 990	\$1 834 425	\$4 304 415
Revenue			
Tropical Rock lobster licence buyback return	\$1 070 000		
Rent and building	\$64 145		\$64 145
Licenses and levies	\$515 762	\$164 643	\$680 405
Total revenue	\$1 649 907	\$164 643	\$1 814 50
Net expenditure	\$820 084	\$1 669 782	\$2 489 865



Table 18: 2012–13 Australian Fisheries Management Authority (AFMA)—Fisheries Queensland (FQ) cost-sharing details

Description	AFMA	FQ	Total
Direct Costs			
Salaries & on-costs	\$695 756	\$756 410	\$1 452 166
Consultants and contractors		\$100 000	\$100 000
Travel & subsistence	\$83 173	\$224 000	\$307 173
Research contracts	\$481 637		\$481 637
Other administrative costs	\$225 529	\$37 000	\$262 529
Total direct costs	\$1 486 094	\$1 117 410	\$2 603 504
Indirect Costs			
Logbook program	\$4 957		\$4 957
Data management	\$4 783		\$4 783
Observers	\$37 020		\$37 020
Vehicle lease/ operating costs		\$10 000	\$10 000
Information services (VMS polling)		\$18 000	\$18 000
Leased asset costs		\$10 000	\$10 000
Overheads	\$731 356	\$493 629	\$1 224 985
Total indirect costs	\$778 116	\$531 629	\$1 309 745
Total costs	\$2 264 211	\$1 649 039	\$3 854 664
Revenue			
Rent and building	\$7 365		\$7 365
Licenses and levies	\$586 130	\$168 788	\$754 918
Total revenue	\$593 495	\$168 788	\$762 283
Net expenditure	\$1 670 716	\$1 480 251	\$3 150 967





Table 19: 2013–14 Australian Fisheries Management Authority (AFMA)—Fisheries Queensland (FQ) cost-sharing details

<i>Description</i>	<i>AFMA</i>	<i>FQ</i>	<i>Total</i>
Direct Costs			
Salaries & on-costs	\$842 142	\$768 752	\$1 610 894
Consultants and contractors		\$100 000	\$100 000
Travel & subsistence	\$186 522	\$79 000	\$265 522
Research contracts	\$548 938		\$548 938
Other administrative costs	\$258 324	\$40 000	\$298 324
Total direct costs	\$1 835 926	\$987 752	\$2 823 678
Indirect Costs			
Logbook program	\$5 755		\$5 755
Data management	\$4 377		\$4 377
Observers	\$57 554		\$57 554
Information services (VMS polling)		\$18 000	\$18 000
Overheads	\$494 889	\$450 154	\$945 043
Total indirect costs	\$562 575	\$468 154	\$1 030 729
Total costs	\$2 398 500	\$1 455 906	\$3 854 406
Revenue			
Licenses and levies	\$263 230	\$194 698	\$457 928
Total revenue	\$263 230	\$194 698	\$457 928
Net expenditure	\$2 135 271	\$1 261 208	\$3 396 479



ANNEX A: PZJA OUTCOMES

OUT OF SESSION DECISIONS

8 JULY 2011

On 8 July 2011, the PZJA made the following out of session decisions:

With respect to the Torres Strait Prawn Fishery:

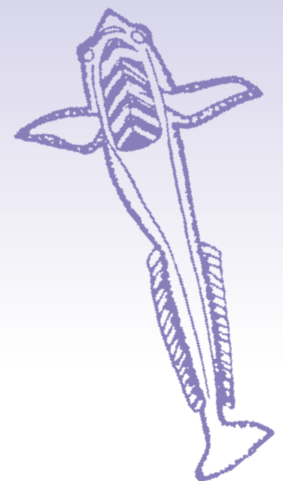
- 1.1 The PZJA **AGREED** to endorse the *Torres Strait Prawn Fishery Harvest Strategy*.
- 1.2 The PZJA **NOTED** that consultation for the development of the harvest strategy was undertaken through the Torres Strait Prawn Management Advisory Committee and a specialised Torres Strait Prawn Fishery Harvest Strategy Working Group.

9 SEPTEMBER 2011

On 9 September 2011, the PZJA made the following out of session decisions:

With respect to the Torres Strait Tropical Rock Lobster Fishery:

- 1.1 The PZJA **AGREED** to:
 - a. to remove interim management arrangements for the Torres Strait Tropical Rock Lobster Fishery following announcement of the structural adjustment; and
 - b. introduce temporary (sunset) fishing licences in the tropical rock lobster fishery and two temporary (sunset) Processor-Carrier licences.
- 1.2 The PZJA **NOTED** that a Communication Strategy will be provided to announce structural adjustment in the Torres Strait Tropical Rock Lobster Fishery.
- 1.3 The PZJA **AGREED** to issue a number of Processor-Carrier licences to the Torres Strait Regional Authority to be leased out on a yearly basis. Tender conditions agreed to by the Standing Committee, including those relating to towing of fishing dories and accommodating of crew, will apply to these licences.





- 1.4 The PZJA **NOTED** that as the buy-out in the lobster fishery has been agreed to, the PZJA will buy the licences offered for sale and the Torres Strait Regional Authority agree to negotiate with potential lessees to lease back to the Transferable Vessel Holder sector for a period of up to ten years with a guarantee that lease conditions will not be restricted by additional conditions such as area closures, without the full agreement of the parties to the lease.
- 1.5 The PZJA **NOTED** that recommendations on leasing arrangements are based on the following key points:
 - a. Purchased non-Indigenous licences will be surrendered on the contract date or other date agreed to by the signing parties.
 - b. The interim management arrangements will be removed following the announcement of a structural adjustment package.

15 SEPTEMBER 2011

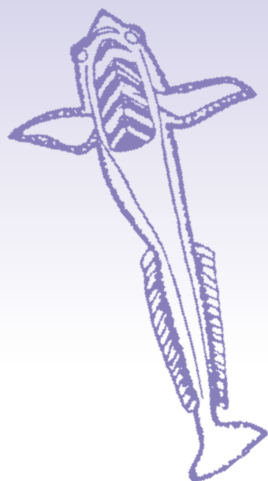
On 15 September 2011, the PZJA made the following out of session decision:

With respect to the Torres Strait Prawn Fishery:

- 1.1 The PZJA **AGREED** to the implementation of formal arrangements to facilitate leasing of Torres Strait Prawn Fishery licences.

With respect to the Torres Strait Prawn Fishery:

- 1.1 The PZJA
 - a. **AGREED** that the PZJA will no-longer note the Torres Strait Prawn Fishery Levy regulation amendments before they are determined and provided to the Federal Executive Council each year. This will reduce administrative delays in providing levy advice to industry.
 - b. **NOTED** that the chair of the PZJA will still approve the annual levy regulation amendments prior to their submission to the Federal executive Council for consideration and the final levy regulation amendment will be provided to the PZJA out of session for noting following its determination.





15 DECEMBER 2011

On 15 December 2011, the PZJA made the following out of session decision:

With respect to the Torres Strait Tropical Rock Lobster Fishery:

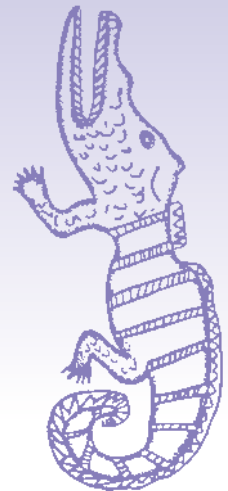
- 1.1 The PZJA **NOTED** the Communications strategy provided to announce structural adjustment in the Torres Strait Tropical Rock Lobster Fishery.
- 1.2 The PZJA **AGREED** to use the Communications strategy to announce structural adjustment in the Torres Strait Tropical Rock Lobster Fishery taking into account that:
 - a. Consideration will be given to making a public announcement of the structural adjustment on Thursday Island in the Torres Strait with PZJA members present.
 - b. The Chair of the PZJA will issue a media release on behalf of the PZJA subsequent to any public announcement.
 - c. PZJA agencies will use the Communications Strategy as a tool to provide further information to their constituents subsequent to an announcement.

30 JANUARY 2012

On 30 January 2012 the PZJA made the following out of session decisions:

With respect to the Torres Strait Tropical Rock Lobster Fishery:

- 1.1 The PZJA **AGREED** to reintroduce the 30 per cent tender reduction for non- traditional inhabitant vessels with more than one tender and the monthly seven day moon-tide hookah closure for all license holders as interim management arrangements in the Torres Strait Tropical Rock Lobster Fishery for 2012.
- 1.2 The PZJA **AGREED** that the interim management arrangements for the tropical rock lobster fishery in 2012 will be removed on completion of a structural adjustment of the fishery.





With respect to the Torres Strait Finfish Fishery

- 1.1 The PZJA **AGREED** to release the draft *Torres Strait Finfish Management Plan 2012* for public comment.
- 1.2 The PZJA **NOTED**:
 - a. That extensive consultation has been conducted in developing the draft *Torres Strait Finfish Management Plan 2012*.
 - b. That the Finfish Working Group, the Torres Strait Fisheries Management Advisory Committee, and PZJA agency officers have reviewed the draft *Torres Strait Finfish Management Plan 2012*, or an outline of the Plan, and have agreed to recommend that it is released for public comment.
 - c. That a communications strategy has been developed by PZJA agencies for consultation with stakeholders during the public comment period.
 - d. That the Finfish Working Group and the Torres Strait Fisheries Management Advisory Committee have been provided with the draft *Torres Strait Finfish Management Plan 2012* for their information.

31 JULY 2012

On 31 July 2012 the PZJA made the following out of session decisions:

With respect to the PZJA Annual Report 2009–10:

- 1.1 The PZJA **AGREED** to endorse and sign *Torres Strait Protected Zone Joint Authority Annual report 2009–10* so that the report may be tabled in the Australian Parliament in accordance with Section 41 of the *Torres Strait Fisheries Act 1984*.

6 MAY 2013

On 6 May 2013 the PZJA made the following out of session decisions:

With respect to the Torres Strait Finfish Fishery

- 1.1 The PZJA **AGREED** to approve the *Torres Strait Finfish Fishery Management Plan 2013* for determination.



1.2 The PZJA **NOTED**:

- a. That extensive consultation has been conducted in developing the draft Finfish Fishery Management Plan (the Plan).
- b. That the Finfish Fishery Working Group, the Torres Strait Fisheries Management Advisory Committee, and PZJA agency officers have reviewed the Plan and agreed to recommend it be released for public comment.
- c. That appropriate community consultation has been undertaken by PZJA agency officers leading up to and during the public comment period.
- d. That the Finfish Fishery Working Group and the Torres Strait Fisheries Management Advisory Committee agreed that the Australian Fisheries Management Authority adequately addressed the submissions from the public comment period and have endorsed the Plan with no amendments.
- e. That the PZJA Standing Committee has endorsed the Plan with no amendments.

3 JULY 2013

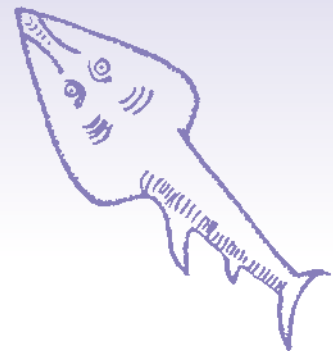
On 3 July 2013 the PZJA made the following out of session decisions:

With respect to the Torres Strait Treaty

1.1 The PZJA **AGREED** that, for future seasons, any Papua New Guinea days accepted by Australia annually through the Torres Strait Treaty preferential entitlement agreement should not be allocated to Australian licence holders.

1.2 The PZJA **NOTED** that:

- a. An ongoing decision not to issue Papua New Guinea days will reduce the administrative burden of consulting the PZJA annually on this matter.
- b. If the Australia Government accepts Papua New Guinea days offered at the fisheries bilateral meetings, the PZJA has the authority to make a subsequent decision to allocate these days during or between seasons if circumstances in the fishery change.





- c. PZJA agencies encourage the use of the Australian effort before they consider offering Papua New Guinea days.
- d. Unused effort can be leased between Australian licence holders as detailed in section 4.7 of the *Torres Strait Prawn Fishery Management Plan 2009*.
- e. The Torres Strait Prawn Fishery has operated at around 30 per cent of the Australian effort limit for the fishery (6,867 days) for the 2009, 2010 and 2011 seasons.

14 OCTOBER 2013

On 14 October 2013 the PZJA made the following out of session decisions:

With respect to the Torres Strait Bêche-de-mer (Sea Cucumber) Fishery

The PZJA **AGREED** to:

1. Set a 15 tonne Total Allowable Catch limit for black teatfish to be available for a maximum of one month commencing September 2013¹¹ in the Torres Strait Bêche-de-mer (Sea Cucumber) Fishery;
2. Note that under Section 22 of the *Torres Strait Fisheries Act 1984*, the Australian Fisheries Management Authority holds the delegation to issue a cease fishing notice when the catch limit is reached;
3. Undertake a review of management arrangements including the timing of any future seasons after the 2013 fishing season, and seek recommendations regarding future black teatfish catch limits; and
4. Catch reporting for black teatfish in the Traditional Inhabitant sector be established through a catch data record sheet.

¹¹ Note that the black teatfish fishery did not open in September 2013 due to governance arrangements.



13 February 2014

On 13 February 2014 the PZJA made the following out of session decisions:

With respect to the Torres Strait Prawn Fishery

- 1.1 The PZJA **AGREED** to set the Total Allowable Effort in the Torres Strait Prawn Fishery at 9,200 days for the 2014 fishing season.
- 1.2 The PZJA **NOTED** that the proposed Total Allowable Effort is consistent with the Torres Strait Prawn Fishery management plan, harvest strategy and PZJA sustainability reference points.

MEETING—PZJA 23

9 April 2014—record of decisions¹²

2. Update on fishery performance

- 2.1 The PZJA **NOTED** an update on each of the Torres Strait fisheries.

3. Compliance updates

3(i) Domestic compliance update

- 3.1 The PZJA **NOTED** an update on domestic compliance arrangements and achievements in the Torres Strait Protected Zone for the 2013–14 financial year.

3(ii) Foreign compliance update

- 3.2 The PZJA **NOTED** an update on foreign compliance activities in Torres Strait.

4. Capacity building, achievements and challenges

The PZJA **NOTED**:

- 4.1 the achievements in the development of the capacity of Torres Strait Islander and Aboriginal fishers and communities; and



¹² With regard to Agenda Item 1 there were no decisions, this item related to meeting preliminaries.



4.2 that changes to licensing regulations could encourage further development of the Traditional Inhabitant fishery.

5. Papua New Guinea Update

5.1 The PZJA **NOTED** a verbal update from representatives of the Papua New Guinea National Fisheries Authority.

6. Outcomes of PZJA Stakeholder Meeting

6.1 The PZJA **DISCUSSED** a summary of the outcomes of the PZJA Stakeholder Meeting held on 8 April 2014.

7. Native Title update including outcomes from the Cairns Summit

The PZJA **NOTED**:

7.1 a verbal update on Native Title matters from Mr Joseph Elu, Chair of the Torres Strait Regional Authority; and

7.2 the resolutions of the Torres Strait Sea Forum Summit (Cairns Summit) held in January 2014.

8. Indigenous Reference Group update

8.1 The PZJA **NOTED** a summary of the outcomes of the Indigenous Reference Group held on 17–18 March 2014.

9. Lessons Learned from the Maori Fishing Trust (Q&A)

9.1 The PZJA **NOTED** the presentation from Mr Douglas and took the opportunity to discuss specific matters of interest in detail.

10. Pathway to 100 per cent ownership

10.1 The PZJA **ACKNOWLEDGED** and **SUPPORTED** the aspirations of 100 per cent ownership of Torres Strait fisheries by Torres Strait Islander and Aboriginal Traditional Owners and also **ACKNOWLEDGED** and **RECOGNISED** the rights of existing non-traditional fishers in the Torres Strait;



- 10.2 The PZJA **NOTED** the draft Road Map to 100 per cent Ownership and **ENDORSED** the Torres Strait Regional Authority seeking comments from Torres Strait Communities and other stakeholders;
- 10.3 The PZJA **AGREED** to establish a Working Group which will consider the draft roadmap; and
- 10.4 The PZJA **AGREED** to request the Commonwealth Minister for Indigenous Affairs to support access to Indigenous Business Australia funds and the Indigenous Land Fund to support the pursuit of these aspirations.

11. Tropical Rock Lobster Management Arrangements

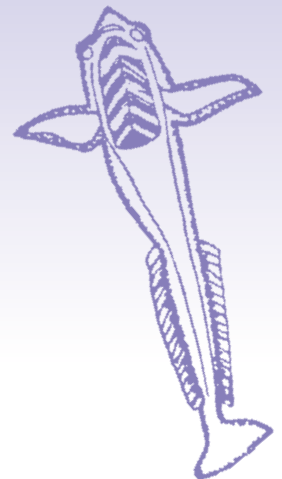
11(i) Traditional Inhabitant Tender numbers

The PZJA:

- 11.1 **NOTED** the correspondence from two Native Title representative bodies relating to the proposed management change relating to tender numbers; and
- 11.2 **AGREED** to an unlimited number of tenders able to be attached to a Traditional Inhabitant licenced primary vessels;

NOTING:

- a. The importance of single tender operators and important role they play in the Traditional Inhabitant fishery;
- b. the need for consistent management arrangements between the indigenous and non-indigenous sectors of the fishery;
- c. that marine survey requirements for commercially registered vessels restricts the number of crew permitted on board during and thereby restricting the maximum number of tenders;
- d. all tenders must be owned and licensed under the same name as the primary vessel; and
- e. with unlimited tenders the current boat size structure of the traditional inhabitant boat licenced primary vessel fleet would most likely allow only one vessel tow more than five tenders.





11(ii) Moon-tide closure

- 11.3 The PZJA **AGREED** to the re-introduction of the moon-tide hookah closure for the 2014 Tropical Rock Lobster fishing based on the calendar provided.

11(iii) Management Plan

11.4 The PZJA **AGREED** to release a draft Tropical Rock Lobster Management Plan for public comment as soon as practicable;

11.5 **NOTING** that the consultation could occur in conjunction with consultation on the draft roadmap to 100 per cent ownership.

12. Administration Review

The PZJA **AGREED** to:

12.1 implement the detailed short term changes to administrative arrangements for the PZJA; and

12.2 PZJA agencies developing the long term detailed changes to administrative arrangements for the PZJA.

13. Licensing Arrangements

13.1 PZJA **AGREED** to investigate the removal of fees for Traditional Inhabitant Boat licences.

14. Administration

14(i) Torres Strait Prawn Fishery Vessel Monitoring Guidelines

The PZJA **AGREED** to:

14.1 the Vessel Monitoring System Guidelines; and

14.2 publish the Guidelines on the PZJA website in accordance with 5.6(1) of the *Torres Strait Prawn Fishery Management Plan 2009*.



14(ii) Delegations

14.3 The PZJA **AGREED** to the delegation of PZJA powers under Section 38 of the *Torres Strait Fisheries Act 1984* to appropriate staff with the Australian Fisheries Management Authority and the Queensland Department of Agriculture, Fisheries and Forestry (Fisheries Queensland).

14(iii) 2010–11 Annual Report

The PZJA:

14.4 **ENDORSED** the *Torres Strait Protected Zone Joint Authority Annual Report 2010–11* for tabling in the Australian Parliament in accordance with Section 41 of the *Torres Strait Fisheries Act 1984*;

14.5 **SIGNED** the title page for inclusion in the final report; and

14.6 **AGREED** to combine three outstanding annual reports (2011–12, 2012–13, 2013–14) to bring the reporting period back in line with the most recent financial year.

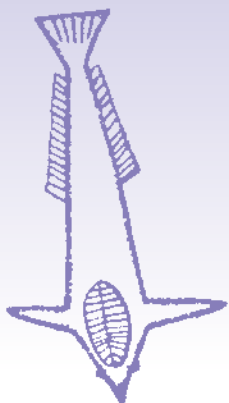
15. PZJA Priorities

15.1 The PZJA **DISCUSSED** a set of PZJA priorities for the next five years.

16. Other Business—Maximum Boat Length

16.1 The PZJA **AGREED** to task the Standing Committee to investigate the request to increase the Traditional Inhabitant Boat length to 23 metres; and make a recommendation to the PZJA within six months.





ANNEX B: PZJA CONSULTATIVE COMMITTEE MEETINGS

Torres Strait Scientific Advisory Committee

- Meeting 56: 5–6 October 2011, Brisbane
- Meeting 57: 7 March 2012, Townsville
- Meeting 58: 22 June 2012, teleconference
- Meeting 59: 19–20 November 2012, Cairns
- Meeting 60: 14–15 March 2013, Brisbane
- Meeting 61: 19 June 2013, teleconference
- Meeting 62: 14–15 October 2013, Brisbane
- Meeting 63: 20–21 March 2014, Brisbane
- Meeting 64: 24 June 2014, teleconference

Torres Strait Fisheries Management Advisory Committee

- TSFMAC teleconference—23 November 2010
- TSFMAC 12 Meeting—21–22 March 2012, Thursday Island

Torres Strait Prawn Management Advisory Committee

- Teleconference: 25 July 2011
- Teleconference: 23 May 2012
- Teleconference: 28 August 2012
- Meeting 13: 13 December 2012, Cairns
- Teleconference: 29 April 2013
- Meeting 14: 16–17 July 2013, Cairns
- Teleconference: 26 November 2013
- Meeting 15: 17 June 2014, Masig Island

Torres Strait Finfish Working Group

- Meeting 2012.1: 20 March 2012, Thursday Island

Torres Strait Tropical Rock Lobster Working Group

- Meeting 1: 10–11 April 2013, Thursday Island
- Meeting 2: 7–8 August 2013, Thursday Island
- Meeting 3: 13–14 November 2013: Thursday Island



Torres Strait Hand Collectables Working Group

- Meeting 5: 29–30 November 2011, Thursday Island
- Meeting 6: 10 December 2012, Thursday Island
- Meeting 7: 2 October 2013, Thursday Island

Torres Strait Tropical Rock Lobster Resource Assessment Group

- Meeting 10: 23–24 August 2011, Cairns
- Meeting 11: 29–30 August 2012, Brisbane
- Meeting 12: 3–4 September 2013, Cairns





ANNEX C: REFERENCES

A guide for fisheries researchers working in the Torres Strait, 2012, Torres Strait Protected Zone Joint Authority (www.pzja.gov.au/wp-content/uploads/2011/06/Guidelines-for-researchers-wokring-in-Torres-Strait-Final-A3_updated-4.4.2012.pdf)

Georgeson, L, Stobutzki, I & Curtotti, R (eds), 2014, *Fishery status reports 2013–14*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

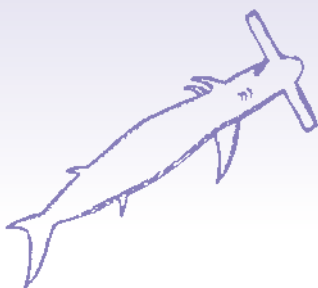
Marsh, H. 1999 *Torres Strait dugong 1998*, Fisheries assessment report, edited by the Torres Strait Fisheries Assessment Group, Australian Fisheries Management Authority, Canberra.

Marsh, H, Grech, A and Hagihara, R, 2011, *Report to the Australian Marine Mammal Centre and the Torres Strait Regional Authority—Aerial survey of Torres Strait to evaluate the efficacy of an enforced and possibly extended Dugong Sanctuary as one of the tools for managing the dugong fishery*, School of Earth and Environmental Sciences, ARC Centre of Excellence for Coral Reef Studies, James Cook University, Australia.

Sobtzick, S, Hagihara, R, Penrose, H, Grech, A, Cleguer, C, and Marsh, H, 2014, *An assessment of the distribution and abundance of dugongs in the Northern Great Barrier Reef and Torres Strait. Report to the National Environmental Research Program*. Reef and Rainforest Research Centre Limited, Cairns. August 2014 (72pp).

Woodhams, J, Vieira, S, & Stobutzki, I (eds), 2012, *Fishery status reports 2011*, Australian Bureau of Agriculture and Resource Economics and Sciences, Canberra.

Woodhams, J, Vieira, S, & Stobutzki, I (eds), 2013, *Fishery status reports 2012*, Australian Bureau of Agriculture and Resource Economics and Sciences, Canberra





ANNEX D: GLOSSARY

SPECIES LIST

<i>Common name</i>	<i>Scientific Name</i>
Crustaceans	
Blue endeavour prawns	<i>Metapenaeus endeavouri</i>
Blue swimmer crab	<i>Portunus pelagicus</i>
Brown tiger prawns	<i>Penaeus esculentus</i>
King prawns	<i>Merlicertus plebejus</i>
Moreton Bay bugs	<i>Thenus</i> spp
Mud crab	<i>Scylla</i> spp.
Ornate tropical rock lobster	<i>Panulirus ornatus</i>
Red spot king prawns	<i>Melicertus longistylus</i>
Slipper and shovel-nosed lobster	Scyllaridae
Fish	
Barramundi	<i>Lates calcarifer</i>
Barramundi cod	<i>Cromileptes altivelis</i>
Coral trout species	<i>Plectropomus</i> spp.
Grey mackerel	<i>Scomberomorus semifasciatus</i>
mixed reef fish	<i>Lutjanus</i> spp. and <i>Lethrinus</i> spp.
Narrow-barred Spanish mackerel	<i>Scomberomorus commerson</i>
Rock Cod	<i>Epinephelus</i> spp.
School mackerel	<i>Scomberomorus queenslandicus</i>
Shark mackerel	<i>Grammatorcynus bicarinatus</i>
Spotted mackerel	<i>Scomberomorus munroi</i>
Molluscs	
Black-lipped pearl shell	<i>Pinctada margaritifera</i>
Gold-lipped pearl shell	<i>Pinctada maxima</i>
Squid	Teuthoidea
Scallops	<i>Amusium</i> spp.
Trochus	<i>Tectus niloticus</i> (previously <i>Trochus niloticus</i>)





<i>Common name</i>	<i>Scientific Name</i>
Winged pearl oyster	<i>Pteria penguin</i>
Mammals	
Dugong	<i>Dugong dugon</i>
Reptiles	
Flatback turtle	<i>Natator depressus</i>
Green turtle	<i>Chelonia mydas</i>
Hawksbill turtle	<i>Eretmochelys imbricata</i>
Bêche-de-mer	
Amberfish	<i>Theleota anax</i>
Blackfish	<i>Actinopyga miliaris</i>
Black teatfish	<i>Holothuria whitmaei</i> (previously <i>H. nobilis</i>)
Brown sandfish	<i>Bohadschia vitiensis</i>
Curryfish	<i>Stichopus hermanni</i> (previously <i>S. variegatus</i>)
Deepwater redfish	<i>Actinopyga echinites</i>
Elephant's trunkfish	<i>Holothuria fuscopunctata</i>
Greenfish	<i>Stichopus chloronotus</i>
Leopardfish (also known as tigerfish)	<i>Bohadschia argus</i>
Lollyfish	<i>Holothuria atra</i>
Pinkfish	<i>Holothuria edulis</i>
Prickly redfish	<i>Theleota ananas</i>
Sandfish	<i>Holothuria scabra</i>
Stonefish	<i>Actinopyga lecanora</i>
Surf redfish	<i>Actinopyga mauritiana</i>
White teatfish	<i>Holothuria fuscogilva</i>



ACRONYMS AND ABBREVIATIONS

CSIRO	Commonwealth Scientific and Industrial Research Organisation
PZJA	Protected Zone Joint Authority
The Act	<i>The Torres Strait Fisheries Act 1984</i>
The Treaty	The Torres Strait Treaty
Protected Zone	Torres Strait Protected Zone

