

# Annual status report 2010

## Gulf of Carpentaria Line Fishery



On 26 March 2009, the Department of Primary Industries and Fisheries was amalgamated with other government departments to form the Department of Employment, Economic Development and Innovation.

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## Fishery profile 2009

<b>Species targeted</b> Spanish mackerel and secondarily, demersal fin fish	<b>Total number of commercial licences in 2009</b> 47 as at December 2009
<b>Total harvest from all sectors</b> Approximately 236 t + Indigenous catch	<b>Commercial licences accessing the fishery in 2009</b> 24
<b>Commercial harvest</b> Approximately 185 t	<b>Fishery season</b> January to December
<b>Recreational harvest (2005)</b> 44 t	<b>Fishery symbols</b> L4
<b>Indigenous harvest (2000–01)</b> ~ 220 000 fish <sup>1</sup>	<b>Monitoring undertaken</b> Fishery dependent sampling, Fishery Observer Program and compulsory daily commercial and charter fisher logbooks
<b>Charter harvest</b> 7 t	<b>FOP days monitored in 2008</b> 13
<b>Commercial Gross Value of Production (GVP)</b> \$1.3 million	<b>Accreditation under the EPBC Act</b> Yes – Expires: 30 August 2010 <sup>2</sup>
<b>Allocation between sectors<sup>3</sup></b> 78% commercial; 19% recreational; 3% charter	<b>Logbook validation</b> Nil
<b>Total exports</b> Nil	<b>Quota managed</b> No
<b>Key fish resources</b>	
<b>Stock status</b>	<b>Uncertain</b>
Spanish mackerel ( <i>Scomberomorus commerson</i> ) Gulf of Carpentaria stock	
<p><b>Comments:</b> Catch has declined but remains within historical harvest levels. Catch rates have increased slightly. A lack of data demonstrating temporal trends in length or age frequencies led the workshop expert panel to determine an 'Uncertain' status. This species will be reviewed again in late 2010.</p>	

<sup>1</sup> Total North Queensland estimate only—includes Indigenous fishers outside the Gulf of Carpentaria.

<sup>2</sup> Wildlife Trade Operation approval granted 20 August 2007. Approved under Part 13 of the EPBC Act subject to conditions applied under section 303FT (re-accredited 10 April 2008 to reflect the new Fisheries Regulation 2008 management arrangements).

<sup>3</sup> Based on latest catch estimates of each sector - excludes the Indigenous catch.

## Introduction

The Gulf of Carpentaria Line Fishery (GOCLF) is a multi-species fishery which harvests a variety of pelagic (open water) and demersal (bottom-dwelling) fish. The pelagic Spanish mackerel accounts for the vast majority of the fisheries catch. Other pelagic species taken include trevally and small mackerels that are caught using surface trolling methods. Demersal fish include tropical snappers, cods and emperors that are primarily caught on coral and rocky reefs between 10 and 30 m deep using hand lines (Roelofs, 2004). Product harvested from the GOCLF is sold predominantly on the Australian domestic market.

This report covers fishing activity during the 2009 calendar year.

## Fishery description

The commercial line fishery operates as a small-boat fishery, with a number of tender boats operating from a mother boat (<20 m), or as small trolling boats targeting pelagic fish (Roelofs 2004).

The GOCLF commercial fishery operates under L4 fishery symbol endorsement. From May 2009 the L4 fishing grounds includes all tidal waters in the Queensland Gulf of Carpentaria from Slade Point near the tip of Cape York Peninsula to the Queensland–Northern Territory border (Figure 1). Commercial line methods are either troll lines (hauled, by hand or hand/electric/hydraulic winches) or heavy rod and reel lines depending on the target species and prevailing conditions. Recreational fishers use basic hook and line techniques to catch gulf line species. Recreational fishers are also permitted to spear fish without SCUBA. In addition to recreational fishing methods Indigenous fishers may also utilise traditional subsistence fishing practises.

Spanish mackerel (*Scomberomorus commersoni*) is a pelagic species that occurs in depths 15–200 m within the Indo-west Pacific Ocean (Carpenter & Neim 2001). The GOCLF shares the same genetic stock of this species with fisheries in Western Australia and the Northern Territory although it is considered that there are at least two meta-populations with a degree of integrity within the Gulf. Queensland east coast Spanish mackerel belong to a separate stock (Buckworth *et al.* 2007; Newman *et al.* 2009; Sulaiman and Ovenden 2009). The

Gulf of Carpentaria Inshore Fin Fish Fishery also harvests small numbers of other species (e.g. 34 t in 2008) (Fisheries Queensland 2009a).

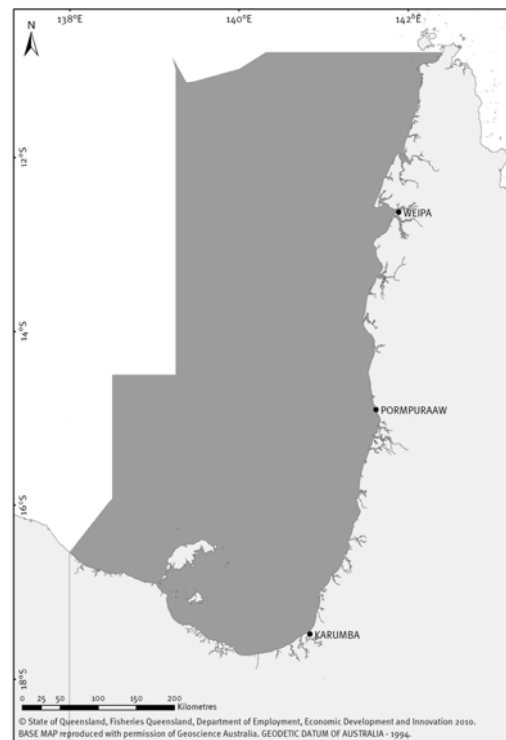


Figure 1: Fishing grounds of the Gulf of Carpentaria Line Fishery (Gulf of Carpentaria—Spanish mackerel and other fin fish).

The predominant demersal species include crimson snapper (*Lutjanus erythropterus*) and saddle-tail snapper (*Lutjanus malabaricus*). These species are widespread in the Indo-west Pacific, often schooling together close to coastal and offshore reefs (Carpenter & Neim 2001). Genetic variations are seen in both species between the Indonesian and Australian stocks (Salini *et al.* 2006). The main harvest (327 t in 2008) of Red Snapper occurs in the Gulf of Carpentaria Developmental Fin Fish Trawl Fishery (Fisheries Queensland 2009b).

## Main management methods used

The Queensland Fisheries Joint Authority (QFJA), through the *Fisheries Act 1994*, manages all targeted fishing for northern demersal and pelagic fin fish in waters adjacent to Queensland in the Gulf of Carpentaria.

During 2009 the GOCLF was managed by Fisheries Queensland, part of the Department of Employment, Economic Development and Innovation, in accordance with the Queensland *Fisheries Act 1994*, Fisheries Regulation 2008 and the Fisheries (Gulf of Carpentaria Inshore Fin Fish) Plan 1999. A range of input and output controls govern fishing activity within the GOCLF. For the commercial sector these include:

- limited entry
- closed area restrictions – South Mitchell River
- gear restrictions – including restrictions of the type of apparatus that can be used (numbers of lines and hooks) and size of the boat and number of tenders that can be used in the fishery
- species specific size and number regulations – size limits and number of fish regulations apply to a range of in-possession species
- prohibition on retaining barramundi (*Lates calcarifer*), black jewfish (*Protonibea diacanthus*), blue and king threadfin (*Eleutheronema tetradactylum* and *Polydactylus macrochir*), scaly jewfish (*Nibea squamosa*), giant queenfish (*Scomberoides commersonianus*) and silver javelin (*Pomodasys argenteus*).

## Catch statistics

### Commercial

In 2009, the total catch<sup>4</sup> of line-caught Spanish mackerel was 185 t which was a 35% decrease in catch from the previous year and similar to 2006. Catch rates of the commercial sector however remained similar to the previous year (Figure 2, Table 1). In 2009, two percent of the total Spanish mackerel catch in the Gulf of Carpentaria was reported from net fisheries (N<sub>3</sub>, N<sub>9</sub>). While 23 line (L<sub>4</sub>) licences accessed the fishery in 2009, six were responsible for 80% of the Spanish mackerel harvest.

In 2009, the catch of other permitted species remained below 1% of total landings as in 2008 (Table 2). The species reported as by-product in the 2008 ASR are slightly different than for 2009 due to the changes in reporting for 2010. In 2009 coral trout and Moses perch were the highest caught groups of by-product species in the GOCLF.

<sup>4</sup> Catch reporting of other species has been redefined for this Annual Status Report. Fisheries Queensland developed a defined list of species for all GOC fisheries based on the key and secondary key species in each fishery and where specific fishery management arrangements cover that species. For the GOCLF, the main differences compared with previous Annual Status Reports (ASR) relate to the removal of red snappers in this report. Red snapper are not considered a target species in the GOCLF. Line caught red snapper catch data will be reported in the GOC Developmental Fin Fish Trawl Fishery ASR where it is the key species.

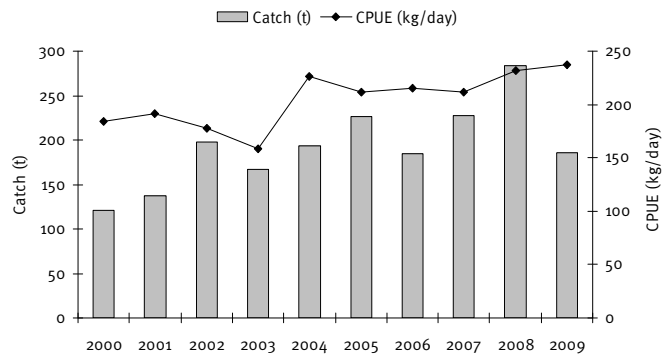


Figure 2: Total commercial catch (in tonnes) and (kg/day) of Spanish mackerel in the GOCLF 2000–09 (Source: Fisheries Queensland CFISH Database, 4 May 2010).

### Recreational

No new recreational catch estimates are available for the GOC region (refer to previous reports for catch estimates up to 2005). Fisheries Queensland are commencing a further state-wide recreational fishing survey in 2010 and updated catch statistics for the GOC will be available by the end of 2011.

### Charter

Charter operator numbers in the Gulf of Carpentaria decreased again from 20 in 2008 to 16 in 2009 with a corresponding decrease in days fished of 27% to 443 days (Figure 3). Retained catch decreased with 7.4 t of fish and an estimated 26.6 t released in 2009.

The charter fishery targets a range of species (Table 3). Spanish mackerel was the largest component of landings with 44% of total landings. Coral trout (32%) and tuna (16%) were also significant components of the charter landings.

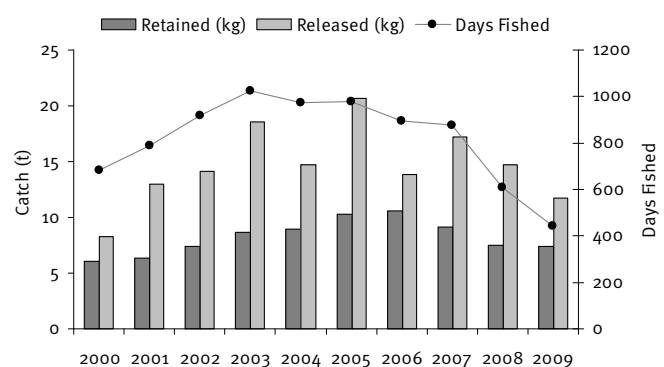


Figure 3: Total retained and estimated released catch weight and days fished reported by charter operators in the Gulf of Carpentaria Line Fishery 2000–09 (Source: Fisheries Queensland CFISH Database, 4 May 2010).

The annual catch of Spanish mackerel decreased again from a peak in 2006 and is likely to be a reflection of decreasing effort. Fishers retained more Spanish

mackerel than they released in 2009. In the Northern Territory recreationally caught Spanish mackerel has an estimated release mortality of 54% (Northern Territory Government 2009). Release rates differed depending on

the species with the lowest rate in 2009 being for red throat emperor and mixed reef fish with 100% of those caught being retained.

Table 1: Total commercial catch (tonnes), effort (licences accessing the fishery and days fished), Catch per unit effort (kg/day) and Gross Value of Production (GVP \$million) for the Gulf of Carpentaria Line Fishery 2000–09 (Source: Fisheries Queensland CFISH Database, 4 May 2010).

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Catch (t)	136	151	210	177	204	246	190	242	289	185
Licences	52	40	65	64	44	57	49	56	51	27
Days	924	959	1377	1367	1094	1345	1007	1320	1377	803
CPUE (kg/day)	147	157	153	130	186	183	189	183	210	231
GVP (\$million)	1.0	1.0	1.5	1.3	1.4	1.9	1.3	1.7	2.0	1.3

Table 2: Commercial catch (tonnes) of line and net-caught Spanish mackerel and line-caught by-product species in the GOCLF 2000–09 (Source: Fisheries Queensland CFISH Database, 4 May 2010).

Species	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Spanish mackerel – line caught	121	137	197	167	194	227	185	228	283	185
Spanish mackerel – net caught	9.6	8.5	5.5	5.9	8.4	7.1	2.1	4.4	4.3	4.3
By-product <sup>^</sup>	4.4	0.5	6.1	4.4	1.9	11.5	2.7	9.7	1.4	0.2

Table 2 Notes: \* Harvest includes multiple species; Net caught Spanish mackerel is from the Gulf of Carpentaria N3/N9 Fishery.

Table 3: Retained (and released) weight reported by charter operators of target and other permitted species caught in the GOCLF 2003–09. (Source: Fisheries Queensland CFISH Database, 4 May 2010).

Common Name	Retained weight (Released weight) in tonnes									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Spanish mackerel	1.2(1.6)	1.9(1.6)	1.5(1.5)	2.5(2.4)	2.6(2.9)	3.4(4.2)	4.9(2.3)	4(3.7)	3.9(4)	3.3(2.6)
Coral trout	0.6(0.5)	0.8(0.4)	2.3(0.9)	2.1(1.2)	2.6(1)	3.3(1.7)	3.1(0.9)	3.1(0.9)	2(0.4)	2.3(1.3)
Moses perch	2(2.9)	1.9(3)	2(3)	2.4(3.3)	1.4(2.9)	1(2.5)	0.6(2.1)	0.4(1.7)	0.5(0.9)	0.3(0.4)
Sweetlip - unspecified	n/a	0.2(0)	0.2(0.2)	0.2(0.2)	0.3(0.2)	0.5(0.3)	0.2(0.1)	n/a	n/a	n/a
Tuna - unspecified	0.2(1.6)	0.5(3.4)	0.6(4.1)	0.6(4.9)	1.2(6)	1.6(10.8)	1.5(7.6)	1.5(10.2)	1(8.4)	1.2(6.5)
Other by-product	1.1(1.8)	1.1(4.6)	0.9(4.4)	0.8(6.6)	0.7(1.6)	0.5(1.1)	0.2(0.9)	0.1(0.7)	0.1(0.9)	0.1(0.1)

Table 3 Notes: \* includes a group of species; n/a = confidential as catch reported by less than five licences.

## Indigenous

Possession and size limits do not apply to traditional and customary fishing, but the indigenous sector is restricted to:

- personal, domestic and non-commercial communal use
- recreational fishing or prescribed traditional apparatus.

An application can be made for a general fisheries permit to use restricted catch methods for cultural and ceremonial events.

Available estimates for Indigenous harvest are not current or restricted to the GOC area. Harvest level of this sector is likely to be small as Indigenous fishers tend not to target large pelagic fish such as Spanish mackerel (Henry & Lyle, 2003).

Fisheries Queensland has engaged the Queensland Indigenous Working Group (QIWG) to undertake targeted consultation with peak regional indigenous groups. The feedback received will be used to develop an Indigenous Fishing Strategy for the next five years that will seek to ensure greater recognition of traditional activities,

greater input from traditional owners and greater participation in fishing related enterprises.

## Spatial issues / trends

The spatial trend in commercial harvest of Spanish mackerel in 2009 was similar to 2008, with the same 30 min grids recording the majority of the catch (Figure 4).

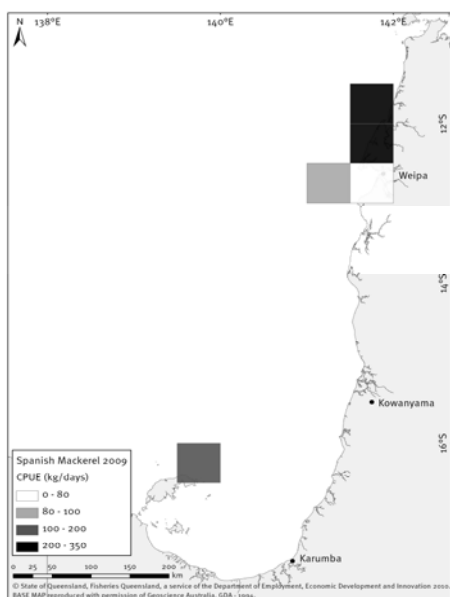
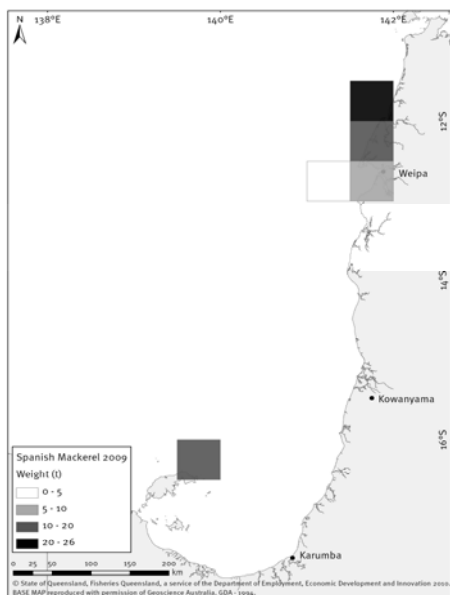


Figure 4: Spatial distribution of Spanish mackerel commercial catch (kg) and CPUE (kg/day) respectively in 2009 (Source: Fisheries Queensland CFISH Database, 4 May 2010).

There were some differences in the contribution of each of these grids to the overall catch in consecutive years. For example, the catch of Spanish mackerel in the grid that encompasses Weipa declined from 15% of the total fishery catch in 2008 to 3% in 2009, whilst the catch in grids to the north of Weipa increased from 2% to 14% for the same period.

## Socio-economic characteristics and trends

There is no export trade from the GOCLF; harvest is sold for approximately \$5–35/kg for Spanish mackerel dependant quality of product. The majority of catch is sold in Queensland and interstate (Lew Williams pers. comm. 10 July 2009). After an increase in 2008 of total average income per licence from Spanish mackerel, the 2009 level decreased 12% to a similar income level as for 2007.

Gross Value of Production (GVP) declined from the previous two years. The 2009 GVP is estimated at approximately \$1.3 million, which is a 35% decrease from the previous year (Figure 5). The number of days fished (37%) and the number of active licences (25%) in the commercial sector decreased in 2009.

Fishing is the main draw card for Gulf of Carpentaria tourism which is a significant source of employment in the region (Greiner *et al.* 2004). Tourists represent the majority of charter fishers and those fishing independently. The number of days fished (27%) and the number of active licences (20%) in the charter sector declined in 2009.

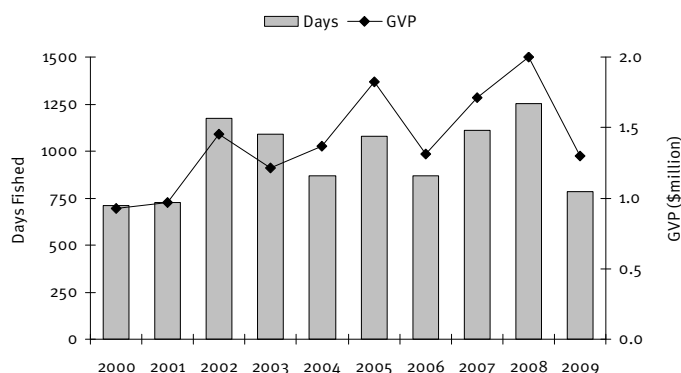


Figure 5: Gross Value of Production of the GOCLF 2000–09. (Source: Fisheries Queensland CFISH database, 4 May 2010).

## Biological and ecological information

### Monitoring programs

#### *Fishery independent monitoring*

Since 2007, Fisheries Queensland has collected fishery-dependent data including the length, sex and age of line caught Spanish mackerel retained by commercial and recreational fishers (including charter fishers) in the Gulf of Carpentaria. These data will assist with assessing the status of the Spanish mackerel stock, evaluating management strategies, and in addressing the Australian Government's recommendation to improve fisheries

management by developing “sustainable yield estimates of target species to determine sustainable levels, particularly for Spanish mackerel” (DEH, 2004).

Detailed information on monitoring program sampling methods is available in Fisheries Queensland (2009c).

In 2009, fish sampled from the commercial sector ranged from 77 cm to 156 cm in total length<sup>5</sup> with a peak at around 110 to 114 cm (Figure 6). There were a greater proportion of fish in larger size classes in 2009 compared to 2008, shifting the distribution to the right. However, the sample size in 2009 was lower than in 2008.

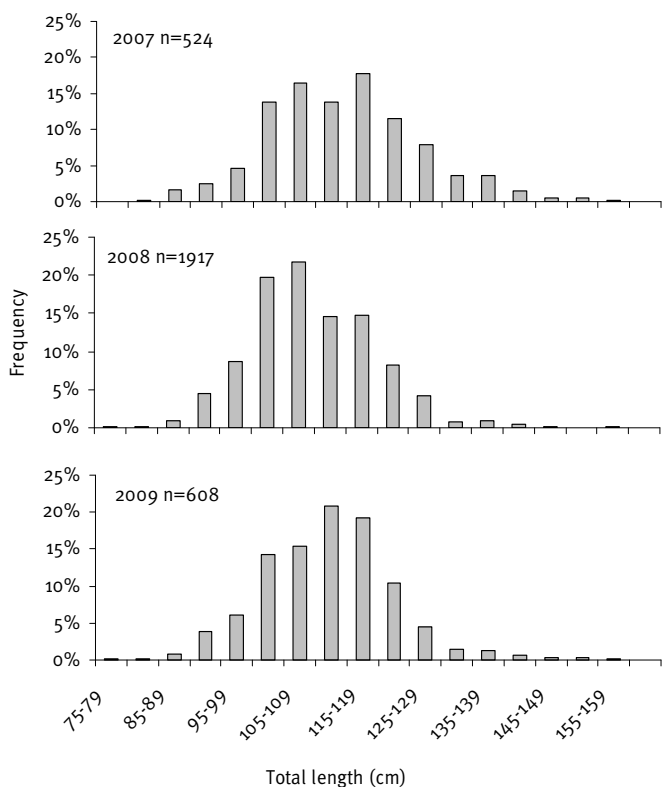


Figure 6: Length distribution of Spanish mackerel sampled from the commercial sector in the Southern Gulf of Carpentaria in 2007–09. Note: Lengths have been converted from fork length.

Spanish mackerel sampled from the recreational sector in 2009 (n=160) ranged from 78 cm to 148 cm in total length (Figure 7). In 2008, Fisheries Queensland introduced a ‘Keen Angler Program’ in the Gulf of Carpentaria to facilitate the voluntary donation of fish frames by recreational fishers. This assists in ensuring that the data collected are more representative of the overall recreational catch as opposed to only those fish caught during tournaments or from fishing charters. As

<sup>5</sup> Length measurements were measured as fork length and converted to total length.

the sample size has grown over the years, the length frequency distribution of fish sampled from the recreational sector has become more evenly spread across size classes.

The age structure of Spanish mackerel sampled in the Gulf of Carpentaria will be calculated during 2010.

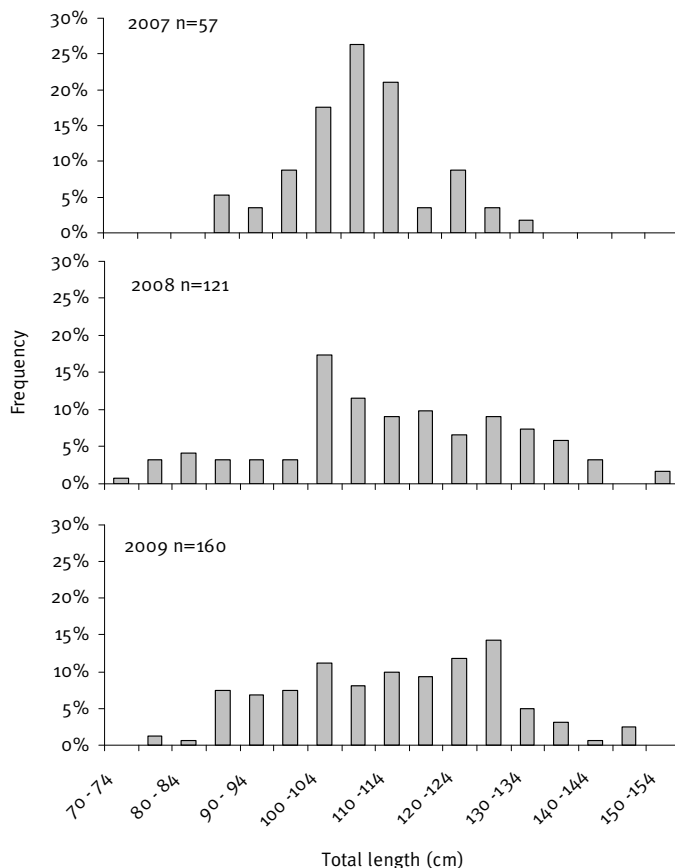


Figure 7: Length distribution of Spanish mackerel sampled from the recreational sector in the Southern Gulf of Carpentaria 2007–09. Note: Lengths have been converted from fork length.

### Fisheries Observer Program

There was limited coverage in the GOCLF for the 2009 fishing year with a single observer survey conducted. Only seven species were observed for the catch, with Spanish mackerel being the most common contributing 77% of the observed catch by number; followed by grey mackerel, 13% and Giant Barracuda, 3%.

The bycatch was observed to contribute 12%, comprising of 4 species. The majority (71%) of the bycatch is regulated (undersize or no take) species for this fishery, and the remainder is not marketable. No interactions with protected species were observed during 2009.

The Fisheries Observer Program functions on a voluntary basis within this fishery. Vessels are contacted and

encouraged to participate in the program. No observations in 2010 are scheduled in the GOCLF.

## Bycatch

The fishing gear and methods employed in the GOCLF limits bycatch by precise targeting of legal sized desirable species (Roelofs 2004). Fishers actively attend to the fishing gear allowing quick retrieval of the catch and immediate live release of unwanted fish. The Fishery Observer Program data confirms the small percentage of bycatch. Recreational (including charter) fishers have relatively high levels of released fish due to the popularity of fishing as a sport and to comply with legal size and bag limits. Little is known of the long-term survival of these released fish.

## Interactions with protected species

No interactions with endangered, threatened or protected species have been reported by the GOCLF since the Species of Conservation Interest (SOI) was introduced in 2006. The lack of interactions is supported by the experience of fisheries observers in both the Queensland and Northern Territory Gulf Line Fishery (who also reported no interactions, Northern Territory Government 2009).

## Ecosystem impacts

Significant physical impacts to the habitat or changes to the ecosystem are unlikely due to the low impact of the line harvest method (Roelofs 2004).

## Sustainability Assessment

Fisheries Queensland held a workshop in March 2009 to determine the exploitation status of key line caught

species. Despite the stock showing a history of consistent catches, a lack of data demonstrating temporal trends in length or age frequencies led the workshop expert panel to determine an 'Uncertain' status for Spanish mackerel in the Gulf of Carpentaria. The status of Northern Territory Spanish Mackerel fishery is considered to be at or below sustainable levels (Buckworth & Beatty 2008). Other species are harvested at low levels and are therefore considered to be at negligible risk of overfishing by the GOCLF (Zeller & Snape 2006).

The ecological risk of fishing activities in the GOCLF impacting on the sustainability of Spanish mackerel was assessed as moderate in 2004 (Zeller & Snape 2006). Fisheries Queensland reviewed the ERA for all GOC fisheries in 2010. The review determined that there have been no significant changes to the management arrangements in the GOCLF or new knowledge of the species to warrant a change to the risk rankings made in 2004.

## Performance against fishery objectives

The Performance Measurement System (PMS) for the GOC Fin Fish Fisheries (DPI&F 2008), which includes the GOCLF, provides a series of measures against which the performance of the fishery can be assessed and reported (Table 4). Full details of the PMS can be found at [http://www.dpi.qld.gov.au/documents/Fisheries\\_SustainableFishing/GOC-PMS-09.pdf](http://www.dpi.qld.gov.au/documents/Fisheries_SustainableFishing/GOC-PMS-09.pdf)

Table 4: Performance measures and outcomes for the Gulf of Carpentaria Line Fishery in 2008.

Performance Measure	Performance
<p><b>Spanish mackerel</b></p> <p>Estimated catch by all sectors exceeds the estimated sustainable yield of Spanish mackerel.</p> <p>Aggregate landings by all sectors reach 90% of the sustainable yield (by whole weight) and/or total fishery catch declines by 30% over the calendar year (by whole weight).</p>	<p><i>Triggered</i></p> <p>A sustainable yield for Spanish mackerel has not yet been determined. The combined commercial and charter Spanish mackerel catches decreased by 34% between the 2008 and 2009 calendar year. This corresponded with a similar decrease in the fishing effort where number of days fished decreased by 37%. Catch per unit of effort in 2009 remained similar to 2008 levels.</p>

Performance Measure	Performance
<b>By-product</b> By-product in the GOCLF increases by 20% of the total landings of the calendar year (by whole weight).	<i>Not Triggered</i> The commercial catch of by-product species is less than 1 % for the years of 2008 and 2009.
<b>Bycatch</b> Bycatch in the GOCLF increases by 10% of the total catch over the calendar year (whole weight).	<i>Not measured</i> Some 2009 baseline data but no comparison data available.
<b>Protected Species</b> Level of interaction with endangered/ threatened/ protected species in the GOCLF increases significantly.	<i>Not Triggered</i> There have been no recorded interactions with protected, endangered and threatened species and/or communities.

## Current sustainability status and concerns

This GOCLF is regarded as sustainable, based on current management arrangements and levels of effort.

## Research

### Recent research and implications

A genetic mark-recapture project (GENTAG) for real-time harvest rate focusing on northern Australian Spanish mackerel was completed in 2009. The project was collaboration between state and territory authorities including Fisheries Queensland. Recent publications on the genetic stock structure of Spanish mackerel include Sulaiman and Ovenden (2009) and Newman *et al.* (2009).

DEEDI in collaboration with the Northern Territory and Western Australia commenced a Fisheries Research and Development Corporation project 2009/037 'Sustaining productivity of tropical red snapper using new monitoring and reference points' in 2009. The project will review and develop methods and data tools required for monitoring and managing fishing activity according to the biological and economic conditions of the red snapper fisheries. The project outputs will be incorporated in a Harvest Strategy Framework for red snapper species across northern Australia.

The department was also involved in a collaborative project with James Cook University and other state fisheries management agencies to determine the management units for grey mackerel fisheries in northern Australia (Welch *et al.* 2009; Charters *et al.* 2010). The recent completion of this project will assist in developing new management arrangements for grey mackerel and highlights the need for collaborative management of

stocks in the Gulf of Carpentaria with the Northern Territory.

Recently published studies including other GOCLF species include cobia (van der Velde *et al.* 2010), longtail tuna (Griffiths 2010), red snappers (Fry and Milton 2009; Fry *et al.* 2009).

## Fishery management

### Compliance report

During 2009, 1974 line fishing inspections were undertaken in the Gulf of Carpentaria. Of these, five were commercial vessel inspections. The majority of the remaining inspections were of recreational fishers, with the remainder comprising camp sites, charter/tour operators, private property and motor vehicles. During this period, 14 offences were detected (A summary of offences is provided in Table 5. Offences are reported as either a Fisheries Infringement Notice (FIN) or Prosecution (to proceed by complaint summons)).

Table 5: Offences recorded in the Gulf of Carpentaria Line Fishery in 2009.

Offence	FIN	Prosecution
Take or possess regulated fish (recreational)	13	1

Illegal, Unreported and Unregulated (IUU) fishing vessel incursions are a recognised threat to the sustainability of northern Australian fisheries. The rate of IUU incursions in Australia has declined dramatically since 2006 and this trend has also continued in the Gulf of Carpentaria. In 2009 only one apprehension was recorded by the Australian Fisheries Management Authority in the Gulf of Carpentaria. The vessel was a Type 3 Shark boat (timber

construction, approx. 15m in length) originating from Merauke, Indonesia. The vessel was equipped with a 2000 m gillnet, but had not commenced fishing operations. It is assessed that the vessel was going to target shark. Management of the IUU fishing issue in this region has continued to prove effective. Incursions in the Gulf of Carpentaria continue to remain at very low levels (Ravanello, P., Australian Fisheries Management Authority, pers. com. 12 February 2010).

## Changes to management arrangements in the reporting year

Some changes to management arrangements for this fishery have taken effect during 2009. In May, the commercial fishery area was expanded to incorporate all Queensland Gulf of Carpentaria waters south of latitude 10°48' south (Figure 1). Previously the fishery only extended from the coast to the 25 nm offshore. Adjustments were also made to L4 non-permitted species allowing take of queenfish (*Scomberoides* sp.) other than giant queenfish (*Scomberoides commersonianus*); allowing take of barred javelin (*Pomadasys kaakan*); and prohibiting harvest of silver javelin (*Pomadasys argenteus*).

Species size limits and recreational bag limits changed for many species in March 2009. The main GOCLF species affected were grey mackerel (minimum size changed from 50 cm to 60 cm and a recreational bag limit from 10 to 5) and school mackerel (recreational bag limit changed from 30 to 10).

## Communication and education

The regulation of the harvest of Spanish mackerel in the Gulf of Carpentaria is under the control of the QFJA, which undertakes consultation on the management of the fishery on a needs basis. The QBFP perform a communication and education role as part of their general compliance program.

During 2009 the seven Management Advisory Committees (MACs) were abolished following the Weller/Webbe review. Operational guidelines have been finalised and Fisheries Queensland are currently establishing a single Queensland Fisheries Advisory Committee (QFAC). The new committee shall consider the GOCLF in the context of all Queensland fisheries on a needs basis and prioritise issues associated with it accordingly. Once fisheries management priorities are determined, the department may establish a small

number of Technical Advisory Groups (TAGs) to provide technical information that will assist Fisheries Queensland pursue these priorities.

The department continues to directly consult with industry members through attendance at industry association meetings, port visits, newsletters and other means. As well as required consultation, such as Regulatory Impact Statements, if any significant changes in management arrangements are proposed.

## Complementary management

Fisheries researchers and managers from Queensland, the Northern Territory and Western Australia and the Commonwealth meet annually at the Northern Australia Fisheries Management Forum to review current research, set research priorities and consider management strategies to facilitate the development and implementation of complementary management for shared fisheries resources.

The Northern Australian Fisheries Committee (the jurisdictions above) is developing a Harvest Strategy Framework for the management of Red Snapper stocks across Northern Australia. The framework aims to ensure the sustainable harvest of the major target and by-product species while maximising the economic efficiency of commercial fisheries for these species. Fisheries Queensland are developing the framework in collaboration with Commonwealth, Northern Territory and Western Australian fisheries agencies.

The Australian Government is developing bioregional plans for marine areas including the Gulf. The processes may result in new marine conservation areas which may include restrictions to fishing. These plans are expected to be released in 2010.

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**Front cover image**

Spanish mackerel (*Scomberomorus commerson*)

