

A Strategic Plan



For Recreational Sportfishing Tourism Development In The Weipa/Western Cape Area

**Prepared for the Western Cape Chamber of Commerce
by Barradave Sportfishing Services
March 2011**

TABLE OF CONTENTS

List of Acronyms and Abbreviations	3
Foreword	4
Acknowledgments	5
Western Cape Chamber of Commerce Vision & Mission Goals	6
Executive Summary	7
Introduction -Why a Recreational Sportfishing Strategy Goals	9
Weipa & the Western Cape Weipa	11
Seasons and access	11
Community Structure	12
Lifestyle Activities	12
Western Cape Tourism History	13
Seasonal trends	13
Tourism Infrastructure	14
Markets	15
Indigenous Tourism	16
Recreational Fishing History	17
Importance to the Workforce	18
Economical Benefits	19
Sport Fishing Tourism	20
Recreational Fishing Tourism – Indigenous Participation	21
Recreational Sport Fishing Ecotourism	21
Marketing and Promotion	22
Infrastructure	23
Concerns	25
Albatross Bay Commercial Netting Closure	26
The Florida Example	28
Cape York Peninsula Versus Northern Territory	29
Conclusion	31
Action Plan	32

APPENDICES

1. Queensland Gulf of Carpentaria Fisheries	35
Commercial Barramundi N3	35
Offshore Netting N9	41
Mackerel Line L4	45
Fish Trawling	46
North Prawn Fishery	48
Crab Fishery C1	48
Commercial Tour Operator (Charter)	49
Recreational	52
Indigenous	53
Fishery Enforcement	53
Customs and Immigration	54
2. Fishery Related Issues	55
History/Chronology	55
Time Line	55
Albatross Bay Closure History	62
Marine Protected Areas	64
Regulatory Impact Statement 2010	64
Regional Fisheries Management	67
Recreational Fishing License	68
Illegal Fishing	69
3. Fishery Status	71
Estuarine Status	71
Offshore Status	79
Large Marine Fauna	84
Conclusion	86
4. Data extracted from <i>Planning for the future of the Northern Territory's guided fishing industry.</i>	88
5. Private CTO Log Book sheet samples	92
Bibliography	94

LIST OF ACRONYMS AND ABBREVIATIONS

AB	Albatross Bay
ABC	Albatross Bay Closure
AFMA	Australian Fisheries Management Authority
CHRIS	Coastal Habitat Resources Information System (DEEDI)
COMALCO	Commonwealth Aluminium Company
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEEDI	Department of Employment, Economic Development and Innovation (Qld)
DPI&F	Department of Primary Industries and Fisheries (Queensland)
DOGIT	Deed of Grant in Trust
DYI	Do It Yourself
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency (Queensland)
FHA	Fish Habitat Area
FQ	Fisheries Queensland
FRDC	Fisheries Research Development Commission
GOC	Gulf of Carpentaria
GOCIFFF	Gulf of Carpentaria Inshore Finfish Fishery
GOCMP	Gulf of Carpentaria Management Plan
GULFMAC	Gulf of Carpentaria Management Advisory Committee
MAC (Fisheries)	Management Advisory Committee
NPF	Northern Prawn Fishery
NRM	Natural Resource Management
NT	Northern Territory
PCQ	Ports Corporation of Queensland
QBFP	Queensland Boating and Fisheries Patrol
QFAC	Queensland Fisheries Advisory Committee
QFMA	Queensland Fisheries Management Authority
QFJA	Queensland Fisheries Joint Authority
QFS	Queensland Fisheries Service
RTA	Rio Tinto Alcan Pty Ltd
RIS	Regulatory Impact Statement
TROPMAC	Tropical Finfish Management Advisory Committee
WCCC	Western Cape Chamber of Commerce
WTA	Weipa Town Authority
ZAC (Fisheries)	Zonal Advisory Committee

FOREWARD

From the Western Cape Chamber of Commerce Strategic Plan 2010-2012

The Western Cape, centred on Weipa, is a fast-growing remote region on the western coast of Cape York Peninsula. The key driver of growth in the area has been the development of the Comalco, now Rio Tinto Alcan (RTA), bauxite mine in the Weipa environs. Bauxite mining activity in the Western Cape may be increased with the feasibility of new mines, including that of Gulf Alumina, Chalco Australia and Cape Alumina, currently under investigation.

The communities of Aurukun, Mapoon and Napranum have the potential to leverage off the heightened levels of activity surrounding the mining, which may assist in diversification from the heavy dependence on government services and public administration for employment.

Until recently, growth opportunities have been generated by the fortunes of the RTA mine alone – Weipa has very much been a mining town where employment in the RTA mine and residency were inextricably linked. But increasingly over the past five years or so, private ownership of housing has leapt forward as a direct result of Rio Tinto making land available for purchase, generating a much greater feeling of community and sense of belonging. Meanwhile, private ownership of property in the Aboriginal communities is an aspiration yet to be achieved, and will continue to restrain economic independence until it is resolved.

The shift in the Weipa psyche has also underpinned entrepreneurial activity. While private sector enterprise is still relatively modest, it is expanding as a result of other emerging opportunities in engineering, tourism and hospitality, education and the service sectors.

This growth, and the opportunities it presents, has meant that the Western Cape Chamber of Commerce (WCCC) has been more active, and has taken a more strategic and pro-active role in the development of the Western Cape, and Weipa's progression towards normalisation. The WCCC has secured increased Government commitment to the region through the State's Cairns based project officer, as well as through the Federally funded Indigenous Business Development and Mentor positions.

The WCCC represents a small but growing business sector in the Western Cape, across a broad range of sectors, including mining, engineering and construction, tourism and hospitality, education and the service sector. The major employers and decision-makers in Weipa – Rio Tinto and the Weipa Town Authority (WTA) – are key partners in the WCCC, as are the three Aboriginal Shires of Mapoon, Napranum and Aurukun, and the Western Cape Communities Trust (representing 600 shareholders from across the Western Cape region).

The WCCC has, as the business community's representative, also actively supported the Mineral Council of Australia and the Commonwealth Government in the development and the subsequent implementation of the Western Cape Regional Partnership Agreement (RPA).

The WCCC became a signatory to the RPA on 26 March 2008, along with Rio Tinto Alcan Weipa, The Western Cape Communities Trust (WCCT), the local Indigenous Shires of Aurukun, Mapoon and Napranum, and both the State and the Federal Government. The RPA demonstrates the signatories' commitment to developing the key areas of Indigenous employment, Indigenous economic/ business development and regional transport, whilst attempting to address the extensive issues that involve obtaining genuine outcomes in remote regions. It is a statement of intent by the Parties to work together to overcome to the fullest possible extent Indigenous disadvantage and to ensure that Indigenous people are supported to take up opportunities in the mainstream economy.

The importance and acknowledgement of the RPA reflects the broader business community and key stakeholders' involvement which reinforces the long-standing commitment to achieving training, employment and business development opportunities for Indigenous people from the Western Cape Communities. The Chamber maintains the opinion that successful outcomes for Indigenous employment in the region will provide tangible results for the Indigenous employees and their employers. Similarly, Indigenous small business will, like the broader business community, provide long term outcomes for Indigenous people and their communities through the growth of community based economies within those distinct Indigenous communities and the wider Western Cape region.

Hence, this Strategic Plan is a culmination of ideas and aspirations put forward by many different people who all seek a vibrant, diverse and sustainable community. The WCCC has every expectation that this Plan will form the basis of transforming concepts into reality with the support of members and various community partners.

ACKNOWLEDGMENTS

The Western Cape Chamber of Commerce would like to thank the following for their contribution towards the cost of producing this Strategy:

Barradave Sportfishing Services, Carpentaria Contracting, Fish's Fly & Sportfishing, Kowari Motors, Mannix & Partners, Manta Ray Charters, Rio Tinto Alcan Weipa, Weipa Camping Ground, Weipa Houseboats, Weipa News & Sports, Weipa Service Centre.

Barradave Sportfishing Services would like to thank all those who agreed to be interviewed, supplied information, offered advice and comment and reviewed the draft document.

WESTERN CAPE CHAMBER OF COMMERCE

(Reprinted from the Western Cape Chamber of Commerce Strategic Plan 2010-2012)

VISION & MISSION

The vision that the WCCC has for the Western Cape is as follows:

The Western Cape is a vibrant region based on an independent, diverse and sustainable economy that is the hub for commercial and community activities on Cape York

The WCCC will help the region achieve this vision by embracing the following mission:

The Western Cape Chamber of Commerce takes a leading role in the economic development of the Cape York region:

- ***by encouraging private enterprise;***
- ***by supporting business networks;***
- ***by expanding Indigenous participation in employment and economic development;***

and through its strategic advocacy role to ensure the region receives appropriate levels of services and infrastructure.

GOALS

To guide WCCC, the following five goals have been adopted:

Corporate Goals

- Economic - To create a platform for sustainable economic development that leads to a growing and diverse economy
- Advocacy - To be an effective representative body for members by influencing government policy and programs
- Environment - To ensure the Western Cape natural environment is managed sustainably in tune with growing and stronger economies and communities
- Leadership - To operate a productive and proactive chamber that provides leadership for the business community
- Governance - To be an independent body that maintains high standards in all areas of operations and governance

EXECUTIVE SUMMARY

Weipa is the major business centre on Cape York Peninsula. Concerns for the continued viability of its growing tourism industry, of which recreational sport fishing is the most important sector, have led the Western Cape Chamber of Commerce to comprehensively investigate the issues through this report. The data raises significant impacts that have the potential to hinder both the social and economic future of the area.

- Investigations indicate that there is an urgent need for government to take a more holistic approach to fisheries and tourism management in the Cape York Peninsula/Gulf of Carpentaria region.
- Recreational sport fishing was estimated to be worth at least \$8 million per year to Weipa/Western Cape and over \$25 million in Cape York Peninsula (including Karumba). In comparison, the Gulf of Carpentaria Commercial Fin Fish Fishery produced revenue of \$12million per year.
- Local business advised that commercial fishing brought minimal revenue to the Weipa economy.
- Confirmation that Weipas' mining and associated industries rely heavily on lifestyle expectations to attract their workforce. Recreational sport fishing was found to be the most common off-duty activity.
- Key recommendation of the Strategy calls for the Albatross Bay to be closed to commercial net fishing out to the 25 nautical mile Queensland boundary immediately. Such a closure has been mooted since 1997.
- The report found that once established, the closure of Albatross Bay, would create a much needed sanctuary for marine fauna within Queensland's Gulf of Carpentaria, allow fish stocks to regenerate and guarantee the future of local tourism.
- Declaration of such a closure was identified as the perfect vehicle for government promotion with positive environmental, tourism and fisheries implications.
- Both estuarine and adjacent Gulf of Carpentaria waters in the Weipa area exhibited a marked decline in their fisheries during the past decade –commercial fishing tour operators recording a 76% fall in barramundi catches and more than 80% for queenfish and trevally from 2004-2009.

- Confirmation that the marked fishery decline had already reduced repeat business and this indicated a potential to threaten the viability of the local tourism industry as well as impacting on the establishment of future indigenous sport fishing ventures.
- Substantial evidence to suggest that commercial net fishing in the Gulf of Carpentaria, particularly the offshore sector, continued to be destructive, have unacceptable levels of by-catch, and was of doubtful sustainability, suggesting that a comprehensive review should be undertaken.
- Reported reduction in numbers of large marine fauna such as dolphin and manta rays was unable to be quantified because commercial fishers were not required to report gear interactions.
- Cape York Peninsula's recreational fishing tourism industry is under threat from increased competition from the Northern Territory - which takes a more economically holistic view to its fishery components.
- Calls for a more professional approach to recreational sport fishing and charter fishing through increased interaction by Fisheries Queensland and Tourism Queensland.
- Investigations found an urgent need for local and regional tourism networks, including a coordinated plan for increased indigenous participation.
- The Fisheries Regional Management Process was supported and suggestions made as to its implementation in the Western Cape area.
- Examination of marine infrastructure identified shortcomings and suggested future development pathways.
- The future Rio Tinto Alcan South of Embley development was reviewed and marine impacts considered.

INTRODUCTION

Why A Recreational Sport Fishing Strategy?

Tourism surveys have confirmed that recreational sport fishing is of major economic and social importance to the communities of the Western Cape. Numbers of fishers visiting the area continue to rise with almost no effect from the Global Economic Crisis. Ensuring that revenue from this source will continue its steady growth has become a very important concern of the Western Cape Chamber of Commerce.

At the start of 2000, Weipa was being hailed as '*Queensland's best fishing spot*', a reputation gained from the accessibility of its abundant fishery resource. Before long, it was regarded as the most desirable fishing destination on the Queensland coast, if not in tropical Australia. The charter industry based there offered a premium service.

Weipa's remoteness, combined with the fact that the majority of its workforce is employed in the bauxite mine, meant that the community is tight knit and much attention given to sustaining their relaxed lifestyle. When reports of the deaths of massive numbers of queenfish spread around the town following the first offshore netting activity in Albatross Bay around 1995, there was immediate anger and condemnation of such wasteful practices.

A suggestion from the body formulating a new fisheries management plan for the Gulf that Albatross Bay be closed to commercial netting was eagerly embraced and a petition in support of the action quickly organized and presented. So began a convoluted governmental process of false promises, deception and subterfuge that continues to this day. The community can see their local fishery declining, threatening the future of their lifestyle and economy and their concerns are not being addressed.

What has been most frustrating is the differing messages coming from fisheries management. On the one hand, there are statements like

'Recreational fishing is a major activity of locals and visitors alike. The growing tourism industry is largely focussed on recreational fishing, and the effective management of Albatross Bay fisheries resources is a critical component of the future economic growth of the region.' (Baker and Sheppard 2006)

but this is not reflected in community consultation that has revealed a department entirely focussed on the commercial fishing sector.

Promoting an area as having 'great fishing' will not encourage repeat or 'word of mouth' business unless visiting fishers find that claim to be true. Northern Territory came to this realization some 15 years ago and has built a fishing tourism industry that threatens to overwhelm its Cape York counterpart, now suffering from a declining fishery and little government support.

Fisheries in the Gulf Of Carpentaria now come under the Department of Employment, Economic Development and Innovation (DEEDI). By continuing to focus on commercial fishing production while ignoring the economic value of recreational fishing tourism, the Department is failing all three of its stated responsibilities.

Queensland tourism cannot afford to lose its '*best fishing spot*' nor Weipa employers one of the 'aces' of their job description drawcard. It is imperative to the future of the western Cape region (and Cape York Peninsula) that its fishery problems be urgently resolved in the hope that its once abundant resource can be restored and commercial fishing effort stabilized.

The Western Cape Chamber of Commerce believes that this Strategy takes the first step towards this consolidation of Weipa's marine-based future.

Goals

Principal goal:

To ensure that recreational sport fishing will continue to contribute to the social and economic growth of the region while maintaining the sustainability of the fishery.

Extension and application to the Western Cape Chamber of Commerce goals provides a comprehensive charter:

- Economic – recreational sport fishing already has been shown to contribute substantially to the community and has significant potential for development especially for the indigenous sector.
- Advocacy – the community has for over 12 years sought to have the Albatross Bay area closed to commercial netting. The WCCC remains committed to achieving this outcome.
- Environment – WCCC is gravely concerned about the sustainability of the fishery and the integrity of the marine environment in the Gulf of Carpentaria, more specifically Albatross Bay. The threat of declining resources is set to pose a major impediment to future social and economic development.
- Leadership – WCCC, as the peak organization representing the largest of Queensland's Gulf of Carpentaria coasts 3 towns, has a duty to represent that area and its proactive stance must be recognized by government.
- Governance – WCCC believes that more autonomy should be granted to regional areas and supports the new regional management process currently being proposed by Fisheries Queensland.

WEIPA & THE WESTERN CAPE

Weipa

Queensland's Gulf of Carpentaria coast, extending from its border with Northern Territory to Australia's most northerly point, Cape York, is 1479km long, represents 24% of the states coastline, and is sparsely populated. With a population of approximately 3,500, Weipa is the largest of just three towns, the others being Karumba (population 600) and Bamaga (Northern Peninsula Area population 2300), that are situated along what is locally known as the Western Cape (Cape York Peninsula).

Weipa, situated on the shores of Albatross Bay between the Embley and Mission Rivers, is the site of Rio Tinto Aluminium's mine reputed to contain the world's largest bauxite deposit. Consequently the majority of the town residents are employed either directly or indirectly in the extraction/export process. Apart from the minor impact of mining and port operation, the coastline for hundreds of kilometres on each side of the town is subjected to no other primary or secondary industry except for limited grazing and commercial fishing and is usually considered to be in a near pristine state.

This effectively simplifies any management initiatives throughout the region being far removed from the complex land and coastal environmental issues impacting the eastern coast from Cooktown south to the New South Wales border. The Western Cape and CYP compares more favourably to the Northern Territory than other sections of regional Queensland, having a similar climate and sharing the coastline of a unique and extensive body of water, the Gulf of Carpentaria.

There have been a number of fluctuations in the status of the mining industry during the town's history, the latest of which, the Global Financial Crisis (GFC), saw the Weipa community lose around 300 workers during 2008/09. Nevertheless, the town has shown its resilience by recovering quickly and the immediate future looks very promising.

Seasons & Access

Situated just 12.5 degrees south of the equator, Weipa has a tropical monsoon climate with two distinctive seasons, the 'wet' generally from late November to April and the dry season from May onwards. The town has an average rainfall of 2007mm annually, most of which falls from December to March.

Vehicular access is via the Peninsula Development Road (PDR) from Cairns, an 840 kilometre trip that includes approximately 600 kilometres of unsealed gravel, and is usually limited to dry season access. Travel, once the road closes, is restricted to the regular daily air service or charter flights, the 580 kilometres direct from Cairns taking approximately an hour and a half by the Qantas Link Dash 8.

Freight is delivered by sea all year round, except during cyclonic events, but road transport is limited by the condition of the PDR. Local barge services supply outlying coastal communities when roads are unpassable.

Community Structure

Weipa was established by COMALCO to mine the extensive deposits of bauxite surrounding the shores of Albatross Bay in 1963. The area continues to be a major world supplier of this product under the current ownership of Rio Tinto Alcan (RTA) with 18.5million tonnes of ore reportedly shipped during 2010. As well as employing the majority of the towns workforce, RTA Weipa also contributes large amounts to state and federal coffers, including \$60million in royalties, payroll tax, fringe benefits tax and indigenous agreement payments in 2008, as well as substantial port costs.

Most other large employers in town rely principally on contracts with RTA for a major part of their income with the result that their workforces can fluctuate substantially during periods of mine expansion and contraction. The retail business sector, once heavily reliant on the current status of the mining economy, now has increasing revenue from tourism to thank for better viability, with an estimated 35 to 55% increase in turnover during the dry season months.

Being the major population centre of CYP, Weipa's importance as a major hub for public services is steadily increasing. The building of a new hospital as well as a major expansion of facilities at the Western Cape College has also contributed to a marked rise in the number of ancillary workers being based in the town. A proposed new residential college, the Scherger refugee facility and the imminent expansion by RTA south of the Embley are indicators that Weipa's future is one of very significant growth.

Lifestyle Activities

The small, isolated community of Weipa has limited opportunities to engage in social venues that are normally associated with larger outback centres so its workforce relies heavily on outdoor activities such as fishing, boating, camping, hunting, horse riding, exploring, four-wheel driving and trail bike riding to satisfy their leisure time. It is vitally important that the quality of these experiences be preserved and even enhanced, if possible. All the major employers are well aware of this need and its importance in helping them retain and attract workers.

In terms of participation, recreational fishing is the number one activity and this, combined with an average household income that puts Weipa at the top of Queensland towns in terms of per capita earnings, has led to the centre having the highest level of boat ownership in the State (see Table below) with an estimated 70% of households owning at least one vessel. Boating and fishing provide an ideal environment for family groups to engage in a healthy and interesting outdoor pastime that actively involves all ages and often involves a plethora of educational opportunities, both practical and social.

Queensland Department of Transport and Main Roads
Boats Registered in Weipa 4874 as at 30/9/2010

Month	< 3.0m	3- 4m	4-5m	5-6m	6-8m	8-10m	10-15m	>15m	Total
January 2010	3	171	287	133	57	11	6	1	669
September 2010	3	170	310	134	59	11	10	1	698

WESTERN CAPE TOURISM

History

Australia's most northern point, Cape York, has long been one of the iconic destinations of the average Australian and each year sees an increase in the number of visitors who make the journey, either as part of an organized tour or driving their own vehicle. While many of the tourists who arrive in Weipa do so as part of their CYP experience, some have made the town their ultimate destination.

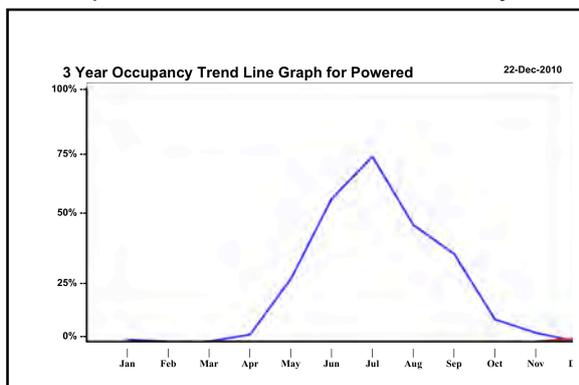
The numbers of vehicles traversing the CYP via the PDR increases each year as the figure below shows. Much of this can be attributed to improved road conditions and the growing strength of the 'grey nomad' market that has created a tourism boom in many outback areas. While 2010 showed a very slight decline in traffic at the Coen Biosecurity Centre compared with 2009, PDR vehicle numbers have increased by 247% in the past five years! Increasing numbers of recreational fishers make up a significant proportion of these statistics.

**Coen Cape York Biosecurity Metro Counter Statistics
January 05 to December 10**

Year	Northbound Traffic Numbers
2005	7381
2006	8852
2007	12547
2008	19611
2009	22024
2010	21817

Seasonal Trends

Most self-drive and organized tour travellers visit CYP between mid June and the September/October school holidays with peak numbers arriving in the winter months of July and August. The limited length of the season places restrictions on the viability of business expansion, particularly with modern competitive markets. While there is usually some traffic outside of the main season from as early as mid March to late November, most of this consists of visiting fishers.



Graph showing percentage increase each month over wet season levels for camp ground powered sites Weipa.

While economic effects of tourism are generally accepted to flow to the sectors, WCCC has established that the influx of visitors has wider reaching benefits, particularly to the service industry sector. Various retail businesses report increases of between 35 and 75% during the dry season months when compared to those in the wet. The increases seen are generally across the board rather than on 'tourist' oriented lines. For instance, the newsagency reports that sales of lottery products rise proportionally during tourist season.

Tourism Infrastructure

Accommodation – Weipa has three main accommodation venues, the Albatross Hotel Resort, Heritage Resort and Camping Ground as well as a limited number of rooms at The Anchorage, Weipa Palms and Western Cape Centre. The Camping Ground includes a dedicated fishing lodge and other self contained units.

During the peak tourist season, from June until October, accommodation usage is often at full capacity and prospective customers sometimes have to be turned away. The dry season sees an influx of mining related personnel, organized tour groups and public servants as well as fishers and general travelers. During major community events such as the Weipa Fishing Challenge, town facilities are often fully booked and unable to cater for the influx of visitors.

As fly-in clients make up the bulk of the charter fishing market in Weipa, most book accommodation well in advance to ensure they have a bed during their stay. Last minute bookings sometimes have to be turned down due to the lack of available rooms. This relative scarcity of accommodation is one important impediment to expansion of the tourism market in general.



Weipa Camping Ground Fishing
Lodge and beachside units

Development of new accommodation venues has been stymied by the unique tenure overlay of Weipa town. While private ownership of freehold land in the area is rising steadily, RTA's ownership of all surrounding land and its preoccupation with its core business - mining, means that there has been little thought given to long-term planning of the town's future tourism requirements. A proposal to build a new motel complex on land adjacent to the Bowls Club in 2011 will provide some respite but may still be insufficient given the demands of rising tourist numbers, the south of Embley development and the Scherger Detention Centre.

There is certainly potential for the Malaruch Corporation to build accommodation on their site along the Embley River as it is one of the town's premier locations, offering a river frontage with deep water access. However, there is still scope for the development of a detailed long term strategy probably through the Weipa Town Authority, that will involve a commitment by RTA to become more heavily involved with tourism related issues including land release, possibly through a long term funding arrangement that will also help support a visitors centre and/or tourism liaison officer.

Recent workshops held by CYSF have identified that Cape York is facing significant problems with tenure related issues and this is impacting on the ability of the established businesses in the area to cater to the ever growing numbers of visitors. Capacity during the peak dry season months is already overstretched but further investment is being hampered by both lack of security and the shortness of the tourist season. Insecurity is also being fostered by government moves towards establishing a world heritage area of indeterminate size on the Cape.

The closure of Camp Chivaree at Janie Creek, Mapoon, in mid 2010 is a significant setback to indigenous involvement in fishing and eco tourism on CYP, and serves to demonstrate the enormous tenure problems facing any tourism development that is sited on Deed of Grant in Trust (DOGIT) land. Given the success of similar ventures in the NT, perhaps it might be wise to look to their experiences to provide a way forward as the tourism market is eager for more indigenous experiences to be established.

Markets

Tourist visitors to Weipa/CYP can be classified as follows:

- Self Drive short term – usually travel in 4WD vehicle with camping equipment, camper trailer or off-road caravan as part of a CYP exploration, Weipa duration typically 1 to 4 days
- Tour member - travel as a member of an organized tour group usually in a medium to large 4WD bus, some tours camping in safari type tents, others accommodated in local hotel/motels, Weipa duration 1 to 2 days
- Tag tour member – self drive own 4WD as part of a guided tour led by a control vehicle, camp out, Weipa duration 1 to 2 days
- Rallies, special events – usually large numbers of self drive but can include fly in visitors, range of accommodation, duration 1 to 2 days
- Self Drive longer term – travel in a 4WD vehicle with camping equipment and boat, usually have Weipa as a destination, duration 5 days to 3 months
- Self Drive longer term – new workers to Weipa seeking employment or awaiting accommodation, duration various
- Fly in, DYI fishers – hire accommodation, vehicle and dinghy's for their visit, duration 3 to 12 days
- Fly in, DYI fishers based on houseboat – hire houseboat, and dinghy's for their visit, duration 5 to 7 days
- Fly in fully guided fishers – hire guides and accommodation for their visit, duration 4 to 10 days
- Fly in mothership-based fishers – hire mothership equipped with guides and dinghy's for their visit, duration 5 to 10 days

Catering to such diverse markets requires two main components

(1) promotion of CYP as a tourist destination as a basic requirement; then

(2) development of specific markets targeting the various visitor demographics.

For example, most Weipa CTO's have promoted their services independently and, in doing so, have established market niches based around their specific expertise. However, a significant proportion of their promotion has directly benefitted other business operators, including airlines, accommodation providers, hire cars and boat rentals, other CTO's and fishing tackle outlets; a contribution usually termed as 'intangible' but, nevertheless, very valuable to Weipa's economy.

Indigenous Tourism

CYP tourism markets are hungry for indigenous content but communities have been slow to respond. The major problems inhibiting the development of indigenous enterprises on CYP are centred on land tenure and long term funding issues. Complex federal and state government land tenure structures, combined with the complexities of traditional ownership, are stifling economic development and must be swiftly resolved. Those ventures that do get off the ground are generally poorly supported and lack any long-term vision.

Tourism needs workers and business operators who have a high level of training and preparation and this can only be achieved by a long-term commitment from government combined with a support structure based around current CYP tourism personnel. CYSF is currently considering the indigenous sector as part of its revue of CYP tourism.

The houseboat operation at Aurukun is one venture that continues to operate successfully on a sub contract basis with a high level of demand. In contrast, Camp Chivaree at Mapoon, a facility established as a turtle conservation and charter fishing venue, closed mid 2010 due to unresolved land tenure problems. These two examples serve to highlight the concept of marine based operations being relatively unimpeded by traditional ownership and tenure issues compared to their land based equivalent.

RECREATIONAL FISHING

History

The township was created following the discovery of bauxite in 1955 and was the subject of an Act of Parliament, commonly called the 'Comalco Act', which gave ownership of Weipa and adjacent mining leases to the mining company. Access to Weipa was therefore limited to workers only well into the 1980's and commercial fishers were excluded from using the port facilities.

From the time the first geological party made its history-making identification of bauxite in what became known as Weipa, fishing during leisure hours was an activity enjoyed by a majority of the workforce. Prior to that, indigenous people living in Napranum and Mapoon had been fishing with spear, net and line from the mission days as it provided a ready source of fish for their diet. These same activities continue today.

By the time Comalco's mining operation was in full swing during the late 1970s, fishing and crabbing were major community activities, and with the quality of the resource in an almost pristine state, meals of fresh seafood were guaranteed. Locals who were children at the time remember throwing a crab pot off the rocks adjacent to the Rocky Point boat ramp after school and catching enough crabs in an hour to feed the family. Another former resident remembers landing dozens of barramundi in the same area every time the tides were right.

The Weipa Sportfishing Club was famous throughout Queensland in the 1980's for the number of times its members won the prestigious State Sportfishing Titles with the fantastic fishery on their doorstep providing them with fishing opportunities unparalleled in any other Queensland centre. That reputation still continues but the wins are more thinly spread these days.

Because the town was effectively 'closed' to anyone who did not have business or employment in Weipa during the early years of Comalco's ownership, the company went to great lengths to ensure that community activities were supported and enhanced as they recognized the fact that a happy workforce was good for productivity. Given that recreational fishing was the number one 'off duty' pastime enjoyed by everybody from senior management down, Comalco lobbied successfully to close the Embley, Hey and Mission Rivers to commercial net fishing, a closure that is still in place today.

Other Comalco projects that enhanced recreational fishing opportunities included establishing concrete boat ramps at Rocky Point and Evans Landing as well as unsealed launching spots at the Mission Bridge, Andoom Bridge, Bettridges Landing (Pine River - now closed due to live mining) and adjacent to the Lorum Point shiploader. Side-tracks were also established to give access to a host of local spots including Red Beach, Gonbung Point and the beachfront near the lakes. The Weipa Motor Boat Club was also established with a clubhouse at Evans Landing.

It was not until the late 80's that a few tourists started finding their way to town and word of the superb recreational fishing to be had there soon started filtering down through the fishing grapevine. The state of the PDR in those days varied from fair to atrocious, and while the 600 kilometres of gravel involved in a trip from Cairns deterred all but the keenest angler, numbers slowly increased each season.

In the mid 90's, a number of feature articles in the fishing media promoted the Weipa area as having recreational fishing that was as good as anywhere in remote tropical Australia sparking greatly increased interest in visiting the town. Meanwhile, the local workforce had increased to peak levels and statistics showed that the average wage was amongst the State's highest. Millions of dollars each year were being invested in boats and fishing tackle by recreational fishers living in the community.

Socially, recreational fishing based activities in Weipa have always been popular and generally involved a very high level of participation. The Weipa Fishing Classic, now held over the June long weekend, soon became established as the number one event on the town's social calendar. In 2010, the event attracted over 1300 entries to the prize draw which featured donated goods worth \$100,000. Visitors come from as far away as Melbourne and Darwin to attend. In 2010, local and Cairns businesses displayed a range of products including 4WD's, boats, motorbikes, camping equipment, mowers, chainsaws and motor accessories, attracting a large audience. It is now widely recognized as CYP's most iconic annual event.



A series of fishing workshops aimed at junior fishers held on annual 'Take a Kid Fishing Days' by (the now defunct) Weipa Sunfish group attracted 43 juniors in 2003, 76 in 2004 and an amazing 142 in 2005. When the fact that most of the kids had at least one parent attending with them is considered, the community importance of these voluntary gatherings could not be understated.

In 2010, recreational fishing has been just as important to the healthy social framework of this remote community as it ever was. It remains the major 'off duty' activity of the town's workforce and Weipa's claim to the State's boat ownership title remains unchallenged. Concern for the future of recreational fishing in local waters is still a major issue in the town.

Importance To The Workforce

Recreational fishing is such an important drawcard to prospective workers that RTA and some major contractors, including Carpentaria Contracting and Goodline Engineering, often feature Weipa's great fishing in their newspaper and web-based advertising.

CARPENTARIA CONTRACTING
ELECTRICIANS, REFRIGERATION & AIR CONDITIONING MECHANICS

Not happy with your current job?

- ▶ Commercial & industrial works
- ▶ 6 week trial period
- ▶ Would require relocation
- ▶ Under go a pre-employment medical

WANTED

Applications to be directed to; HR Administrator
 PO Box 520, Weipa Q 4874
 Ph (07)4030 9999 Fax (07) 4069 7074
 Email: reception@carpentariacontracting.com

Weipa business press advertisement featuring fishing

Given the competitive nature of mining employment during current boom times, the opportunity to live in a remote coastal centre coast situated in a near pristine environment cannot be underestimated in terms of job marketing and it is often the case that some prospective employees are prepared to accept a lower salary in return for the enhanced quality of life a place such as Weipa provides.

Some employees of Rio Tinto Alcan have lived in the community for 15 to 20 years and have raised children in what they regard as a lifestyle that is almost ideal. Many of these children have now married and live in the town, raising a second generation of outdoor loving kids who regard fishing, camping and hunting as an integral part of their day to day activities. Maintaining the quality of the outdoor environment is essential if workforce expectations are to continue to be met and a healthy community spirit maintained.

Economic Benefits

Recreational fishing is an important contributor to the Australian economy, lifestyle and culture. The 2000 National Recreational and Indigenous Fishing Survey (Department of Agriculture, Fisheries & Forestry 2000) estimated that 3.36 million Australians undertook fishing as a recreational pursuit during that year spending \$1.8billion in the process. In industrial terms, the Australian Bureau of Statistics 2003 Year Book reported that recreational fishing supported about 90,000 Australian jobs. These figures would all be appreciably higher in 2010.

Most fishers regularly use a vehicle and boat as part of their leisure activities and often travel widely in pursuit of their quarry. Therefore, their overall benefit to the economy goes much further than just the purchase of fishing accessories.

Even without tourism, the economical benefits of recreational fishing in its widest sense are significant to Weipa businesses, and more widely to tackle and boating suppliers in major centres such as Cairns and Brisbane. Sales of tackle, bait, ice and camping equipment plus substantial purchases of fuel all contribute to a healthy local economy that then grows between 35 and 55% (reported by individual businesses) during the tourist season from May to October.

Weipa's premier social event, the Weipa Challenge, is based on recreational fishing, attracts up to 1300 competitors for the weekend and raises substantial amounts for community organizations. Allowing 2.5 persons per boat and an average expenditure of \$100 per boat per day for fuel, bait, tackle, and ice etc over the three day event, the revenue generated is \$156,000. If half of the competitors come from out of town and stay in accommodation costing \$50 per person per day (some camping, some in rooms), approximately \$100,000 is spent. Factor in another \$30 per competitor per day for meals and drinks and a further \$120,000 is added. All up, this event alone would generate over \$375,000 in a single weekend.

While there have been no attempts to quantify economic benefits, when the contributions of local, visiting and charter clients are combined, the value of recreational fishing to Weipa is thought to be between \$8 and \$10million per year. A comprehensive survey of such an important economic contributor is long overdue and a key recommendation of this strategy.

Many Weipa business owners are recreational fishers themselves and readily agree that maintaining a vibrant local recreational based fishery is of pivotal importance. It is widely acknowledged that the commercial fishing contribution is negligible in comparison.

Sport Fishing Tourism

Recreational fishers started visiting Weipa in the late 1980's and numbers started to increase once word of the exceptional opportunities started reaching mainstream anglers. A couple of very complimentary feature articles then appeared in leading fishing magazines prompting an immediate response. Recreational fishers started flocking to the town during the dry season, in spite of the often poor condition of the PDR.

These days, years of favourable fishing media exposure, much of it sponsored by leading charter businesses, has steadily increased the number of 'do it yourself' (DIY) anglers visiting Weipa, particularly during the peak times from May to June and September to November. Many groups visit every year, some of them twice in a season. This has proved to be a bonanza for accommodation venues such as the camping ground and motels as these fishers mostly arrive during what were once traditionally quiet times business-wise.

An increased availability of hire boats provided yet another popular option for self-drive and fly-in fishers wanting a DIY holiday. Air travellers would hire accommodation and vehicles as part of their visit, further strengthening the town's economy. Some enterprising DIY fishers even went to the extent of barging vehicles and boats to Weipa before the PDR opened to traffic, to ensure they were first on the scene.

Weipa's first charter operators mainly catered to the drive-in tourist market by running half or full day fishing trips on demand. Following the arrival of a couple of new operators with market experience, there was a change in focus from drive-in to fly-in clientele because of the increased business security this offered - bookings that resulted were of multiple day duration and made well in advance.

Customers flew from all parts of Australia and overseas via Cairns, then required rooms, meals and drinks on arrival, a boon to the local accommodation industry. While most of the visitors came from the eastern states, clients also arrived from other Australian States, New Zealand, USA, Japan and Malaysia.

The quality of the fishing, combined with the professionalism and expertise of those involved, soon found demand for charter services in the area rapidly escalating. Operators began to report that up to 70% of their custom was repeat or word of mouth business and soon the peak fishing periods were being fully booked as far as a year in advance.

By 2001, there were approximately nine fishing guides and two mother ships working Weipa and the adjacent coastline, which further increased to 14 guides, three mother ships and two houseboats by 2006. Figures developed around this time (see Appendix 1, GOC Fisheries – Commercial Tour Operator) reveal that the charter fishery was worth \$4.4million for the 2006 tourist season. It would be expected that the sector is even more valuable currently.

Felan Consulting & Event Services, in their report *Weipa Tourism Needs Assessment* (Felan 2004), found that the area's sport fishing was the major tourism activity and offered the observation that

'the Western Cape's Unique Selling Proposition (USP) is clearly its sportfishing. There are other places in Australia where there is good Sportfishing of one type or another but it is only on the Western Cape where the mix of species, weather conditions and access to professional fishing guides and facilities all comes together to produce the ideal package.'

The GFC of 2008/9 impacted very little on the Weipa charter industry. The major operators all reported business as usual for 2010 and heavy bookings already for 2011. This trend is mirrored by the number of travellers visiting Cape York Peninsula, with vehicle numbers remaining stable in 2010. The current season has seen 16 guides, three mother ships and three houseboats operating the in Aurukun to Mapoon region, all with heavy booking schedules.

In essence, Weipa's recreational sport fishing tourism sector in all its guises has boomed to become a major contributor to the local economy and arguably the most important money-spinner outside of mining in the town.

Recreational Fishing Tourism – Indigenous Participation

Initiatives involving indigenous participation in recreational fishing tourism are currently in their infancy but there is a substantial market niche that is ripe for development. The houseboat 'Pikkuw' at Aurukun and Camp Chivarree at Mapoon (now closed) have been steps in the right direction but the process needs proper coordination and pro-active government involvement to address tenure, training and long-term funding problems.

Of course, such initiatives cannot happen without a healthy fishery and the chance to provide communities with employment opportunities in the tourism industry may be lost if current downward trends continue. It is important that fisheries issues in the Western Cape area are addressed as a matter of urgency and a favourable outcome negotiated that supports all stakeholders, especially indigenous communities.

Recreational Sport Fishing Ecotourism

The common perception of recreational fishing is that it is an 'extractive' activity and therefore harmful to the environment. This view comes as a result of the sport being associated with its commercial counterpart, a misconception that is further perpetrated by both sectors being administered by the same governmental entity. Although keeping every fish caught was once common practice, the sport fishing concept born in the late 1960's has revolutionized the recreational sector with the result that 'catch and release' is now widely practiced by a majority of fishers.

Weipa's charter sector generally has developed strict catch restrictions that encourage the killing of only those fish immediately required for meals while a party is visiting. The practice of releasing up to 95% of those fish landed is based on the premise that an individual fish may be caught several times during its lifetime, therefore enhancing the visits of multiple clients. Tagging by some operators has so far included a fingermark sea perch that has been captured and released on four separate occasions.

While the younger generations of fishers have embraced the concept of catch and release, the same cannot be said of the so-called 'grey nomads'. Karumba's recreational fishery features a high retention rate of its prime species – grunter, salmon and barramundi – because it centres around a practice that has been long established, therefore attracting a particular type of clientele, most of whom have grown up with a 'fill the freezer' mentality. Fortunately, these attitudes are changing fast as evidenced by the massive shift to catch and release practices. The Weipa market has been at the front line of this latest initiative.

Dr Ben Diggles PhD (Diggles 2010) is a fisheries scientist who has looked very closely at the status of recreational sport fishing and found

'that commercial fisheries measure their output in dollars per kilogram. On the other hand, it is clear that recreational sportfisheries measure output in dollars per experience, and that recreational fishers need access to desirable sportfish and desirable locations to add value to their experience. It is no secret that they are willing to pay quite a bit of money to do this, just look at the economic data on bonefish, marlin and so on.'

He goes on to suggest a radical solution to the marketing of recreational fishing that consolidates modern attitudes to environmental conservation and animal ethics by today's enlightened fishers

'essentially, recreational sportfishing is ecotourism. Unlike commercial fishing, given access recreational fishing ecotourism can co-exist with "no take" areas or "no take away" philosophies.'

Weipa, CYP, indeed the entire Australian sportfishing fraternity needs to embrace this concept and move quickly to identify themselves as active ecotourists rather than the irresponsible image often portrayed by an often green orientated media.

Marketing and Promotion



Magazine advertisement for Weipa charter business

Almost all of the marketing and promotion of recreational sport fishing on CYP to date has resulted from the efforts of individual charter operators. Often this has involved the costly exercise of hosting media personnel, both magazine and film, as well as press advertising and the setting up of web sites. While these promotional efforts have often resulted in increased business for the operator directly involved, they have also attracted

clientele to other charter fishers, as well as encouraging many DIY visitors.

Running any tourism based business within the constraints of a limited season will always threaten viability so containing costs is very important to economic survival. The lack of availability of a CYP based tourism officer whose role could involve providing

- (1) specialist advice and mentoring
- (2) a central point for joint marketing initiatives and promotional events
- (3) a data base of current operators and market trends
- (4) a liaison and coordination point for government departments
- (5) a reference point for developing indigenous businesses

has increased both work load and costs of current CTO and general tourism businesses.

There is urgent need for such a position to be created, preferably in close liaison with a panel of CYP tourism representatives. CYSF is currently holding a series of workshops throughout CYP that will investigate this concept as part of their discussions and has indicated its willingness to represent that voice. Once the series of regional meetings have been completed in May, CYSF intends presenting a comprehensive proposal to all levels of government.

As suggested in the Queensland versus Northern Territory comparison, there is urgent need for both TQ and FQ to address their lack of support of CTO's in this state – and recreational fishing tourism in general.

Infrastructure

Weipa boat owners are served by three main boat ramps sited at Evans Landing, Rocky Point and Napranum. The facility at Evans Landing is the most popular site and has a walkway and pontoon adjacent for ease of access to boats. Other launching spots include a hard gravel ramp on the north side of the Andoom Creek bridge, off the beach at the south western end of the Mission River bridge and from the beach at the mango trees near the ship loader.

The other structure that is very well used by fishers, both local and visitor, is the Evans Landing jetty. While access to the jetty is often restricted during vessel unloading, it remains very important as a spot to 'wet a line'. A recently constructed boat ramp at Cullen Point, Mapoon, has also provided a much needed improved launching facility in that area, supplementing the gravel access at nearby Cloughs Landing on the Wenlock River.

When the highest boat ownership per capita of any town in Queensland is factored with the rotating shift roster of the major employer RTA, it results in the boat ramps being constantly used, even at night. Once tourists start to enter the town and the better boating weather of the dry season arrives, these facilities can become very busy.

The majority of Weipa's fishing and boating infrastructure was established over 20 years ago and, apart from a minor upgrade of the Rocky Point boat ramp about 5 years ago, has remained largely unchanged. The boat ramp and pontoon at Evans Landing have been in urgent need of refurbishment and expansion for some time but disputes over who actually owns and manages the ramp are still ongoing.

The ramps close proximity to the jetty during fuel unloading has raised workplace health and safety concerns resulting in suggestions that the facilities be relocated further west towards Gonbung Point. This move has been prevented due to land tenure and funding issues.

Given the increase in local workforce and tourist numbers during the past decade, a comprehensive review of all Weipa boating and fishing infrastructure is long overdue. In spite of the high level of boat ownership, the anomaly that prevails with RTA control of the town hinders any contributions by government to marine based improvements, a somewhat farcical situation.



Suggested infrastructure enhancement issues in order of priority include:

- Relocation and expansion of boat launching facilities at Evans Landing including a boarding pontoon, protective bund wall, large car park and wash down area
 - Improvement and expansion of the boat ramp at Rocky Point including extension of the protective bund wall
- Establishment of an all tide launching ramp on the south western side of the Mission River bridge
 - Reopening of the road and refurbishment of the gravel ramp at Bettridges Landing, Pine River as soon as mining in the area allows
 - Regular grading of road access to Bouchat/Red Beach and Stone Crossing, Wenlock River
 - Establishment of fishing shelters and tables at Gonbung Point

Moorings and marine facilities suited to larger vessels have been in urgent need of an upgrade for many years. Apart from a small 'hard' storage area at Evans Landing, any opportunities for vessel refitting are non-existent. Given that the closest commercial slipway to the GOC is based in Cairns, regular annual maintenance of charter mother ships, large private motor vessels, yachts and commercial fishing boats can involve a sea voyage that is time consuming and costly.

The establishment of a marina in the Weipa area has been discussed for some time and a proposal for the Embley River is currently in the advanced planning stage. It is important that such a facility provides:

- Deep water access
- Fixed moorings for a range of vessel lengths
- Modern slipway and comprehensive workshop services
- Readily accessible fuel supplies for both diesel and ULP fuel

- Facilities that allow users to comply with National Standard for Commercial Vessels (NSCV) regulations
- Ready access to moored vessels
- Safe haven in the event of inclement weather and cyclonic conditions

Such a development also offers the opportunity for the inclusion of public recreational fishing facilities such as a boat ramp, adequate vehicle parking, access pontoon and dedicated fishing areas that include shade shelters. It is vitally important that such a project provides reasonable public access to adjacent waterways and be community friendly rather than placing undue restrictions on local fishers.

RTA's South of Embley project may provide an opportunity for new fishing/boating facilities to be established by their incorporation into the marine section of the development, particularly at the Embley River ferry departure site and seawards of the new port facilities to be established near Boyd Point/Pera Heads. There may be a mechanism to support such initiatives. As a precedent, it should be noted that the Gladstone Port Authority established the barramundi hatchery that stocked Awoonga Dam, now famous for its exceptional recreational fishery, as an offset to habitat lost during the redevelopment of its harbour facilities about 15 years ago.

With the port and shiploader development between Boyd Point and False Pera Head set to impact on the offshore area most heavily fished by local boaters, including, of course, many RTA employees, an offset arrangement that saw the establishment of artificial reefs and fish attracting devices (FAD's) outside of the established shipping lanes would seem a suitable outcome for all parties. If such an arrangement was able to include funding of a Weipa-based barramundi hatchery to stock local waters, this could provide an excellent cooperative opportunity for indigenous participation in a project that would benefit the entire population. Local fishers would, no doubt, be keen to become involved with such a hatchery on a voluntary basis.

Such a process could involve a consultative committee made up of RTA, recreational fisher, indigenous and CTO representatives as well as an independent fisheries scientist. It would also be a useful vehicle for RTA to promote community enhancement.

Concerns

Rio Tinto employees, regular DYI visitors and charter fishers have all noted a marked drop in the population of some of the popular recreational species, particularly over the past five years. Up to the late 90's, queenfish were recognized as a prolific inhabitant of inshore and estuarine waters but numbers have dwindled alarmingly in the past few years. Golden trevally, another popular species that was commonly encountered around the mouths of the rivers and along the beaches, often schooling around bait congregations, has now dwindled to such an extent that they are an occasional catch. Another trevally, locally known as the tea leaf because of its distinctive spot pattern, once congregated in large schools in the shipping channel and just offshore of Boyd Bay/Pera Head. These annual congregations have virtually disappeared and even catches of a couple of specimens are becoming increasingly uncommon.

CTO catch data has been analysed to seek to quantify the fishery changes. The status of estuarine and offshore waters are examined in Appendix 3 and indicate that there have been falls of 75% in barramundi catches and 85% reductions in the numbers of queenfish and trevally species. Such figures have severe implications for the health of the spawning biomass of these species.

One of the results of the fishery decline is that fishers have to travel much further to find catchable quantities of fish. Ten years ago, few boats travelled south past Pera Head, finding enough activity in that 23NM long stretch of water to keep them very busy on the majority of fishing days. Weipa based CTO's now estimate that the average distance travelled on a typical day is twice that of 2000 effectively doubling fuel and service costs. Travelling further afield also involves increased safety issues.

Obviously, there are factors influencing the marine environment adjacent to Weipa that are causing what would seem to be a major shift in fish populations indicating that the area is far from as pristine as is too often imagined. This Strategy examines the status of the various GOC fisheries (Appendix 1) and attempts to identify some of the causes of this disturbing issue, then suggests means by which these may be addressed.

It would appear that current fisheries management regimes are not producing a sustainable marine resource (see Appendix 2 and 4) and need to be urgently addressed if Weipa's main employment and tourism activity is to continue to remain in a healthy state.

Albatross Bay Commercial Netting Closure

The data contained in Appendix's 1, 2 and 3 demonstrate unequivocally that a commercial netting closure of Albatross Bay is long overdue. To be effective, the closure must extend seawards to the 25NM line, the extent of the Queensland administered fishery, and should include trawling as well as mesh netting. The following map shows the extent of the proposed closure.

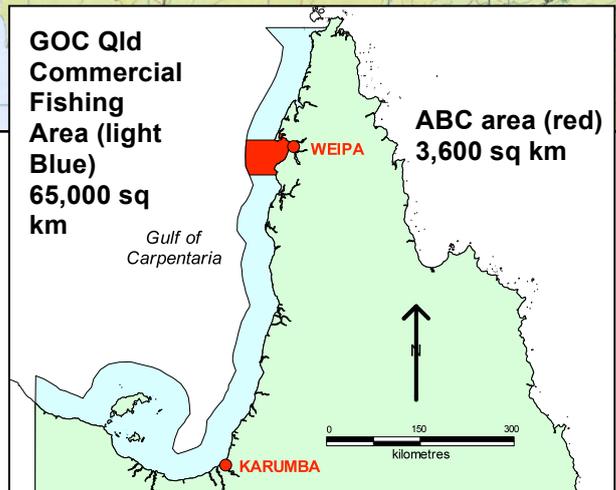
ABC Facts

- A closure line directly from Jantz Point to Boyd Point (current Smooth Waters Limit) would not protect AB from the majority of the offshore netting and trawling effort
- The proposed ABC encompasses an area of 3,600 square kilometres. That represents only 5.5% of the total GOC area open to N3 and N9 fishers of 65,000 square kilometres
- The ABC is strategically placed in the available commercial fishing area to provide minimum inconvenience to operations and maximum benefit to fishery regeneration
- The GOC contains no other representative area of comparable significance.

PROPOSED ALBATROSS BAY COMMERCIAL NETTING CLOSURE



Albatross Bay Closure - from Jantz Point in the north to False Pera Head in the south, east to the shoreline (including all estuarine waters) and west to the 25NM line - represents 5.5% of the total area currently available to the GOC commercial net fishery.



ABC Benefits

- Provide an opportunity for the regeneration of declining marine fish stocks in AB
- Provide a much needed sanctuary for large marine fauna such as dugong, dolphin, pilot whales, manta rays and turtles, all of which are susceptible to tangling and drowning in commercial fishing nets
- Provide an excellent opportunity for scientific comparison and ecological sustainability assessments with commercially netted areas
- Provide an area strategically placed within the commercial fishery for stock regeneration
- Consolidate and enhance recreational fishing tourism and the local economy
- Consolidate and enhance workforce long-term lifestyle opportunities
- Create an outstanding marketing opportunity for the tourism industry
- Create an opportunity for government to promote its environmental awareness
- Create an opportunity for government to promote community cooperation
- Support and consolidate the status of the waters of the Embley, Hey and Mission Rivers currently closed to commercial net fishing
- Support and consolidate the status of the Pine River Catch and Release Area
- Protect local beaches and inshore waters vitally important to recreational fishers from commercial fishing currently impacting on several iconic sport fish species and dugong
- Stop commercial fishers harvesting a significant proportion of Weipa's barramundi and threadfin salmon pre-spawning brood stock when they move to AB foreshores in September
- Provide a platform for Weipa to instigate micro management regimes of Albatross Bay through the new FRMP being promoted by FQ
- Minimize any interactions between large bauxite carriers and commercial fishing vessels when new RTA SOE port facilities are established

The Florida Example

In 1994, Florida USA citizens voted overwhelmingly, by a 72 percent margin, to approve the "Limiting Marine Net Fishing" constitutional amendment that became Article X, Section 16, of the Florida Constitution. Known as the *Save Our Sea-life Amendment*, it prohibited the use of gill and entangling nets in all Florida coastal waters and also prohibited other large nets in near shore and inshore waters. It is now considered *'the most important marine conservation initiative in the history of the state and reversed decades of abuse of Florida's marine resources through waste and over-fishing.'*

Fish stocks that had been reduced to dangerously low spawning biomass levels (as low as 15%) have since recovered. Florida now has a massive tourist economy based on its exceptional Sportfishing and many of its residents are fishing orientated retirees. Mackerel were one species that benefited from the netting ban and continue to maintain stock levels in spite of considerable pressure from commercial and recreational line fishers.

Statistics generated by Florida's sport fishery for bonefish also provide some extremely interesting data. In a recent census that included satellite tagging, detailed by Dr Ben Diggles PhD (Diggles 2010), he reported

that a population of 300,000 bonefish underpins a sportfishery worth one billion US dollars to the Florida economy that's the amount of money spent in Florida each year on fishing trips that just target bonefish....that's \$3500 per fish, per annum.....Sportfishers in Florida release 99% of their bonefish ...that live for around 20 years, which means over their lifetime, researchers in Florida consider these fish to be worth \$70,000 each to the Florida economy. Given bonefish average 3 kg or less, that's over \$23,000 per kg.

With such precedents, a netting closure of Albatross Bay is definitely a sound economic and environmental investment.

Cape York Peninsula Versus Northern Territory

The similarities between the CYP and NT are easily appreciated. Both areas have relatively small populations, a similar climate, a lengthy coastline and extensive river systems while sharing a major water body, the Gulf of Carpentaria. The major difference is that NT is administered by a government that lives on site while CYP is under the ultimate control of people situated over 2,000 kilometers away who have priorities much more important than those of a handful of voters north of Cooktown!

So, while the Cape and NT would seemingly need similar fisheries management regimes, in reality, they are very different. Queensland's management is largely focused on the commercial fishing sector and separates its east coast participants from west coast in only some regimens. Because a large percentage of its population are recreational fishers, Northern Territory tries to balance commercial fishing interests with tourism and this combination would appear to be reaping rewards. Comparisons between fisheries in both states may offer an insight into the future direction of GOC management and, in particular, to the future of tourism in the Western Cape.

While commercial barramundi catches are very similar in terms of the amount of product, GOC license numbers are more than 4 times greater. Consequently, the average gross return for GOC N3 fishers (mean \$87,500) is around one third of their NT counterparts (mean \$245,000). This raises the question of whether the 'average' GOC operator produces enough product to run a business that is commercially viable given the expenses of running a primary vessel, at least one dinghy and employing a deckhand.

The table below compares the relevant barramundi fisheries

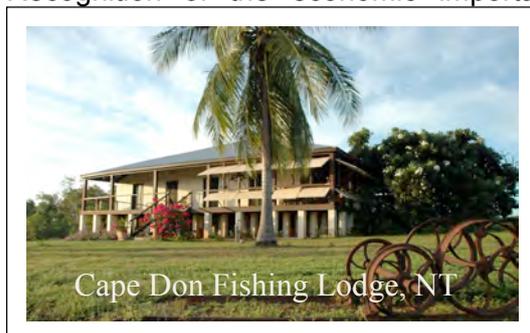
	Qld GOC	NT
Commercial barramundi catch	720 tonnes	615 tonnes
Worth	\$5.04M (\$7.00 kg)	\$3.94M (\$6.40kg)
Catch Per Unit Effort (CPUE)	25kg/100m net day	29.2kg/100m net day
License number	86 (80 active)	20 (all active)
Average catch per license	9 tonnes	30.75 tonnes
Average number of days fished per license	60 days using 600 metres of net	105 days using 1000 metres of net
*Approximate Income	\$87,500 per license	\$245,000 per license
Estimated barramundi fishery biomass	85%	Unreported

*Per boat earnings estimated on entire net catch, not only barramundi (but excluding shark and grey mackerel) (NT Government 2009, GOCIFF 2010)

The other major difference from the above statistics would appear to be the ability of the NT fishery to be able to sustainably support a fishery that has a much longer season than its neighbour. Given the fact that NT's commercial barramundi fishers have already been excluded from large areas that have been deemed by the government to be important to recreational fishers, it is obvious that, in spite of this sharing arrangement, that states barramundi population is in very good health. This is confirmed by an estimated biomass figure that shows barramundi at 85% of the original unfished stock level. No comparable figure is available for GOC stocks.

After statistics in the early 1990's showed that over 30% of NT's resident population went fishing, the government became very aware of the need to maintain fish stocks available to that sector, particularly in respect of their major angling species, the barramundi. Recreational fishing surveys revealed that over 400,000 barramundi were caught in 2000 with 76% being released (an increase from the 240,00 recorded in 1995) and that fishing tourism was worth \$35M that year to the state. A more recent survey is due for release in 2011 and is expected to reveal a much higher revenue figure (an expected figure of \$35million for its CTO's alone!).

Recognition of the economic importance of recreational fishing also prompted a



Cape Don Fishing Lodge, NT

management review of the commercial barramundi fishery and this resulted in the buy out of a large number of licenses combined with netting closures of popular areas including Darwin Harbour, Anson Bay and Chambers Bay. While commercial catches have remained stable in spite of these changes, the numbers of barramundi caught by recreational fishers has continued to improve.

The improved fishing and a proactive interest by government also resulted in a marked increase in fishing tourism oriented businesses, to the extent that NT had 145 (99 active) licensed fishing tour operators in 2008 working from home bases, lodges, mother ships, charter boats and safari camps. In an effort to ensure that this important industry operated professionally, licenses were issued only when strict criteria were met and operators agreed to submit comprehensive information as part of retaining their permits.

The government also funded the establishment of an industry body, the Northern Territory Guided Fishing Industry Association (NTGFIA) in 2005 that is now supported by yearly license fees introduced in 2007. The NTGFIA has worked closely with government on a recent review of the industry that will result in even higher professional standards.

The logbooks that resulted from these initiatives provided the most comprehensive data on fishing tourism that has ever been produced in Australia, and probably the world. An example of the statistics generated is shown in Appendix 4. One indicator of the level of growth is the number of tour days that have increased from 4,800 in 2000 to 7,000 in 2008, with 32,609 client days being recorded in 2008.

In the light of these facts, NT's attempt to provide a balanced approach to its barramundi resource has resulted in an economic bonanza that has minimal environmental impact. Its fishing tourism industry has gained a reputation world-wide and is still growing. There is already indigenous ownership of a number of tourist sites including Cape Don Lodge, Cooinda Lodge and the Gagadju Hotel at Kakadu.

In contrast, the Queensland government offers little support its fishing tour operators, other than collecting their license fees, and seems reluctant to engage in any initiatives that would result in the setting aside of recreational fishing only areas. The ABC proposal is the classic example - an area that has high recreational use, a thriving tourism sector and minor commercial usage – yet it is stubbornly resisted. Fisheries managers have been reminded many times that the value of the annual barramundi harvest in AB amounts to around one third of the income generated by the commercial fishing tour operators in **one day** at the season peak. This is something the NT government worked out 20 years ago!

Given the growth of fishing tour infrastructure in NT since the recreational fishery was enhanced, it would be possible to speculate that the same proliferation of businesses might happen on CYP if a similar philosophy applied in Queensland. Currently, the GOC charter industry appears under threat rather than being given that positive support.

GOCIFFF reports that the number of commercial fishing tour operators in the GOC has dropped from 43 in 2003 to 18 in 2009, seemingly confirming the downward fishery trend. While the number of tour operators working from Weipa has remained fairly stable at around 14 since 2005 and bookings continue to be heavy, there is widespread concern that the health of the fishery rather than the strength of the market will impact on future business viability. When compared with their NT counterparts, GOC charter fishers are significantly disadvantaged and face increasing threats to their viability as a result of the failure of government to support their industry, both from fisheries and tourism points of view.

Conclusion

The following Action Plan defines the important issues and their outcomes.

ACTION PLAN

ISSUE	ACTION	KPI*
Sustainability of the Weipa marine environment	Declare the closure of Albatross Bay	<ul style="list-style-type: none"> ▪ Increase in fish stocks in AB ▪ Increase in numbers of large marine fauna in AB ▪ Growth of recreational fishing tourism in Weipa and WC ▪ Growth of Weipa economy
Monitoring of the Weipa marine environment	Establish a research program to assess and monitor marine stocks in Albatross Bay	<ul style="list-style-type: none"> ▪ Improved fishery data including comprehensive catch statistics ▪ Informed management options ▪ Establishment of voluntary tagging program
Improved fisheries management consultation	Establish a Weipa based FRMP	<ul style="list-style-type: none"> ▪ Implementation of area based bag limits and legal sizes ▪ The ability to react promptly to local sustainability issues
Sustainability of the GOC fishery	An immediate comprehensive review of GOC fisheries management	<ul style="list-style-type: none"> ▪ Reduced commercial license numbers ▪ Improved viability of commercial fishers ▪ Improved stock levels ▪ Compulsory reporting and disclosure of by-catch levels ▪ Significant reduction in by-catch levels ▪ Specific enforceable fishery regulations
Equitable allocation of the fishery resource in AB per economic and social data	Recognition by FQ and TQ of the economic status of recreational and charter fishing to Weipa	<ul style="list-style-type: none"> ▪ Closure of AB declared ▪ Improved consultation with Weipa community ▪ A higher level of liaison and cooperation with local tourism businesses

Support of recreational fishing enhancement in CYP/GOC	A greatly increased priority given to recreational fishing in the GOC by FQ	<ul style="list-style-type: none"> ▪ Closure of AB declared ▪ Recreational fishers are being given equal stakeholder status with commercial fishers ▪ An increase in dedicated FQ recreational fishing orientated managers ▪ Other significant recreational fishing areas identified and closed to commercial fishing ▪ A comprehensive study of recreational catch data implemented ▪ Urgent review of GOC fisheries management underway
Support of CTO's and the charter fishing industry	Immediate development of a comprehensive strategy by FQ aimed at professionalizing the charter sector	<ul style="list-style-type: none"> ▪ A CTO representative body established and running ▪ A coordinated FQ/TQ promotional campaign operating ▪ A comprehensive data collection program established and running
Support of recreational fishing as a major community activity	Upgrading of Weipa's boating and fishing related infrastructure	<ul style="list-style-type: none"> ▪ Tenure problems with current structure resolved ▪ A maintenance and improvement program established ▪ Access to popular fishing spots being maintained and improved ▪ Regular consultation between the FRAP and WTA on infrastructure matters
Maintenance of larger fishing vessels	Establishment of a marina complex in Weipa	<ul style="list-style-type: none"> ▪ A safe, secure deep water anchorage now available ▪ A slipway and comprehensive maintenance facilities in operation ▪ New public boat ramp and shore fishing sites now accessible

Supporting Weipa's tourism industry	Create a network that will coordinate and market local tourism	<ul style="list-style-type: none"> ▪ An operational tourism committee that is supported by RTA, TQ and CYSF ▪ A strategically placed visitors centre open for business ▪ A WTA development plan for future tourism infrastructure in operation ▪ A coordinated marketing plan for Weipa and the Western Cape in operation
Offsetting the impact on AB by the SOE development	Negotiate an AB fishery enhancement package with RTA that will benefit RTA workers and other recreational fishers	<ul style="list-style-type: none"> ▪ A strategically placed network of artificial reefs and other FAD's established in AB ▪ Minimized access restrictions adjacent to the Boyd Bay ship-loading wharf ▪ Recreational fishing facilities included in Embley River ferry terminal project ▪ An operational long-term funded fish hatchery in Weipa
Greater indigenous participation in local tourism	Identifying and training indigenous workers for the tourism industry	<ul style="list-style-type: none"> ▪ Increasing numbers of indigenous people being employed in local tourism ▪ New indigenous business ventures operating viably

*KPI – Key Performance Indicators

APPENDIX 1

Gulf of Carpentaria Fisheries

Management History

To understand the potential impacts on the marine environment along the eastern Gulf of Carpentaria coast, it is necessary to consider the different fishery methods being undertaken and the management measures that are in place. Management itself involves a range of agencies, some involving designated areas, others species based, a sometimes unwieldy process that comes as a result of the boundaries defining State and Commonwealth jurisdiction.

Waters on Queensland's side of the Gulf of Carpentaria are therefore under the control of the State out to 25 nautical miles and the Commonwealth outside of that area, except for a number of species that include shark, mackerel and prawns. These are administered throughout the GOC by a Commonwealth/State body known as the Queensland Fisheries Joint Authority (QFJA).

Following the recommendations of the Burns Enquiry in 1992, a number of Queensland fisheries consultative committees were formed, some locally based (Zonal Advisory Committees or ZAC's) and at a higher level, fishery based bodies called Management Advisory Committees or MAC's. Two MAC's were formed to represent the coastal areas in the south and north of the state. The northern body, which represented all waters north of the Tropic of Capricorn including the Gulf, was called Tropical Finfish MAC or TROPMAC. To this body was given the task of formulating the first of a series of new management plans – for the Gulf of Carpentaria.

TROPMAC was made up of various stakeholders including commercial fishers, recreational fishers, charter fishers, indigenous fishers and conservation groups. A government appointed, and nominally 'independent' chairman plus two senior fisheries managers made up the remaining members. Submissions to future GOC management were called following the development of a draft document by TROPMAC. Approximately 250 were received.

The GOC Management Plan was then developed over the next 3 years and was released in April 1999. The regulations contained in this document are still in force today but are currently being reviewed as part of a Regulatory Impact Statement (RIS) due for release sometime in 2011.

Following a vote of "No confidence" by peak recreational fishing organization, the Australian National Sportfishing Association (Queensland branch) in August 2000, fisheries management in the State changed from the Queensland Fisheries Management Authority (QFMA) to Queensland Fisheries Service (QFS). This prompted a major change in how recommendations from the various MAC's were handled. Decisions that had been previously made by an independent Board were now placed in the hands of the Director General of Fisheries. There was some speculation that certain fisheries staff, upset by the no confidence ruling, may have impeded the MAC process from that point on. This could explain the eventual failure of what had begun as a showpiece of public consultation.

In the 10 years following the release of the GOCMP, only two other similar Plans were released, much to the frustration of many of the voluntary MAC members involved. Most of the recreational participants of the various MAC's eventually resigned in disgust and by 2007, these committees, except perhaps for Freshwater MAC, were in disarray.

In 2009, the Government disbanded the entire process replacing the fishery based committees with a State 'Super MAC' designated the Queensland Fisheries Advisory Committee (QFAC). Given the apparent loss of government interest in a consultative process that started so positively in 1996, and the disillusionment of many of its former dedicated voluntary members, the effectiveness of this new body remains to be seen.

The apparent neglect of recreational fishing by management agencies focused on the commercial sector was recently criticized in a landmark report.

An Australian Bureau of Agricultural and Resource Economics (ABARE) paper titled '*Issues Insights: Australian Fisheries – The Global Context*' asked global management experts in 2010 to assess Australia's current commercial fishery performance. A rating of 5.8 out of 10 was arrived at, leading the chair of the FRDC working group, George Kailis, to comment that Australian '*fisheries management has progressed from poor to reasonable*'. It should be noted that this figure applies primarily to the commercial sector.

More pertinent to the recreational fishers were conclusions by the experts that links between commercial, recreational and indigenous users (FRDC 2009) '*are immature at best and non existent at worst*'; an alarming indictment of the vast differences in current stakeholder priority.

However, a growing understanding of recreational fishers' importance by management was acknowledged while noting that assessment and data collection (for that sector) must improve. The report also emphasized that recreational fishers' rights and responsibilities '*must be better defined to strengthen partnerships with other users*'; a position that recreational fishers have long advocated.

Meanwhile, the fact that the indigenous fishing sector is '*poorly understood at a national level*' has finally been admitted.

In the light of those findings, it is hard to rationalize the current Fisheries Queensland management situation as anything other than a retrogressive step.

Commercial Barramundi Fishery (N3)

Commercial barramundi fishing began in the Gulf of Carpentaria during the boom days of the banana prawn fishery centred at Karumba in the 1960's. By the early 80's, barramundi numbers had reportedly begun to drop significantly, a probable result of the fishery being almost unregulated.

At a barramundi management conference held in Cairns in 1985 hosted by fisheries department managers, that was attended by commercial and recreational fishers from across the State as well as fisheries scientists, GOC-based commercial representatives advised that they were seeking to address the overfishing of barramundi stocks by insisting that the Gulf be managed as a separate entity with restrictions on licence numbers and a structured management regime. This attitude contrasted sharply with the 'open slather' mindset of the fisheries department and the east coast netters, but thanks to persistent efforts by GOC fishers, rationalization of the Gulf was slowly being instigated by the start of the 90's.

Scientific studies carried out over many years by various scientists (including Russell, Garrett and Gribble) found that GOC barramundi stocks reached a very low level around 1992 and that residual stocks necessary for effective genetic diversification may have reached untenable levels. Barramundi are protandrous hermaphrodites starting life as males, mature at three to four years of age, then some two years later change gender to become females. Research found that there was a marked shift in the average size of mature females around that time with the species changing sex from male to female at a significantly smaller size than previous studies. This may have resulted as a consequence of the reduced genetic pool that could have been a consequence of the low biomass level.

GOC barramundi licence numbers stabilized around this time and stocks slowly started to recover. When TROPMAC began developing the management plan, there were approximately 105 net licences in place and it was readily agreed amongst all stakeholders that numbers had to be further reduced.

A target of 65 N3 licences by 2003 was set (TROPMAC proposed a time line of 1999 – 95, 2000 – 90, 2001 – 85, 2002 – 75, 2003 – 65) and became one of the major 'performance indicators' of the GOCMP released in 1999. A buy back plan was formulated which included

- (1) a yearly contribution of \$1000.00 per licence holder
- (2) a Fisheries Adjustment Package that offered a dollar for dollar contribution by government
- (3) a requirement by fishers entering the new N9 fishery to surrender two N3 symbols in return.

Federal government pressure to establish dugong protection areas on the east Queensland coast that required a compensation payment to displaced fishers meant that funds allocated for the GOC Adjustment Package were directed elsewhere. With the N3 license levy contributions for the first year, three licences were removed at a cost of approximately \$30,000 per licence. Commercial fishing tour operators could see the value of the buy back scheme and offered to contribute \$1000 per charter fisher to the scheme in return for some adjustments to the program. Their efforts were rejected out of hand and the conciliatory initiative lost.

Rampant speculation then caused licence values to triple over the next two years and the scheme eventually collapsed. In spite of claims featured prominently on the current Queensland Seafood Industry Association (QSIA) web site, GOC N3 fishers then refused to pay any further contributions, and consequently, nearly 10 years later, licence numbers still stand at 87. Suggestions that have included

- (1) a two for one licence buy back; and
- (2) an industry funded loan scheme

have been made on numerous occasions but neither GULFMAC nor successive fisheries ministers have made any concerted attempt to reduce GOC barramundi licences to the target set in 1999.

According to the GOC Inshore Finfish Fishery Annual Status Report for 2010, commercial catches of barramundi have remained reasonably stable since 2003 as has the level of fishery effort. While anecdotal evidence indicates that some areas have fared badly in terms of species recruitment following a series of poor wet seasons, these effects can vary widely over such a vast coastline.

The N3 net fishery is able to be operated within estuaries, along foreshores and out to seven nautical miles from the coast. While barramundi is usually the prime target, operators harvest a range of other species including king threadfin salmon, blue salmon, queenfish, grey mackerel, various shark species, grunter and jewel fish.

The majority of the fishery effort is concentrated in the lower half of the GOC coast with very few operators working north of the Archer River. Most full-time commercial fishers who have based themselves in Weipa found they had to fish from the Archer River south to ensure that their businesses remained viable. Only one operator in the past decade has been reasonably successful working the Albatross Bay area for both fish and crabs but he eventually relocated to the Wenlock River at Mapoon where his business was subsequently purchased by the local indigenous community.

It is not commonly known that all 87 GOC N3 licence holders have the right to fish the Weipa area at any time. During the past decade, there have been a number of commercial netters who have periodically worked the beaches from the Embley River mouth south, some while their primary vessels are awaiting repairs, others on a part-time basis while working other jobs.

Their efforts have generally resulted in mediocre catches of saleable product but reasonably high levels of by-catch including some highly regarded recreationally important species and threatened marine mammals, including dugong and turtles. Charter operators, in particular, have been affected by such practices that have denuded the beaches and formerly prolific shallow inshore waters of queenfish, trevally, giant herring and snub-nosed dart, all highly sought after by visiting clients.



A dugong found floating near where netters had been working south of Westminster Rocks, Weipa.

On one occasion, netters worked the beach areas adjacent to the rocky outcrop known as Westminster only days before the Weipa Fishing Challenge, the town's major social event of the year, an anti-social manoeuvre that incensed the community. In another instance, a letter to the then Minister, Henry Palaszczuk, in 2005, the Chamber of Commerce details an incident where an 'out of town' commercial barramundi fisher

'repeatedly netted recreationally important locations .. potentially costing the local tourism many times the value of his catch, as well as, according to observations, ...probably being responsible for the deaths of at least two dugong, one male animal sighted floating near his vessel...and another female...a week or so later'.

More concerning was the sudden proliferation of power hauled nets amongst N3 fishers when large hauls of grey mackerel began being taken in offshore waters. In an anomalous situation that required N3 fishers to flout GOCMP regulations as well as targeting a fish that was outside of their allocation, up to 20 vessels moved into the Weipa area for the 2002 season and began working local waters out to seven nautical miles. (See N9 fishery)

Many of these vessels were ill equipped to handle the large catches that resulted. Lacking brine tanks and with limited deck space, crew were often left standing knee deep in mackerel after a successful shot. Fish that remained on deck when a subsequent shot brought more fish were dumped to make way for the 'fresher' product. Netted fish were not bled and sometimes spent hours in the tepid waters followed by another couple on deck before being filleted.

The flesh that resulted was of very poor quality and difficult to sell, At one stage, it was reported that tens of thousands of kilos of product lay in storage with little prospect of being sold. Cooks found the flesh presented discoloured and mushy when thawed so rarely bought a second lot.

Meanwhile, former crew members reported large amounts of by-catch including recreationally important queenfish and trevally as well as dolphins, dugong, manta rays, turtles and pilot whales.(See N9 fishery). This was confirmed in press reports including

- Sunday Mail, 22 July 2001, *Bloody Pillage in Gulf* by Kim Sweetman



Three deckhands and two professional fishermen contacted the Sunday Mail after learning of the inquiry, to express concerns about activities in the rich Gulf waters.

One man, who said he would give evidence in court against his former employers, said turtle kills were an almost daily occurrence.

Huge numbers of fish were regularly dumped back into the sea if a more profitable catch came in, he said.

The man, who asked to be known as Phil, said hammerhead sharks were regularly thrown overboard after having their valuable fins cut off.

"I watched on many occasions the sharks trying to swim without fins. It was a horrible sight," he said.

"It was a daily occurrence to have to pull dolphins, large sea turtles and manta rays dead out of the net - sometimes several times a day."

Another man said the same company had a policy of dumping the least profitable catch.

One witness said that in two months on board a Gulf boat he saw at least 20 dolphins killed or injured.

Vessels came from as far as Karumba to engage in what became known as the 'drift net' fishery. The regulations were so badly written and conditions when nets were deployed so dangerous that attempts by Boating and Fisheries Patrol officers to inspect licence holders had to be aborted.

By the time the fisheries department acknowledged that fishers were in breach of regulations and the taking of a limited amount of grey mackerel approved by the Joint Authority, the catches had started to dwindle and that, combined with the low return from what was mainly a low quality product, caused many participants to go back to their traditional fishing methods.

Weipa GULFMAC members Lance Jarrett, David Donald and Sue Gould repeatedly sought to have the issues regarding the 'reel boats' properly addressed but their efforts were not progressed. At the height of these netting activities, the destructive nature of the practice made press headlines on a number of occasions with letters to the editor from former crew members confirming the considerable by-catch including high grading of product and regular killing of dolphins. Intimidation and threats of violence against commercial line fishers, vessel crew members and even MAC members heightened community feeling against the practice.

In reality, this intensive netting of waters out to seven nautical miles by barramundi licensed fishers using drifting nets should never have happened. When the GOC Management Plan was being formulated, there was no provision for N3 licensed fishers to become involved in the offshore shark and grey mackerel fishery. Both of these species were regulated by the QFJA and were designated 'Commonwealth administered' species. Furthermore, the nets used were designated 'set mesh nets' and had to be 'anchored or fixed to a place'. The nets being used were, according to regulations, 'mesh nets' and that type of net could only be used by N9 fishers.

A Queensland Fisheries Service report on the GOC Offshore Gillnet Fishery presented in August 2001, on page 3, Recommendation 10 followed by page 19 Item 7.3.3 (QFS 2001) confirmed that the QFS was fully aware that the
'offshore component of the N3 fishery has been founded on illegal targeting of shark and grey mackerel'.

No attempt was made to address this major infringement and the report shelved.

As discussed in the N9 fishery description, this sector was established under very stringent conditions because of the major concern in submissions to TROPAC of establishing an offshore net fishery (82% wanted NO offshore netting). N9 net length was limited to 6,000 metres total, a net levy to support a regular observer program was imposed, the fishery was limited to an area from seven to 25 nautical miles offshore and boats had to fit a Vessel Monitoring System (VMS).

By comparison, the N3 vessels that entered the offshore fishery were virtually unregulated - they paid no net levy, had no observer commitment and weren't required to have a VMS. There were a minimum of 15 N3 boats using drum nets that could according to regulations use 600 metres of net each which effectively put 9,000 metres of extra 'mesh net' into a fishery that was supposed to be limited to 6,000 metres. In reality, the N3 offshore component was actually larger than the N9 and in 2001 (when N3 and N9 totals were listed separately) the 'barramundi' harvesting sector actually caught more shark than the N9 boats.

In spite of admitting that a significant unplanned fishery sector had been allowed to flourish outside of a number of regulations, QFS chose not to censor the offending fishers. Instead, negotiations began with the QFJA to allow State-licensed vessels to include grey mackerel and shark in their catch.

The intense offshore netting during the period from 2000 to 2004 that occurred off Weipa had a marked effect on the inshore waters of Albatross Bay. Charter operators noted at the end of the 2002 season that numbers of species such as queenfish, trevally, tuna, cobia and mackerel had shown a 30 to 50% drop in numbers from 2001.

They were also concerned at the reduced incidence of sightings of large manta rays, a marine giant that is easily spotted and often travels with cobia and golden trevally. Since then, offshore netting by N3 vessels has greatly diminished but the fishery continues to rapidly deteriorate.

Offshore Netting N9

The N9 or Offshore Net Fishery was a new fishery established by the 1999 GOCMP that allowed a restricted number of tightly regulated vessels to 'mesh net' an area from seven to 25 NM offshore. This fishery has always been controversial and was established in the face of an overwhelming 82% of submissions to the GOC MP indicating that they did not agree to 'power hauled nets' being introduced in GOC offshore waters.



Grey mackerel and a hammerhead shark being winched aboard an offshore net vessel

International concern about the practice of what is termed 'drift netting' led to the United Nations banning nets longer than 2.5 kilometres in length from ocean waters in 1993. The European Union moved to ban all drift nets from its jurisdiction in 2002 and this situation was complemented by support from the General Fisheries Commission for the Mediterranean Sea in 2005. The major concerns of all parties involved included issues such as by-catch generated, loss of nets and the potential for shipping hazards.

While the permitted lengths of individual nets used in the GOC fall short of the international criteria required to classify them officially as 'drift nets', many recreational fishers and conservationists find the distinction of an arbitrary nature and deplore the practice as indiscriminate and destructive. The lack of a defined method for measuring net length in the GOC has resulted in

claims that fishers were using nets well in excess of that permitted not being able to be tested.

Netting of offshore waters in the GOC started off Karumba in the mid 80's when shark trunks for the Melbourne market were the main target. Regular catches of grey or broad barred Spanish mackerel did not start to happen until 1994. Activity began in the Weipa area in 1996/97 and immediately extensive fish kills were reported by local recreational and line fishers. Large queenfish in their hundreds were found floating in lines that sometimes stretched for kilometres.

Response to community anger to such evidence was swift. Crews of the net vessels started spiking the gut cavity of any unwanted species to ensure they sank when thrown back overboard thereby masking the amount of by-catch produced. That practice still continues to the present day. A report made to the initial meeting of TROPMAC also described the drowning of more than five dugongs on another occasion.

While considering the submissions made to TROPMAC in the development of the GOCMP, a workshop was convened to interview representatives of the offshore net fishers and those involved in the L4 mackerel line fishery. Following this meeting, TROPMAC decided, much to the disappointment of recreational, conservation and charter members, to create a new symbol, designated N9 that would permit three vessels each with an allowance of 1,200 metres of net, to enter the fishery. An N9 licence would require the surrender of two N3 symbols.

Then, in a move that startled the non-commercial MAC stakeholders even more, a new proposal that permitted 6,000 metres of net and five N9 vessels was quickly pushed through the following meeting. Fisheries managers went to great lengths to point out that a mere 6,000 metres of net in the area from seven to 25NM offshore over the entire GOC coast would ensure that the fishery remained sustainable.



Part of dozens of longtail tuna dumped by an offshore net vessel south of Weipa circa 2003. The fish on the right has had its belly cavity slit open to make it sink but the carcass has floated due to putrefaction. Marks from the net can be clearly seen.

Concerns about the high levels of by-catch already occurring called for regular monitoring and that cost would have to be borne by the operators. Regulations called for a yearly contribution to an observer program via a net levy, regular visits from these observers and the fitting of each vessel with a Vessel Monitoring System (VMS) to allow its position to be permanently tracked by satellite. N9 fishers would also have to stop fishing during the annual closed season for barramundi.

What happened after the GOCMP was put in place in 1999 was certainly not a scenario that had been considered by TROPMAC. The Commonwealth Government licensed another two or three vessels with 1200 metres of net each to operate outside of 25NM in Commonwealth waters. Up to 20 N3 vessels fitted power haulers then started working the area out to 7NM. This effectively put many times the amount of net into the Gulf offshore fishery than what had been supposedly agreed.

Measuring the lengths of the nets used proved impossible so complaints that nets up to 3km long were being set could not be substantiated. Most N9 operators also retained an N3 endorsement so they could work all waters to 25NM. Then there were numerous complaints of the Commonwealth licensed boats fishing inside their given limits. GOC Management Plan Regulations proved inadequate and not practically enforceable, something that had been pointed out prior to the Plan being finalized by recreational and charter stakeholders. In effect, GOC offshore waters were 'open slather' to any licence holder who fitted a power hauler, which resulted in somewhere between 20 and 35 boats at the height of the netting effort in 2004 (CHRIS lists 43).



This fisher has landed a Spanish mackerel that has escaped a net. Note the extensive scarring. Many more pass through the net then die.

Although N9 fishers were restricted to catching grey mackerel and sharks, line fishers who targeted narrow barred Spanish mackerel frequently complained that both N3 and N9 boats were using radar to mark the spots they were working then netting those areas. On a number of occasions, line fishers witnessed the illegal targeting of their allocated species, sometimes involving tonnes of narrow barred Spanish mackerel, many of which had to be dumped because the nets could not be cleared in time.

Because boat length was restricted, the ability to process some of the large catches being made was limited at best. Few vessels had facilities to hold the catch in cool conditions until it could be processed and this led to the practice of 'high grading' - dumping fish not processed from a previous shot when the next one was successful.

Mackerel sometimes spent as much as six hours in tropical conditions before being filleted. Because fish caught in nets die slowly, lactic acid concentrations build up in the flesh and it begins to deteriorate immediately. The flesh of these fish therefore has a tendency to be soft and of a light brown colouration and, consequently, of relatively poor table quality. Marketing the large amounts of product the offshore net fishery produced became a major problem, particularly for those vessels that were not adequately equipped.

Following anecdotal history of the regular killing of large marine fauna including dolphins and manta rays, details of the first of the observer trips on an N9 vessel were of major concern and eventually released. The by-catch list including dolphins confirmed fears about the indiscriminate nature of this fishery and the news brought widespread condemnation. Comprehensive observer reports were deemed 'industry in confidence' following this incident.

In the paper, *Ecological Risk Assessment of Queensland-Managed Fisheries in the Gulf of Carpentaria* (Zeller and Snape 2006), an estimate of dolphin deaths of 15 to 25 per year for the N9 fishery was based on the effort of five vessels for 700 days per year. This was compiled from information that may have been subject to skippers avoiding areas with a history of high dolphin interaction while observers were on board. The calculations avoided the fact that there were many more vessels involved in the offshore fishery than just the N9's.

In 2004, for instance, CHRIS reports that there were 43 vessels that recorded an effort of 1438 days in the grey mackerel fishery. By extrapolation of these figures, it could be estimated that dolphin deaths may have been several times the above amount – it would not be unreasonable to suggest a figure of greater than 50 deaths - and this would seem to be supported by press reports by former crew, one of whom told the press that

"in two months on board a Gulf boat he saw at least 20 dolphins killed or injured"

while another former net fisher confirmed that

“It was a daily occurrence to have to pull dolphins, large sea turtles and manta rays dead out of the net”.

A local trial using sonic pingers sourced from Europe also went badly wrong. It was reported to GULFMAC that GOC dolphins seemingly tried to attack the devices, some becoming entangled in the nets while doing so. Removing distressed dolphins and manta rays enmeshed in heavy monofilament can be a life threatening experience so few were saved. Thanks to the almost complete lack of by-catch statistics, there is no possible way of quantitatively assessing the extent of the impact that this more than 15 year old fishery has caused in GOC waters but the population has been noticeably reduced.

In spite of what would seem an entirely necessary action in the approval of such a controversial fishing method, fisheries managers and government steadfastly refused to put in place regulations requiring the reporting of deaths of dolphin and other by-catch by operators, even to the extent of ruling that offshore net fishers were exempt from having to document any interactions of large marine fauna to the Environmental Protection Authority as was the duty other non-commercial marine users. This extraordinary situation, in the light of governments that continually remind the public that they be environmentally responsible, still remains unchanged.

Recommendation 5 of Attachment B, *Recommendations to the Department of Primary Industries and Fisheries (DPI&F) on the ecologically sustainable management of the Queensland Gulf of Carpentaria Inshore Finfish Fishery (GOCIFF)* issued by the federal Department of Environment and Water Services on 22 August 2007 states that

‘Within 2 years, DPI&F to analyse the number, rate and type of protected species interactions of the SOCI data compared to the observer data available and review the adequacy of the protected species interactions information collection system. DPI&F to implement further measures to mitigate interactions, if necessary.’

This recommendation would appear not to have been actioned.

Reports on the fishery are now difficult to obtain. Because there are less than five boats active, a FQ ruling means that grey mackerel and shark catches are now included with N3 statistics. It has been impossible to obtain any data on the amounts taken in AB since 1997 when 130 tonnes were reported. The annual observer reports are also deemed ‘commercial in confidence’ and it is interesting to note that the N9 fishery has not had an observer visit since 2007, a situation that is in breach of GOCMP regulations. Observations by other fishers of N9 boats retrieving nets less than 3 miles from shore that should have been able to be detected by VMS data and investigated have seemingly gone unnoticed.

New management measures to increase the size of boats, allow 1800 metres of net and decrease net mesh size while creating two new symbols N7 and N8 does not address the evidence that this fishery (and its former N3 counterpart) has, through its destructive and indiscriminate nature, had an enormous impact on GOC marine populations and needs to be urgently re-evaluated.

A ban or moratorium on GOC offshore netting until a comprehensive evaluation of the stock biomass levels of important commercial and recreational species can be completed would seem to be a reasonable outcome for all stakeholders concerned.

Mackerel Line L4

Commercial line fishing effort is primarily directed at narrow barred Spanish mackerel and had its origins in the GOC in the 1970's. L4 operators typically use the method known as trolling, towing wire lines rigged with lures or garfish to attract the mackerel. This method is arguably the most sustainable of all fishing practices as any unwanted species can be released immediately resulting in almost nil by-catch.

Because the fish is landed, killed and bled very quickly then usually stored in a saltwater ice brine, any spoiling of the flesh is minimized and the resulting fillets when snap frozen are of premium quality. L4 fishers find a ready market for their first class product that can sell for as high as \$15.00 a kilo, compared to net caught mackerel averaging \$4.00 to \$5.00 kg.

The first line fishers to work in the Weipa area found Spanish mackerel in good numbers in the Albatross Bay area. In the days before radar units and well before Global Positioning Systems (GPS) became available, fishing was limited to a couple of very productive grounds close to the coast and easily located by land marks. In 1981, the seven line boats that regularly worked out of Weipa landed around 10 tonnes each per season (May to November) of Spanish mackerel from these areas and these catches remained stable until the early 90's even though the number of participants had risen to 13.

When the first offshore net vessels fished the Weipa area in 1996, the line fishers quickly found evidence of their presence. Huge numbers of dead queenfish were found floating at the southern end of Albatross Bay and line fishers immediately noticed that catches in their traditional grounds began to decline. Shortly after, they found two boats netting their most productive patch, one of which was trying to retrieve a mackerel filled net that was estimated to be over two kilometres long.

There were so many narrow barred Spanish mackerel entangled that it took crews from both boats many hours to clear the catch. The line fishers who were observing estimated that 10 to 15 tonnes of fish were entangled and the majority had to be discarded. It seemed that the offshore operators, in contravention of their licence conditions, had deliberately targeted a species that they were not permitted to take and had used their radar to fix the areas where line fishers were working. Several other traditional grounds were similarly targeted and complaints made to fisheries by line fishers ignored.

Line fisher catches in those areas dropped considerably after the initial netting and the number of mackerel fishers returning each season quickly declined as licence holders found that the Weipa grounds were becoming unviable. L4 representatives briefed TROPMAC at the 1998 workshop on the problems between the two sectors and this resulted in the N9 operators being restricted to an area seven to 25NM offshore. Efforts to limit the number of L4 licence holders to 15 to ensure sustainability were rebuffed by fisheries management who had just issued L4 licenses to a large number of Northern Prawn Fishery trawlers.

The netting debacle that ensued following the 1999 GOCMP had a major impact on the line fishery adjacent to Weipa. Numbers of L4 operators working Albatross Bay have declined from 13 fishing from May to November in 1996/97 to as few as three on an irregular basis in 2010. Catches on the grounds that once supported over 10 boats a year have now dropped alarmingly to a level that has caused most fishers to move elsewhere or surrender their permits.

The 2010 annual status report of the GOC line fishery reports that 'the catch of Spanish mackerel in the grid that encompasses Weipa declined from 15% of the total GOC fishery catch in 2008 to 3% in 2009, an indication of the extent of the impact.

L4 fishers who have had thousands of days working on the waters around Weipa are astute observers of the marine environment and very sensitive to any seasonal changes. They have noticed that the 'mud boils' signalling bait aggregations being attacked by predators, and a sure sign of mackerel activity, are being encountered much less these days and seem to indicate that there has been a marked change in the status of pelagic species. Tuna schools are smaller, more scattered and numbers overall greatly reduced, while queenfish and grey mackerel, once caught regularly, are now rarely encountered. Large aggregations of demersal species that were once regularly sighted on sonar are now only seen occasionally. Also disturbing is the marked decline in the numbers of large marine fauna that have always been part of their lifestyle – the dolphins, manta rays, turtles and pilot whales.

Meanwhile, the few line fishers that remain report that offshore netters still target their locations in deliberate attempts to take a species they have never been permitted to catch. It would seem that fisheries managers, both state and commonwealth are prepared to sacrifice a fishery that has demonstrated its long term sustainability, a first class environmental record, exceptional product quality and low operating cost for a fishery whose methods have been condemned worldwide for its destructive, indiscriminate practices and poor quality product that is allowed to continue because the catch quantities and dollar values look good on the government balance sheet at year's end.

Fish Trawling

Officially known as the Gulf of Carpentaria Developmental Fin Fish Trawl Fishery (DFFTF), this sector is described as a 'limited entry, quota-managed, semi-demersal trawl fishery' and operates under the jurisdiction of the QFJA. It is licensed to operate in Commonwealth waters beyond 25NM and the product of primarily reef dwelling species and has a set quota of 1250 tonnes.

Being classed 'developmental', the fishery is licensed subject to
'continued demonstration of ecological sustainability, commercial viability and social acceptability'.

In governmental terms, the fishery was created to show a presence in GOC waters that are adjacent to the boundary of the Australian Fishing Zone (AFZ) where Taiwanese, Chinese and Thai-based trawlers were regularly working until 1990.

Fish trawling off the Gulf coast first started in 1994 and Weipa fishers first encountered the vessel involved when it trawled some of their regular reef grounds at the southern end of Albatross Bay that were well inside of its authorized operating area in Commonwealth waters (outside 25NM offshore). Complaints were made to Boating and Fisheries Patrol officers who checked the vessel but were unable to substantiate these claims.

In 1998, the QFJA officially took control of the fishery and, in spite of concerns that vessels were targeting spawning aggregations of an important recreational species, mangrove jack (*Lutjanus argentimaculatus*), approval was given for up to five vessels to harvest a quota of 1800 tonnes.

In the years that followed, fish trawlers have worked out of Weipa almost every season and their presence has been of constant concern to local recreational fishers and some fisheries scientists.

Varying market prices, coupled with considerable logistical problems and high transport costs, combine to make the fishery of questionable viability. However, issues regarding the substantial by-catch generated, the ability of the operator to bypass Queensland regulations and sell undersized fish, and the questionable mangrove jack status, would suggest that the practice is in breach of its requirement to be 'socially acceptable'.

The GULFMAC meeting in Cairns in July 2003 was informed by a Boating and Fisheries Patrol officer that undersized mangrove jack were being openly sold in Cairns and when the seller was questioned, he claimed that the fish had come from the Weipa based fish trawler. As mangrove jack are classed as a 'regulated' species by the GOCMP with no more than five fish of a minimum legal size of 35cm allowed in the possession of either recreational or commercial fishers at any time, any transactions regarding these undersized fish should have been illegal. To the dismay of the B&FP and many of the GULFMAC members, advice was obtained that because the fish had been caught by a vessel issued with a Commonwealth permit, Queensland regulations did not apply and the fish could be sold.

A resolution to the meeting that this anomaly be legally investigated as a matter of urgency by both QFS and QFJA and the instigation of uniform regulations was recommended. At the next meeting of GULFMAC held a year later, when the item was again raised, members were told that QFS legal people had been 'too busy' to consider the problem. The sale of undersized fish still occurs, much to the frustration of many people.

Repeated protests about the targeting of spawning aggregations of mangrove jack have received similar treatment. Scientists discovered some time ago that mangrove jack move from the estuaries to offshore areas before breeding then the fingerlings travel back to nursery areas. Along the Barrier Reef coast, mangrove jacks have the protection of the reef when spawning. In the Gulf, the lack of substantial bottom formation causes the fish to aggregate in large schools over largely featureless areas with little protection. When the fish trawlers find these aggregations, whole breeding populations are removed from the environment during a single shot of the net.

As with many other GOC species, mangrove jack numbers continue to decline. Meanwhile, the breeding aggregations are still being lost with 55 tonnes being reported for 2009. If each individual weighed between 2 to 2.2 kilos average, this figure represents a total of 22,000 to 25,000 fish being removed from the spawning biomass in a single year. It is difficult to rationalize that the stock of such a minor species in term of population density can sustainably resist such constant pressure from trawling.



A visiting fisher with lure caught mangrove jack

Many Weipa fishers have also been disturbed by the amount of by-catch this industry produces. The 2010 Annual Status Report reveals that two vessels harvested 744 tonnes of product in 2009 with an average value of \$6.60 per kilo. Unlike the N3 and N9 fisheries, fairly comprehensive data on the trawling activity is available including a logbook record of by-catch.

The Report confirms that

'the level of by-catch more than doubled in 2009 to 272 tonnes (36% of the catch).'

It is believed that a high proportion of that by-catch was trevally of various species.

It is interesting to note that a similar fishery operated out of Darwin in Northern Territory records no catches of mangrove jacks and a by-catch rate of 18%. Obviously, there are substantial ecological differences between Gulf of Carpentaria and Arafura Sea waters and this difference needs to be investigated.

Northern Prawn Fishery

The Northern Prawn Fishery is reputed to be the best managed of any marine based sector in Australia. In 2010, the fleet stands at 52 vessels able to fish all waters from Cape York (Queensland) to Cape Londonderry (Western Australia). This is a far cry from the 1960's when Karumba was the centre of a largely unregulated industry that sported a tough, frontier style image that is very much a part of Queensland folklore.

Banana prawns are by far the most common species taken during an 8 to 12 week season that traditionally begins on 1 April each year. Before the recent requirement to have a Vessel Monitoring System (VMS) fitted, vessels would gather at Weipa, Karumba and Darwin where Fisheries Officers would fire a shotgun to signal the season start.

The banana prawn fishery operates in daylight hours usually targeting visible 'boils' of schooling prawns with net shots generally of short duration, usually around 30 minutes. This limits the amount of by-catch taken, with only a relative small percentage of juvenile finfish being killed. A total of 5,495 tonnes of bananas were harvested in 2009 over the entire NPF area but very little of this was taken in Albatross Bay. Catches of banana prawns in the Weipa area have dropped dramatically since 2005 from an average level of 320 tonnes from 1993 to 2004. Poor wet seasons may have contributed to this marked decline.

Tiger prawns are harvested later in the year during August and September. This species is more dispersed and often occur in deeper waters than banana prawns with trawling only permitted at night. As such, vessels targeting tiger prawns have longer shots (hours) and much higher levels of by-catch than the banana prawn fishery often reaching levels as high as 80% of the catch. According to CSIRO 1998 figures, the NPF discards an estimated 30,000 tonnes of by-catch annually, 4 to 5 times the amount of prawns retained.

Such a massive amount of by-catch would definitely impact on the marine environment of Albatross Bay given the tiger prawn effort in that area. It is therefore important that prawn trawling be excluded from any closure of AB along with other netting.

The Crab Fishery

Queensland fisheries issue a commercial crabbing licence that entitles users to fish anywhere in the state. A total of 779 crab licenses had been issued in 2007 with most of those (C1 designated) permitted to fish in the Weipa rivers. Some GULFMAC stakeholders argued for many years that the GOC crab fishery should be separated from the east coast and license numbers restricted, but this has never been progressed.

An abundance of mud crabs was once an accepted part of the Weipa lifestyle and up until approximately 1997, this was certainly the case. Following the commencement of a daily jet service by Ansett Airlines, commercial fishers found that they could send crabs to southern markets overnight and this caused a massive increase in effort. According to fishery figures, 33 tonnes of mud crabs were caught in the local area in 2000 rising from 20 tonnes in 1999, but following the collapse of Ansett in 2001, the catch dwindled dramatically until there was no recorded catch from the area in 2005.

In the ensuing six years, in spite of almost no commercial effort, mud crab stocks in Weipa's rivers remain very depressed. It would appear that stocks were fished to such a low level that recovery has been severely affected. There have been some signs of a slight increase in adult numbers in 2010 but the fishery is still a long way from what it once was.

During the breeding cycle, female crabs loaded with eggs travel out into GOC waters to spawn making them susceptible to be coming entangled in nets. Instances of large numbers of female crabs being killed and forcefully removed from set nets have been reported.

One interesting point is that, although the Embley, Hey and Mission Rivers were closed to commercial netting some 30 years ago, commercial crabbing is still allowed. Given that the crab population appears to be so fragile, it would seem that calls by some recreational fishers that the river closures also include commercial crab harvesting, are timely. Certainly, a minimum requirement, if the fishery recovers, is the establishment of a yearly quota on commercial catch in the Weipa area.

Commercial Tour Operator (Charter)

Charter fishing started on Cape York Peninsula when keen Cairns recreational fisher, Gary Wright, was asked to provide services to the newly built 'Top of Australia Lodge' built by Air Queensland owner, Sir Sydney Williams at Cape York in 1985. By the early 1990's, charter fishers were established at Seisia and Punsand Bay in the NPA while a mother ship started trips along the GOC coastline. Fly-in clients started to make up the larger proportion of those fishers booking trips.

By 1996, there were charter fishers operating from Weipa and Karumba and CYP was quickly becoming one of the favourite destinations of a growing market of travelling fishers. Almost all of the promotion was generated by the operators themselves and was highly successful. Leading fishing guides were reputed to rate as professional as any in the industry.



The expectations of the clientele of commercial tour operators have shown a marked change in many areas during the past decade. Thanks to the efforts of those operators who have sought to ensure the long term sustainability of their industry, visiting fishers are now more likely to practice catch and release, as well as treating their experience in a more holistic way.

Birdwatching, beachcombing, exploring, local history and indigenous culture are providing another dimension to what was once a 'kill and grill' mentality. The suggestion that recreational sport fishing be rated as an ecotourism activity is certainly timely.

GOC charter fishers were represented on both TROPMAC and GULFMAC by Weipa based business operator, David Donald. His regular and detailed reports revealed the low priority attached to his industry by fisheries managers and their reluctance to comprehend its economic importance. Even though charter fishers have to be registered and pay fees to FQ/QFS for a Commercial Tour Operators Licence, their stakeholder status is of a far lower priority than that of other commercial fishing license holders.

The importance of charter fishing to the Weipa area has been identified by various surveys including John Felan's 2004 report '*Weipa Tourism Needs Assessment*'. It is a major contributor to the town's economy as the following statistics from 2006 confirm.

Weekly Charter Fishing Revenue Peak Season 2006

Guides Boats	14	
Mother Ships	3	
Houseboats	2	
Client Numbers		Total
- Guided	35 (based on 2.5 pax per boat)	
- Mother ship	18 (based on 6 pax per boat)	70
- Houseboat	17 (Based on 8.5 pax per boat)	
Air Travel		
- Home to Cairns	70 pax @ \$400 return	\$28,000
- Cairns to Weipa	70 pax @ \$350 return	\$24,500
Total	140 airline seats per week	\$52,500
Charter Costs		
- Guided	14 boats @ \$800 per day for 4.5 days	\$50,400
- Mother ship	3 boats @ \$24,000 per week	\$72,000
- Houseboat	2 boats @ \$550 per day for 6 days	\$6,600
Total		\$129,000
Accommodation Weipa		
- Guided	35 pax @ \$80 per night for 5.5 nights	\$15,400
- MS & HB	35 pax @ \$80 per night for 1 night	\$2,800
Weipa Total		\$18,200
En Route	70 pax @ \$80 per night for 2 nights	\$11,200
Grand Total		\$29,400
Meals Weipa		
- Guided	35 breakfast/dinners @ \$50 per day for 4.5 days	\$7,875
- Mother ship	Meals on board included in charter cost Cost to MS, 18 pax for 7 days @ \$40 pp per day	\$5,040
	18 breakfast dinners @ \$50 for 1 night	\$900
- Houseboat	Provisions purchased for trip @ \$25 pp/day for 6 day trip	\$2,550
	17 breakfast/dinners @ \$50 for 1 night	\$850
Total	Revenue for all Weipa businesses	\$17,215
Drinks Weipa	70 pax @ \$100 per trip (Many groups reported spending a similar amount to food costs on drinks!)	\$7,000
Fishing Tackle for Trip	70 pax @ \$200 per trip (Some individuals purchased up to \$3000 worth of tackle in preparation)	\$14,000

Fuel Expenditure Weipa			
- Guided	14 boats @ 60lt per day for 4.5 days @ \$1.40 per lt	\$5,292	
- Mother ship	3 boats @ 600lit per trip @ \$1.40 per lit	\$2,520	
- Houseboat	2 boats @ 600lit per trip @\$1.40 per lit	\$1,680	
Total	6780 litres per week		\$9,492

Total Weipa revenue for week including charter costs, accommodation, meals (except mother ship – meals included in price), drinks and fuel (houseboat only – fuel costs are part of guided and mother ship prices) would be \$168,055. Based on a 30 week season where 15 weeks were at peak revenue and 15 weeks were at 75% of peak revenue, the total economic value to the Weipa community equates to \$4.4 million for 2006. Given the increased costs since that time, it is estimated that this figure would be more than \$5million in 2010.

The contribution in air fares is also a substantial statistic – over 3,500 seats per year that cost a minimum of \$750 per seat. This equates to over \$2.5million in fares by fishers visiting Weipa (and this is a minimum figure), and these are only the clients of CTO's and the houseboats. DIY visitors who choose to fly are not included in these figures but probably contribute at least another \$1million to the above total.

The yearly totals of Weipa accommodation and fuel, calculated from the 2006 calculations, add further to the economic considerations:

Accommodation – 6,000 room nights worth \$480,000 per year

Fuel – 180,000 litres (boat fuel only) worth \$250,000 per year

Compare these figures with the latest CHRIS statistics that show the total revenue from GOC barramundi fillet sales by commercial fishers in 2005 was \$3.5million. This illustrates that Weipa's charter fishery has been generating income that consolidates its position as a major industry sector, a fact that continues to be ignored by FQ. This oversight threatens to have a significant impact on the viability of operators and the community they support.

While the fishing charter sector based in Karumba is small in number and primarily focussed on day trips, contrasting with the predominantly fly-in catch and release market that forms the bulk of Weipa's business, a study by Fenton and Marshall in 2001 found that charter fishing was worth \$400,000 per year to the community. This figure serves to consolidate the above estimates.

Indigenous participation in the charter fishery has been very limited but is certainly a sector offering substantial potential. Felan (Felan 2004) in his report '*Weipa Tourism Needs Assessment*' points out

“One of the primary goals of a successful tourism industry is to provide employment opportunities for indigenous people in the region. The most successful product in this region is Sportfishing. It is self evident that bringing the two together has to form an important part of any future tourism vision for the region.”

When compared with Northern Territory where corporate entities like Indigenous Business Australia (IBA) own and operate a range of tourism businesses including sport fishing orientated Cape Don Lodge and Cooida Lodge, CYP has no comparable product. This has a lot to do with differing government priorities towards recreational fishing including management that provides the industry with a sustainable future.

There is certainly long term potential for keen indigenous participants to be involved in the Weipa fishing charter sector but much depends on the integrity of the sport fishery being maintained.

Recreational

Recreational fishing in the GOC was initially a community-based activity that was part of the experience of living in the remote centres of Karumba, Weipa and Bamaga during their developing years. The first 'tourist' fishers found their way to Karumba in the mid 60's and numbers steadily increased when news of the town's great fishing reached the angling media. Surveys (Greiner 2004) indicated nearly 25,000 tourists visited the Carpentaria Shire from April 2002 to March 2003 and that

'The primary reason for tourists visiting Carpentaria Shire is fishing.'

A study entitled *'Towards sustainable management of recreational fishing in the Gulf of Carpentaria: Investigation into recreational fishing in Karumba'* by Greiner and Patterson (2007) involved a comprehensive survey of recreational fishing in the town and

'estimated that during 2002/03 tourists contributed approximately \$11.3 million to the shire's economy, with a total economic impact—including output multiplier—of \$14 million. Approximately 173 persons—equivalent to 16% of the workforce in Carpentaria Shire—were employed in tourism-related jobs.'

Similarly, recreational fishing boomed in Weipa and is currently estimated to be worth around \$8-10million (including \$5million from the charter sector) a year to that community. At the northern end of the GOC coast, the Aboriginal and Torres Strait Islander inhabitants of the five communities centred on Bamaga once made up the majority of the fishers in that area. That participation continues to the present day, but the resource has now to be shared with the growing number of tourist fishers now visiting the NPA.

Recreational fishing is also a major activity of all other CYP indigenous communities with some offering limited camping facilities to visiting fishers. Many councils are becoming interested in encouraging tourists and the revenue they bring but lack the expertise to know how to proceed. There is an urgent need for sound advice and coordination of the recreational fishery on CYP.

The various Queensland entities involved with fisheries management have given little priority to the recreational fishing sector. The ABARE report comment that relations between commercial and recreational stakeholders

'are immature at best and non existent at worst'

could be certainly applied to FQ and its predecessors as their actions directly impact on relationships of parties under their stewardship.

Recreational representatives on the various MAC's, including GULFMAC, repeatedly recorded their frustration with a process that was seen to be totally biased towards the commercial sector and that many eventually conceded was totally unworkable. ANSA went as far as declaring a 'Vote of No Confidence' in the QFMA, but rather than improving the problem, it seemed to exacerbate the situation. If recent consultation over the GOC RIS is any indication, priorities in that department have not changed.

COCIFFF reported that the 2009 harvest of finfish in the GOC was worth a total of \$12million. The revenue figures from recreational fishing for Karumba and Weipa above produce a total of more than \$20million – and that was in 2003/06.

Combine those figures with the NPA and it seemingly confirms that recreational fishing on the western CYP coast is worth at least twice as much to Queensland in the GOC than commercial fin fish fishing. These estimates would compare with figures available for NT.

COCIFFF also reports that recreational fishers retained an estimated 101 tonnes of fish in the GOC in 2009. This represents 5.4% of the total commercial catch of 1867 tonnes. If recreational revenue equalled commercial return then a fish caught and kept by an angler would be worth 20 times its counterpart, an interesting statistic.

Modern day recreational fishers are highly mobile and regularly invest \$100,000 plus on vehicles and equipment. Many of the ever increasing numbers designated 'grey nomads' have spent many times that amount on motor homes and off-road caravans to indulge their fishing experiences. If their time on the water is not productive, they will move somewhere better and the very effective communication networks of today will soon let others know about 'where not to go'.

Lack of government recognition of the recreational fishing sector and the huge economy involved has the potential to impact on future tourism of all CYP coastal towns. Catch sharing arrangements need to be urgently reviewed and recreationally important areas enhanced. If current trends in both estuarine and offshore status continue, CYP tourism will inevitably suffer a significant setback.

The NT is already far ahead of Queensland in its management philosophy and is reaping the benefits economically. Our state needs to urgently learn the lessons NT has applied if recreational fishing on CYP is to continue to increase. Already, fishers are being lost to NT's vibrant recreational market.

Indigenous

More than 60% of the Cape's population is indigenous, most of whom reside close to rivers or the coastline. Hunting and fishing is an integral part of their lifestyle and fresh fish are regularly part of their diet. Depletion of GOC fish stocks will impact on many traditional fishing areas.

Fishery Enforcement

Weipa's two Queensland Fisheries & Boating Patrol (QFBP) officers have to cover an area that is larger than Tasmania! Their 'beat' involves some 670NM (approximately 1300klms) of coastline stretching from Port Stewart to the Escape River on the east coast and from Crab Island to Kowanyama on the GOC coast. With access varying according to weather, in good conditions it still takes 15 hours to drive to the southern boundary, 6 hours to the north and 5 hours to Lockhart River in the east. Their closest QFBP counterparts are based in Karumba and Thursday Island.

Annual leave and training commitments mean that there is only one officer on duty for a substantial part of the year and this can lead to policing difficulties when urgent action is needed at those times. Support from local police and customs personnel helps alleviate this operational problem on most occasions. Recreational fishing groups have long supported increased funding for the QFBP but budgets still remain very tight. It has been suggested that a 'roving' officer be appointed to cover the times when Weipa, Karumba and Thursday Island are a person short and this would appear to be sorely needed.

QFBP Weipa operations are also restricted by the size of their patrol vessels. Now that Customs have assumed the role of policing illegal fishing vessels (mainly from Indonesia), Weipa officers are limited to two small craft, a 5.8 m half cabin and a 4.3m open dinghy mounted on an off-road trailer. The absence of calm anchorage sites outside of the rivers in the GOC makes lengthy patrols by water very difficult to conduct, even during the dry season. Once the monsoon winds of the wet prevail, the ocean is often too rough to operate offshore.

Road access to the area immediately outside of Weipa township can be rendered impassable anytime from late November until April. This limits any coverage of the major section of their area to travel by either light plane or helicopter, a costly exercise that is usually outside of the operational budget. This effectively means that policing of commercial fishers at one of the key times, the months following the opening of the barramundi season, is largely impossible.

An effective QFBP presence in Weipa should involve regular policing and community education on fisheries matters. This will encourage both commercial and recreational fishers to act in a responsible manner, something that will benefit the area in the long term. The Weipa community certainly supports any measures that will enhance and consolidate the QFBP presence in the GOC.

Customs & Immigration

Regular air and sea based patrols of the GOC since 2006 have reduced the number of foreign fishing vessels entering Australian waters to a handful in 2010. This has virtually halted the large scale harvesting of shark fins that was happening in the early part of this decade. It is important that the regular surveillance continue and the fishery be protected from this outside exploitation.

APPENDIX 2.

Fishery Related Issues

History/Chronology

Isolation, combined with the fact that most people in the town work either directly or indirectly for its major employer, means that the community of Weipa is, of necessity, tight knit and keen to see their lifestyle continue without outside interference. As recreational fishing is a major activity and rotating shifts standard practice, both estuarine and offshore waters are regularly patrolled and scrutinized both day and night. Any change to the status quo is quickly noted, reported and networked. When offshore netting started in Albatross Bay leaving a trail of dumped unwanted by-catch in its wake, the news soon became common knowledge in the town and the actions of the fishers concerned almost universally condemned.

While fisheries managers regularly visited Karumba, the unofficial centre of commercial fishing in the GOC, their trips to Weipa have been rare. This situation has remained unchanged over the years and has undoubtedly contributed to the department's low regard in the local community.

Several members sought to represent the community as voluntary members of the Fisheries Management Committees including Lance Jarrett (recreational fisher), Sue Gould (conservation), David Donald (commercial tour operator) and Greg Howard (commercial fisher). The formation of a SUNFISH branch in the town was well supported and its members worked hard to bring to public attention what they saw were threats to the health of the local fishery. The efforts of all these community-minded individuals were commended and supported by Weipa Town Authority and Weipa/Western Cape Chamber of Commerce.

Time Line

The following time line lists events of significance to the GOC fishery from 1997 to 2010.

- 1997 - TROPMAC meeting Cairns. Senior QFMA fisheries manager, Laurie Gwynne, suggests a commercial net fishing closure for Albatross Bay while formulating the GOC Management Plan
- August 1998 – After a petition in support of the suggested closure is organized, approximately 700 Weipa residents (70% of registered voters) sign a document calling for Albatross Bay to be closed to commercial net fishing. The petition called for
- ‘an area from Jantz Point south to False Pera Head and west to the 25nm line be closed to all commercial net fishing in the Gulf of Carpentaria Management Plan’.*
- September 1998 - This petition was presented to QFMA via TROPMAC prior to the final draft of the proposed Gulf of Carpentaria Management Plan (GOCMP). The petition was accompanied by letters of support from Weipa Chamber of Commerce, Weipa Tourism Committee, Weipa Catchment Coordinating Committee, Weipa Sportfishing Club - representing all major business, sporting and environmental organizations. At this time, there were **no** commercial fishers working Albatross Bay on a full-time basis.

- September 1998 – TROPMAC reviews the developmental fish trawl fishery and recommends to the Queensland Fisheries Joint Authority (QFJA) that the developmental permit be revoked. (Recommendation was not accepted by QFJA)
- October 1998 – TROPMAC chairman, Dr Joe Baker explained
‘that the MAC needed to recognize that Weipa had a significantly large community in the GOC, there was an increased number of recreational fishers travelling to the GOC, and the MAC should consider the social and economic benefits of implementing closed waters (to commercial fishers) as well as the ecological benefits.’
- February 1999 – TROPMAC chair, Dr Joe Baker and QFMA CEO Richard Crossing hold individual meetings with selected Weipa recreational fishers. Each is asked to endorse the declaration of a ‘Catch and Release Zone’ in the upper Pine River, an initiative that had not been discussed by TROPMAC members. The Albatross Bay closure is not discussed, even though most of those interviewed make the point that the closure is their preferred option. It is later discovered that legislation for the GOCMP had passed through parliament on 28 January 1999, **before** the above meetings were held.
- April 1999 – The GOCMP was implemented but the ABC is not included. Instead, a Catch and Release Zone is established in a section of the Pine River as mentioned above. TROPMAC members questioned why the ABC was not able to be included in the GOCMP when it was discussed several times at meetings, yet the Pine River closure, which took members completely by surprise (as it was never proposed or discussed) could be included in the GOCMP with a mere 3 months notice.

The major aim/performance indicator of the GOCMP was to reduce N3 (barramundi net) licence numbers to 99 by the season end of 2000 and 65 by the end of 2003.

All N3 fishers are required to pay a levee of \$1000 per year towards a buy back scheme aimed at achieving the projected license numbers.
- May 1999 – A SUNFISH branch is established in Weipa with Lance Jarrett as president.
- June 1999 – At least 12 vessels are reported fishing with offshore mesh nets between the Wenlock and Archer Rivers.
- 27 January 2000 – After extended discussion and approval by TROPMAC, the Qld Fisheries Management Authority (QFMA) Board recommends that the closure of Albatross Bay (ABC) to commercial net fishing is to happen when the number of N3 licences reaches 85 or 2 October 2003, whichever comes first. These recommendations are forwarded to legislation.

- July 2000 – Following a vote of ‘no confidence’ by major recreational fishing organization, the Australian National Sportfishing Organization (Queensland branch) at their annual meeting in August 1999, QFMA is restructured to become Qld Fisheries Service (QFS) and the ABC recommendation is not progressed.
- October 2000 – Sunfish Weipa is advised by a senior QFS manager that the GOC fisheries buy back scheme holds a total of \$299,000, \$197,000 from licence contributions and \$102,000 from government.
- May 2001 - Reports of as many as 23 vessels (N3 and N9) using power hauled nets involved in intensive offshore netting in Albatross Bay
- August 2001 – After deciding that the QFMA recommended ABC was past history, the QFS asked the newly formed Gulf of Carpentaria Management Advisory Committee (GULFMAC) to recommence discussion on the closure. Weipa members include Lance Jarrett (recreational), Sue Gould (conservation) and David Donald (charter) representatives
- August 2001 – A QFS report acknowledges that N3 licensed fishers using mesh nets in the offshore fishery are doing so illegally but no action is forthcoming.
- September 2001 – Ansett Airlines goes into receivership and Weipa’s daily jet air services are terminated overnight. Qantas Link takes over the service.
- November 2001 – GULFMAC begins formulating a plan to reduce by-catch created by the offshore net fishery.
- May 2002 - More than 20 vessels (N3 and N9) continue to net Albatross Bay and adjacent waters heavily. Large numbers of dumped longtail tuna are found floating near Boyd Bay.
- Mid 2002 – Report of an offshore net boat catching 8 tonnes of queenfish in a single set. Questionable statistics later emerge that show this one incident equates to 11.6% of the **reported** by-catch total for that entire year!
- 15 August 2002 – At its meeting, GULFMAC recorded in its minutes
‘GULFMAC recommended that option (A) be amended to read; "All waters east of the line between Janz Point and Thud Point be closed to commercial netting (other than nets used under an N6 fishery symbol) when the number of N3 licences is 85 or 6 October 2004, whichever comes first." The recommendation was agreed unanimously.’

GULFMAC recommends that a loan be negotiated on behalf of the commercial fishery to buy out sufficient N3 licenses to bring numbers to 85

GULFMAC proposes that charter fishers pay a levee towards the buy back of commercial licenses

November 2002 – Charter operators report a noticeable drop in the numbers of fish and large marine fauna in Albatross Bay waters during the 2002 season. The number of boats in mackerel line fishery also drops considerably.

April 2003 – Weipa GULFMAC member, Lance Jarrett, frustrated by continual broken 'promises' by QFS managers, particularly in respect of the ABC, resigns his position.

July 2003 – GULFMAC meets in Cairns. Charter member, David Donald, refuses to endorse the completed offshore net fishery By-catch Action Plan claiming that it fails to include any quantitative recommendations and would not save even 1 kilo of by-catch in the GOC when instigated.

Boating and Fisheries Patrol officers report the sale locally of undersized mangrove jacks (from the fish trawler) and QFS managers advise that the practice is permitted under the vessels Commonwealth (QFJA) license. GULFMAC members request that a legal opinion on the anomaly be presented at its next meeting.

Charter fishers present a submission outlining suggested terms in return for their yearly contribution to the N3 license buy back scheme. Their submission is hastily discussed and not accepted.

A proposal is tabled calling for new regulations to make the reporting of interaction with or death of large marine fauna by GOC commercial fishers compulsory as there was no obligation for them to do so (unlike other marine users).

April 2004 – QFS Deputy Director General Jim Gillespie attends a public meeting in Weipa attended by approximately 70 people including the town manager, Ian Pressley, town committee chairman, Michael Rowland, Chamber of Commerce chairman, Graham Mannix, other prominent business leaders, former and current GULFMAC members, David Donald and Lance Jarrett, commercial fishers including local resident Peter Tonin, charter operators and recreational fishers. Mr. Gillespie was left in no doubt that the feeling of the entire Weipa community was that the ABC be introduced as soon as possible and certainly by the recommended date of 6 October 2004. Commercial fishers in attendance had no objections.

- Lance Jarrett and companion personally witness commercial fishers catching and taking numbers of barramundi well over the legal size limit during a trip to the Mitchell River. This incident was reported to GULFMAC but no action was taken.
- May 2004 - A recommendation to GULFMAC from member David Donald to instigate the ABC on 6 October 2004 is not accepted following protest from a commercial stakeholder based outside of the Weipa area. GULFMAC failed to set any target date, instead recommending that the ABC be part of a general revue of the GOCMP due from 2005 to 2009.
- There was no resolution of the legal issues arising from the fish trawler being able to sell undersized fish. Managers advised that their legal team was 'too busy' to consider the anomaly. No advice from the QFJA was offered.
- The proposal to compel commercial fishers to report marine fauna interaction was discussed and again deferred without resolution.
- July 2004 - Out of town commercial fishers target beaches south of Weipa with nets killing large numbers of recreationally important species as well as at least two dugong.
- CSIRO scientist, Shane Griffiths begins collecting queenfish specimens as part of a research project on the species.
- August 2004 - GULFMAC member and local charter operator, David Donald, briefs members of the Weipa Town Authority on the ABC and it's likely ramifications if implemented. The WTA is keen to impose regional management after the closure happens to ensure sustainability of the resource.
- Late September 2004 - A commercial fisher is reported to have taken over 4 tonnes of barramundi in spawning condition in a single net shot along the foreshores near a river mouth in Albatross Bay.
- 6 October 2004 - The barramundi season closes with no resolution of the ABC.
- October 2004 to January 2005 - Weipa Chamber of Commerce pursues the issue of the promised ABC through the Department of Communities Forum.
- December 2004 - In a detailed report received by GULFMAC members from chairman, Dr Joe Baker, following feedback from the Communities Forum, Dr Baker reiterates the GULFMAC recommendation of 15 August 2002 that the ABC would happen on or before 6 October 2004.
- End 2004 - GOC commercial fishers withdraw their contributions to the buy back scheme and the scheme folds. It is unclear how many licenses were actually purchased while it was active.

January 2005 - A reply to the Weipa Chamber of Commerce from Fisheries Director General, Peter Neville, received on 12 January 2005 does not concur with Dr Baker's report. Instead, it offers no hint of a possible time frame for resolution of the ABC.

February 2005 - A reply to Mr. Neville's letter from Weipa Chamber of Commerce demonstrates the frustration of the community over this protracted issue and read in part

'We do not accept your decision to overrule this decision of GULFMAC and are extremely disappointed that the Department of Primary Industry and Fisheries continues to treat the community of Weipa in such an off-handed and patronizing manner. At the Weipa meeting earlier this year that Mr Jim Gillespie convened, Mr Gillespie was left in no doubt that the Albatross Bay closure was an issue of major community concern and was supported by all sectors, including COMALCO, the Town Committee, Weipa Chamber of Commerce, tourism interests, recreational fishers and Weipa based commercial fishers. Former and current GULFMAC members, Mr Lance Jarrett and Mr David Donald reported at that meeting that on several occasions over a period of 5 years, they had been repeatedly assured by Fisheries senior managers that the Albatross Bay Closure would happen on time.

All these 'promises', and the firm written commitment per the GULFMAC chairman above, have proved to be false. You can understand our anger and frustration at now being told we must wait for what may turn out to be another number of years before the closure actually happens.

The Weipa Chamber of Commerce respectfully suggests that you urgently review your decision on the Albatross Bay Closure. We ask that you make the only recommendation that is possible in this matter and declare the Albatross Bay Closure immediately.'

3 March 2005 – Weipa Chamber of Commerce and commercial charter fisher representatives meet with local member Jason O'Brien MLA to brief him on the lack of progress with the instigation of the ABC. Mr. O'Brien agrees to assist the community in this regard.

Some of the community members who met with MP Jason O'Brien over the Albatross Bay Closure issue. 3 March 2005



- April 2005 - GULFMAC meets in Cairns. Further discussion on the Albatross Bay Closure, the lack of progress with the N3 license buy back, the continued taking of mangrove jacks by the fish trawler, and the commercial fisher reporting of marine fauna interaction left all these issues unresolved. An information session from National Oceans Office (NOO) staff on the establishment of Marine Protected Areas in the GOC found MAC members not supportive of the process.
- January 2006 – Charter representative David Donald resigns from GULFMAC. In a letter to the MAC he states
- 'It is with enormous regret and frustration that I tender my resignation from GULFMAC.....*
- My 10 years spent on two MAC's have demonstrated to me that DPI&F exhibit a blatant and conspiratorial bias towards the commercial fishing industry ... and has little comprehension, or willingness to comprehend, the position of any fisheries stakeholders outside of the commercial sector, other than offering them lip service through the MAC process.*
-*
- A litany of controversial issues have questioned my confidence in GULFMAC and include:*
- The outright abuse of the public consultation and MAC process in the declaration of the Pine River Catch and Release Zone*
 - The failure of the Gulf buy-back scheme to achieve anywhere near its goals, the lynch pin of the GOCMP, and the complete lack of enthusiasm by DPI&F to work towards or support the achievement of these goals*
 - The confirmation that N3 fishers fishing offshore were using nets that were illegal under the regulations and yet their 'illegality' was to be ignored*
 - The hypocrisy of the By-catch Action Plan, a paper plan used solely as a political tool to ensure export licenses were granted to a fishery that is environmentally destructive, a Plan that has not saved one kilo of by-catch since its inception*
 - The repeated calls by DEH to have commercial fishers report deaths of protected and vulnerable species, yet 3 years of discussions have yet to yield an outcome'.*
- June 2007 – Itinerant commercial fishers net areas close to Weipa dumping large numbers of unmarketable fish that are vitally important to community and charter fishers, prompting outrage. WCCC resolves to increase political pressure for the ABC to be declared.
- April 2008 – WCCC with the backing of the Weipa Town Authority decides to hold another petition re the ABC at the towns' major social event based on recreational fishing, the Weipa Classic, and follow up with personal representations to both the DPI&F and Tourism ministers. The Petition is presented via local member Jason O'Brien.

- October 2009 – Fisheries management staff from DEEDI host a public meeting in Weipa for approximately 2 hours for both commercial and recreational fishers for the fisheries review. No other meetings are offered to hear recreational fishers views. This is the only consultation for recreational fishers in the Weipa area concerning the proposed RIS.
- October 2010 – The RIS dismisses the ABC and its 12 year history of consensus amongst **all** stakeholders and does not include the issue in its proposals. Instead it suggests that 'the issue be addressed more broadly through the regional management process'
- WCCC approves the development of a Recreational Sportfishing Strategic Plan
- November 2010 – WCCC writes to Ministers Mulherin, Lawlor and Fraser asking for the RIS to be delayed pending the release and review of this Strategic Plan

Albatross Bay Closure History

From the time it was first suggested in 1997, the closing of Albatross Bay to commercial net fishing has been a focus of attention by all sections of the Weipa community. The fact that fisheries managers and the minister(s) in charge have repeatedly rebuffed and delayed the proposed closure has angered residents to the extent that they no longer have any confidence at all in the department.

The above time line provides an insight into what has become a public consultation disaster for successive fisheries regimes. The ludicrous circumstances that resulted in the Pine River Catch and Release Zone being included in the Gulf Management Plan legislation before it was publically 'discussed' smacks of conspiracy and may have influenced why new QFS CEO, Richard Crossing, only held that position for a short period. Then, the overturning of the consensus decision approved by both TROPMAC and the then independent industry adjudicator, the QFMA Board (to move the Albatross Bay netting closure to legislation) by the all new QFS (that had banished the Board in favour of the right of approval being handed to one or two senior staff) raises the issue of the right of such persons to interfere in such an important community initiative without an intimate knowledge of issues involved.

This was then followed by another questionable sequence involving the body that was given the task of revisiting the closure of Albatross Bay, the newly formed GULFMAC. Reviewing the time line, it quickly becomes apparent that the terms of the ABC seemed to be changed at almost every meeting with the conditions subject to constant interference from commercial fisher and fishery manager members. There seemed to be no concern at all that the buy back scheme was failing as long as it kept license numbers above the ABC trigger point.

FQ and its predecessors have repeatedly acknowledged that the amount of barramundi harvested in Albatross Bay is a relatively minor amount and that commercial N3 fishers will not be significantly disadvantaged by such a closure, yet they have repeatedly used the failure to reach the target number of 85 licenses as an excuse to ensure the ABC never went ahead. This is in spite of making a number of personal promises, at least once by e-mail, that the event was imminent.

GULFMAC chair, Dr Joe Baker, in a report sent to MAC member David Donald in December 2004 confirms the GULFMAC recommendation of 15 August 2002 that the ABC was set to happen on or before 6 October 2004, a promise quickly overruled by fisheries Deputy Director General Peter Neville in January 2005. Mr Neville has never visited or consulted with the community and offers no explanation of his decision.

After progress on the ABC remained stalled and unresolved after 8 years of consultation and community agitation, David Donald, the final Weipa based member of GULFMAC resigned in frustration following the examples of Lance Jarret and Sue Gould in 2003. Further attempts by the WCCC to have the issue resolved were rebuffed or ignored.

By the time fisheries staff visit Weipa for consultation on a review of the management plan via a Regulatory Impact Statement, it has been over 5 years since a community opportunity to discuss the ABC and other local issues has been scheduled. Unlike other centres where consultation had taken place, in Weipa there are no separate meetings for commercial and recreational fishers. Bickering between the two sectors during the short session that is concluded in just over 2 hours severely disrupts this opportunity to adequately discuss the important issues.

All attendees of a public meeting called to review the issues and options proposed by the draft RIS express their extreme disappointment that the ABC has not been included in the new regulations. The feeling of the meeting was that many Weipa fishers were so disillusioned by the ineffectiveness of past fisheries consultations that they were no longer prepared to be involved in the preparation of submissions. However, most fishers who attended that evening agreed to take the time.

Meanwhile, the Western Cape Chamber of Commerce, who have actively pursued the ABC for many years, decided to fund the development of this Strategic Plan in an effort to consolidate its efforts to have the issues involved in the ABC and the future of Weipa's fishery addressed. Letters were sent to Ministers Tim Mulherin (Primary Industries), Peter Lawlor (Tourism) and Andrew Fraser (Economic Development) asking for the RIS to be delayed until this Strategy has been received and reviewed.

At the December 2010 meeting of the WTA, the following statement of support was issued

At the December meeting of the Weipa Town Authority the members reaffirmed their support on the proposal for the closure of Albatross Bay to commercial net fishing. Recreational fishing is a major activity for our residents as well as supporting our tourism efforts. On many occasions over the past few years residents have voiced concerns of dwindling catches and having to travel much further out into the Gulf. (This is seen as a major safety hazard) We are concerned regarding this, and ask the relevant authorities to honour the commitments made in the past about the closure.

*Peter Miller
Acting Chair
Weipa Town Authority*

Marine Protected Areas

The rise of Green politics has seen successive governments pursue the establishment of marine protected areas (MPA's) for all Australian waters. The precursor to these was the Great Barrier Reef Marine Park (GBRMP) which was established hastily following a political deal with the now defunct Australian Democrats. Once established, this had enormous economic and social effects on the coastal communities of north Queensland that still persist to this day.

The task of extending these parks or MPA's was originally given to the National Oceans Office (NOO) with head office in Tasmania around 2000. GULFMAC received regular briefings from its representatives but state fisheries were reluctant to cooperate with what they saw as interference in waters under their jurisdiction.

The NOO was then dismantled following the 2007 election but its agenda continued to be developed in a low key manner by the Department of Environment. Information surfaced prior to the recent 2010 election that showed proposed MPA's extending right around the coastline, including large areas in the Gulf of Carpentaria. It is expected that once the new Green Party senators take their seats in July 2011, establishing MPA's will become a major federal government priority.

Locking people out of huge areas of ocean that have minimal usage would seem to serve no purpose other than to make the area more appealing to illegal fishing. When Raine Island was designated a Scientific Zone by the GBRMP, permits were so hard to obtain that by the time scientists did arrive, they found illegal fishers camped there slaughtering the 'protected' turtles. Remote MPA's would be almost impossible to police without a (costly) fleet of vessels and planes.

Professor Ray Hilborn, a world renowned Washington based scientist specializing in natural resource management and conservation had this to say in the magazine *Science*,
"What the doom-and-gloomer will say is that you cannot successfully manage fisheries without marine protected areas and that is clearly wrong. There are many successfully managed fisheries – including areas that have never been overfished – and they do not use marine protected areas."

In fact some studies have shown that threats to the integrity of marine ecosystems are more likely to come from factors influencing the health of the environment rather than reasonable fishing pressure. In an investigation entitled '*Influence of marine reserves on coral disease prevalence*' (Page 2009) the authors conclude

'We found little evidence that MPAs enhance the health of acroporid and poritid assemblages in Palau. We also found no differences in the prevalence of bleaching and signs of other factors that compromise coral health in poritid and acroporid corals between MPAs and non-protected reefs. Results of this study therefore partially corroborate those of previous studies, which found that the prevalence of GAs on Kenyan reefs in the western Indo-Pacific (McClanahan et al. 2008) and the prevalence of several diseases on Little Cayman Island in the Caribbean (Coelho & Manfrino 2007) were not reduced inside MPAs. In fact, the prevalence of SEB was 2-fold higher within MPAs than on non-protected reefs in Palau. When protected and non-protected reef pairs were analysed individually, in some cases, measures of coral health were significantly worse inside the studied MPAs.'

Diggles (Diggles 2010) also points to the example of the world's first national park in USA for its balanced management approach

'Yellowstone National Park in the USA is famous because it was the worlds first terrestrial national park, established in 1872. Yellowstone boasts a vibrant and healthy recreational trout sportfishery. And it has since the day dot.

According to the official Yellowstone National Park website "Fishing has been a major visitor activity (in the park) for well over a century. Because of this history, fishing continues to be allowed and can complement, and in some cases even enhance, the park's primary purpose to preserve natural environments and native species"

*Yellowstone National Park has maintained a vibrant recreational fishery for nearly 140 years using nothing but **normal fisheries and environmental management procedures.**' (Authors highlight)*

While there certainly appears to be problems with GOC commercial fisheries, particularly the N9 and fish trawling sectors, these would best be addressed by specific management solutions rather than blanket closures. MPA's within current Queensland waters will only concentrate effort to smaller areas, exacerbating the loss of stocks in those locations. Without research that defines the mobility of specific species, it is impossible to estimate the effectiveness of MPA's.

A netting closure of AB, on the other hand, could provide a baseline for scientific studies involving regeneration of commercially fished areas, particularly if it was extended to the commonwealth boundary (25NM offshore). A regional management program for recreational fishers involving reduced bag limits and compulsory reporting of catches would supplement the above research, as well as providing an opportunity for the Weipa community to actively participate in husbanding their local waters. NT has already demonstrated the effectiveness of areas closed to commercial fishing in regenerating barramundi stocks.

In short, it is communities that should have the opportunity to play a major role in marine protection rather than city based environmental protectionists who would rather exclude people than seek to properly address issues that have a direct impact on the lifestyle of those living adjacent to the areas they are seeking to 'lock up'.

The federal government was advised that the GBRMP declaration would cost a mere \$15M in compensation. Currently, the amount distributed is over \$200M! To date, there has been no mention of a similar package being offered to those effected by MPA's. If compensation for the GOC is planned, surely that amount could be better spent on positive initiatives including fisheries restructuring and CYP community and tourism enhancement, especially in the indigenous sector.

Regulatory Impact Statement 2010

Given the extensive involvement of the Weipa community in fisheries consultation listed in the Time Line and their anger at having their petitions, submissions, letters and representations since 1997 go largely unheeded by various fisheries ministers and staff, many concerned recreational fishers have lost confidence in the consultation process are no longer prepared to commit time and effort to complete submission documents they see as being ignored.

Residents also feel patronized and alienated by a fisheries department that visits the smaller population centre of Karumba regularly but rarely takes the time to consult with the people of the major CYP/GOC coastal centre.

The inadequacy of the RIS consultation process at a face to face level was also questioned. A total of 3 port meetings were held – Cairns, Karumba and Weipa – with the short Weipa meeting being disrupted by commercial/recreational bickering. There were no opportunities given for separate representations by the various sectors (commercial, charter, recreational) or from community organizations such as the WCCC or WTA. No representatives from Weipa were included in the ‘expertise-based technical working group’ that held meetings in November/December 2009, neither were CTO’s or tourism representatives invited to engage in ‘informal consultations’ as was offered to the Gulf Fishermen’s Association and the Queensland Seafood Industry Association.

These glaring inadequacies in the consultative process are at odds with stated objectives of the fisheries review which claim to provide

- a fair allocation of fisheries resources between all users
- maximum benefits for the community while ensuring minimal impacts on the fishery, other fisheries or the environment
- resolution of a number of specific management issues affecting the fishery

Development of the RIS therefore raises a number of questions about the effectiveness of its consultative process

- what was ‘fair’ about commercial fishers being offered several representative opportunities when the charter and recreational sectors were not?
- why were the major community organizations of the main GOC population centre not specifically included in consultations or asked for their opinions on what options provided ‘maximum benefits’ for their community?
- why were major issues such as the 1997-2010 ABC or N3 license numbers not ‘resolved’ as they were very important ‘specific management issues’?

At a public meeting convened by concerned recreational fishers in Weipa on Monday 25 October 2010, attendees expressed their frustration at

- (1) what they saw was a totally inadequate community consultation process leading up to the draft RIS document;
- (2) the non inclusion or evasion of what they considered were major GOC issues (the GOC N3 license numbers and the ABC for instance);
- (3) the framing of suggested options in the RIS Submission document in such a way as to limit comment or opinion;
- (4) the focus on a small number of specific commercial fishing issues rather than a comprehensive review of management policies; and
- (5) more restrictions for recreational fishers but no measures designed to recognize the increasing economical importance of the sector (i.e. catch sharing, enhancement).

Submissions were discussed but the general consensus of the meeting was that the RIS document was totally inadequate in dealing in with many management concerns.

At its November meeting, WCCC decided to write letters to Ministers Mulherin (Minister for Primary Industries, Fisheries and Rural and Regional Queensland), Lawlor (Minister for Tourism and Fair Trading) and Fraser (Treasurer and Minister for Employment and Economic Development) expressing their concern with the GOC RIS process and asking for the final outcomes to be delayed until this important Strategy could be presented and considered.

The WCCC letter to Minister Mulherin states in part:

'This Strategic Plan for the Development of Sport Fishing on Western Cape York Peninsula, due February 2011, will provide a platform for the development of a fisheries regional planning process in the Weipa area in line with the policy initiative recently introduced by your department.

.....

As the issues here are both Fisheries and Rural and Regional Queensland based, the Western Cape Chamber of Commerce looks forward to receiving your support for this significant contribution to your innovative fisheries regional planning process and request that you advise those involved in the Gulf of Carpentaria Fisheries RIS process of the imminent arrival of this vitally important document, requesting their urgent consideration of its outcomes.

The Western Cape Chamber of Commerce looks forward to working with you and your department in ensuring favourable social outcomes for this thriving mining community while providing a healthy marine environment for the towns burgeoning tourism industry'.

Regional Fisheries Management

The concept of a regional management process as recently proposed by FQ has been well received by the WCCC because such a process had already been discussed locally in 2004/05 as a means of ensuring the long term sustainability of Albatross Bay once the ABC was in place. Members of the WTA and WCCC all conceded that it should be the right of the community to manage its local fishery to ensure maximum economic and social benefits while ensuring sustainability. It was readily agreed that fisheries management based thousands of kilometers away in Brisbane could never adequately address the local situation, particularly as any visits by management personnel were so far apart and usually brief in duration.

CYP communities have become increasingly vocal in their attempts to increase the numbers of local people involved in the decision making process directly affecting their area. A prime example of their determination was the declaration in May 2010 of the CYP Natural Resource Management Board consisting of 12 members, all of whom live on CYP. The benefits of having such 'local' involvement are already being felt in greatly improved delivery of services.

The NRM Board has already expressed interest in the outcomes of this Strategy and the proposed fisheries regional management process (FRMP). Cape York Sustainable Futures, the major representative body for CYP businesses, is also keen to see fisheries management placed in the hands of local people. Representatives of both organizations have expressed support for the FRMP.

Interest in developing similar Strategies (or extending this one) has also come from parties as far apart as the NPA and Karumba along with suggestions that a FRMP be established for the entire GOC coastline that could possibly include representation from the NRM Board, CYSF, WCCC and community organizations from all major centers. As with the NRM Board, the general feeling is that such a body must, of necessity, consist of a majority of CYP residents and have a high level of autonomy.

Concerns amongst some commercial fishers that their GOC sector has been overly influenced by a group of hard line operators who have sought to manipulate the management process have been raised for some time. Fishers are reluctant to speak out openly for fear of retribution but there are those who would prefer to see a more transparent process replace the current situation reputedly based on intimidation and threat. This transparency would include closer cooperation with the recreational sector and meaningful involvement in a working FRMP.

Recreational Fishing License

The introduction of recreational fishing licenses has been repeatedly proposed since the 1980's by some angling groups but fears of a voter backlash from those opposed to such a move has stalled the political will to do so. Schemes currently underway in Victoria and New South Wales appear to be working fairly satisfactorily with the money raised going towards enhancing recreational fishing opportunities in a range of ways including buying out commercial licenses, building better infrastructure and the introduction of education initiatives. A fresh water based permit scheme, the Stocked Impoundment Program, has operated successfully in Queensland for many years as a 'surrogate' freshwater license.

There have been numerous opportunities for groups representing recreational fishers, such as SUNFISH, to negotiate a license arrangement in Queensland that would have produced optimum benefits for the angling public they represent but opposition from a section of their ranks that sees a license as purely an extra tax has stifled any incentives. This failure to capitalize when favourable lobbying conditions have prevailed reflects a lack of professionalism that has hindered recreational fishing politics for many years. Currently, the Bligh labor government is threatening to introduce a snapper fishing 'license', the proceeds of which will have no benefit at all to fishery enhancement and go straight to consolidated revenue.

A GOC or CYP based recreational fishing license, if carefully negotiated, could be of major benefit to the region. Greiner and Patterson in their report '*Towards sustainable management of recreational fishing in the Gulf of Carpentaria: Investigation into recreational fishing in Karumba*' (Greiner 2007) compared a general fishing license with an area focused levy suggesting

'The introduction of a purpose specific levy to support the sustainability of the key recreational fish species might be more palatable to anglers than a general levy. Greiner et al. (2004: p.45-46) provide suggestions as to how an equitable and effective levy system could be implemented.'

This structure would support the proposed FRMP as being the perfect vehicle to oversee disbursement of monies collected.

Suggested GOC Recreational Fishing License Structure:

- Licenses would be required by all fishers in the CYP/GOC region whether they be local or visitors.
- A scale of fees would offer licenses from short term to all year.
- A network similar to that already operating for the SIP scheme would provide a viable collection system.
- FRMP group/s to oversee expenditure.

Illegal Fishing

While perceptions regarding illegal fishing mostly relate to the incursions of overseas vessels into GOC waters, the issue has three components

- Overseas fishing vessel activity
- Licensed commercial fisher operating outside of regulations
- Recreational fishers involved in illegal netting and bag limit abuses

Recent efforts by Australian Customs have seen overseas fishing vessel activity reduce from a major invasion of GOC waters in the early 2000's to a very low level in 2009/10 thanks to intensive surveillance and enforcement. It is vitally important that these efforts continue and, given that sightings have reduced dramatically and workload is now reduced, there is certainly the possibility of including a cooperative arrangement that would include the monitoring of state and commonwealth licensed vessels into this regimen.

As already mentioned, staff of the QFBP lack the staff, mobility and budget required to offer more than a minor effort to police commercial fishers in the GOC. Their diligence is further hampered by poorly written regulations and a well-established industry 'grapevine' that telegraphs their whereabouts when on patrol. Attempts to prosecute offenders, when apprehended, are often unsuccessful because the potential costs of losing the case to well legally represented fishers are not departmentally acceptable. Then, when prosecutions are successful, the penalties incurred are often mere token amounts.

These problems ultimately relate to a lack of political will to police commercial fishers in the GOC and Queensland as a whole. There is a possible solution but that requires a major shift in fisheries management philosophy. The answers lie in providing commercial fishers with a regimen that gives them greatly enhanced ownership which, in turn, leads to their need to carefully husband their allotted area and self-regulate their industry. This arrangement is working successfully in many parts of the world, including Northern Territory.

Policing of recreational fishers is a regular part of the activities of QFBP officers based in Weipa and involves an educational component as well as regulatory one. Their presence at events like the Weipa Fishing Challenge allows them to interact with the community in a positive manner. While recreational fishing attitudes are much more environmentally aware than they were even a decade ago, there are still those who occasionally engage in illegal activities and abuse the system. Again, QFBP officers are severely restricted in being able to cover such a large area, a fact that illegal fishers often use to their advantage.

Illegal fishing, even in the relative remoteness of the GOC, needs to be adequately policed. Increasing staff and facilities will have little consequence unless those people are supported by well formulated regulations and meaningful education programs.

APPENDIX 3

Fishery Status

Estuarine Status

Weipa is sited on a peninsula between two major river systems, the Embley/Hey to the south and Mission to the north. Another large estuarine complex that includes the Pine River and Nominade Creek runs into the north eastern corner of Albatross Bay. Local fishers also regularly visit the Pennefather River and Wenlock River (Mapoon) and less occasionally the Archer and Love Rivers (Aurukun).

Thanks to the forward looking efforts of Comalco, the Embley, Hey and Mission Rivers have been closed to commercial netting for over 30 years. A line running from Urquhart Point (Embley) to Andoomajettie Point (Mission) defines the boundary of the closed area.

While barramundi is the most sought after species in the estuaries, anglers also catch a large variety of other types including threadfin salmon, mangrove jack, fingermark, estuary cod, pikey bream, grunter, queenfish and trevally. Research has shown that many of these fish rely on wet season run-off to create the necessary conditions for spawning.

Logbook Statistical Trends

Local and visiting recreational fishers, charter operators and some commercial stakeholders have expressed increasing concern that Weipa's marine resources are in marked decline. Due to commercial in confidence restrictions by FQ on the disclosure of statistics in fisheries involving less than 5 vessels, confirming recent trends in the Weipa/Albatross Bay area have been almost impossible to establish. As many of the species that are important to recreational fishers are not commercial targets, any information on their status is also very limited.

The logbooks supplied to commercial tour operators are a further stumbling block. Unlike the NT, where charter fishers must complete daily log sheets that allow catches, client information and fishing effort to be comprehensively reported, Queensland based tour professionals are provided with the same logbooks as commercial fishers that are focussed on recording the amount of product taken. In spite of numerous requests for a NT type format that would provide better tourism focussed figures, there has been no change in the process leading many charter fishers to become uncooperative.

However, thanks to the private records of a long-term Weipa commercial fishing tour operator being made available, local catch trends over the past 11 years can be represented. The table labelled *Charter Log Book Statistics* has resulted from the perusal of daily log sheets totalling over 150 days per year from 1997 to 2009 with the exception of 2008 (where no records were available).

Because of the variability of weather, tides, season, fishing method (bait, lure, fly fishing) and angler competence, the CTO catch data was evaluated according to the best fishing days. In the case of the most prolific species - barramundi, queenfish and trevally – the catches were averaged over 20 days, and for mangrove jack, threadfin salmon, mackerel, tuna and cobia, the time frame was 10 best days.

Another variable applicable to mackerel, in particular, was the practice by the charter fisher of moving away from concentrations of both narrow barred and grey mackerel once a couple had been kept for the table to avoid the unnecessary mortality of subsequent fish due to shark attack or undue stress.

CHARTER LOG BOOK STATISTICS (Private Weipa CTO)

Species/ Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Barramundi	12.4	16	14.1	18.1	22.5	20.7	17.3	12.9	7.1	5.9	4.7	0	6.3
Man Jack	2.5	4.4	3.8	5.5	6.3	4.3	6	7.6	4.8	2.9	3.5	0	1.3
King Salmon	1.7	3.2	1.7	2.9	4.8	1.7	1.6	2.4	0.7	0.9	0.6	0	0.6
Queenfish	12	16.1	15.5	14.8	16	16	15.1	13.7	5.4	4.8	3.9	0	2.5
Trevally	8.5	18.3	16	23.7	21.3	25.6	24	21.3	18.6	10.2	3.5	0	2.9
NB Mackerel	4.4	2.8	6.2	3.6	7.2	2.6	7	5.1	3.5	4.1	3.3	0	3.8
Grey Mackerel	1.6	3.5	3.6	2.1	1.4	3.8	5.4	6.4	2.8	2.9	2.5	0	0.2
Longtail Tuna	4.3	6.8	4.2	9.8	16.8	17.6	15.5	16.6	13.8	7.6	2.9	0	4.1
Cobia	0.8	0.9	0.8	0.7	0.8	0.5	0.5	1.9	1.1	1.3	2.9	0	0.6

The figures for those species may not be representative of the actual stock status that from anecdotal observations is reportedly much depleted. In fact, most charter fishers have advised that grey mackerel during the 2010 season have been a rare catch.

Barramundi

Barramundi or giant perch (*Lates calcarifer*) is arguably the most iconic of all of Australia's fish species and is one of our most sought after species, both commercially and recreationally. It occurs from Maryborough right around the northern coast to Exmouth in Western Australia with the heaviest concentrations found in the lower half of Cape York Peninsula and the Northern Territory.

Research into the life cycle of GOC barramundi has been extensive but mainly centred around Karumba and the south eastern GOC. This species is catadromous, meaning that it moves from fresh to saltwater to breed, as well as being a protandrous hermaphrodite, the condition of being born a male then changing sex to female later in life. This transformation usually happens at around 5 to 7 years of age and 70 to 80cm length.

Concern about overfishing of barramundi, particularly in the period from 1985 to 1995, eventually led to management measures that included a 4 month closed season during the spawning season from October to January being instigated for both recreational and commercial fishers in the GOC. (Note: A similar closed season in NT does not apply to recreational fishers)

The breeding cycle is usually stimulated by the influx of freshwater that occurs at the beginning of the wet season with spawning occurring around the river mouths and adjacent foreshores during the nights around the full and new moon. Ideal conditions occur when there is heavy rain early in the wet, then levels are maintained by medium to heavy falls right through the season. As many breeding fish have to move from land locked lagoons to the river mouths to spawn, it is important that the early rains are heavy enough to link the normally landlocked waterways to the main rivers.

Because of the length of its coastline, rainfall totals can vary widely along western CYP. A series of poor wet season, some in terms of the amount received, others with respect to the short period where major falls happened, have limited spawning and recruitment in the northern half of the GOC since 2001/02. With only one good season in 2007/08 in the Weipa area in the past decade, barramundi numbers have shown a steady decline.

Bureau of Meteorology figures for their Weipa Airport station show the trends:

Wet Season	Total	Comments
1998/99	2367mm	Good season (mean average Weipa 2010mm)
1999/2000	2175mm	Good season
2001/02	1755mm	Below average season
2002/03	1858mm	Below average, heavy rain later than usual
2003/04	2174mm	Poor spawning conditions, heavy rain Feb/March, light early in season
2004/05	1566mm	Very poor season
2005/06	1418mm	February figures unavailable, poor season, Cyclone Monica arrives late April, road opens end May
2006/07	1359mm	Very poor season, PDR stays open most of year
2007/08	2215mm	Good season, best since 99/00
2008/09	1919mm	Fair season, slightly below average
2009/10	1579mm	Poor season

Typical barramundi rich rivers are lengthy, slow flowing and turbid with extensive freshwater headwaters and associated wetlands. While the Archer and Wenlock fit these criteria in most respects, the estuaries of Albatross Bay are lacking significant length, have minimal lagoon structure and deliver very little freshwater inflow once the wet season influx ceases. They are basically marine systems where barramundi have to compete directly with a host of other species and, although prolific, this species is far from being as dominant as it becomes in its 'ideal' environment.

Because the barramundi population in the Weipa rivers is able to access spawning areas freely without the restraints of needing a substantial freshwater flow, fish tend to move towards the mouths of the rivers as early as September in anticipation of the coming wet. Local commercial fishers have long been aware of this annual migration and have targeted these pre-spawning aggregations, particularly along the coastline from Andoomajettie Point to the Pine River mouth and also on the mudflats where the Pine flows into Pine Bay.

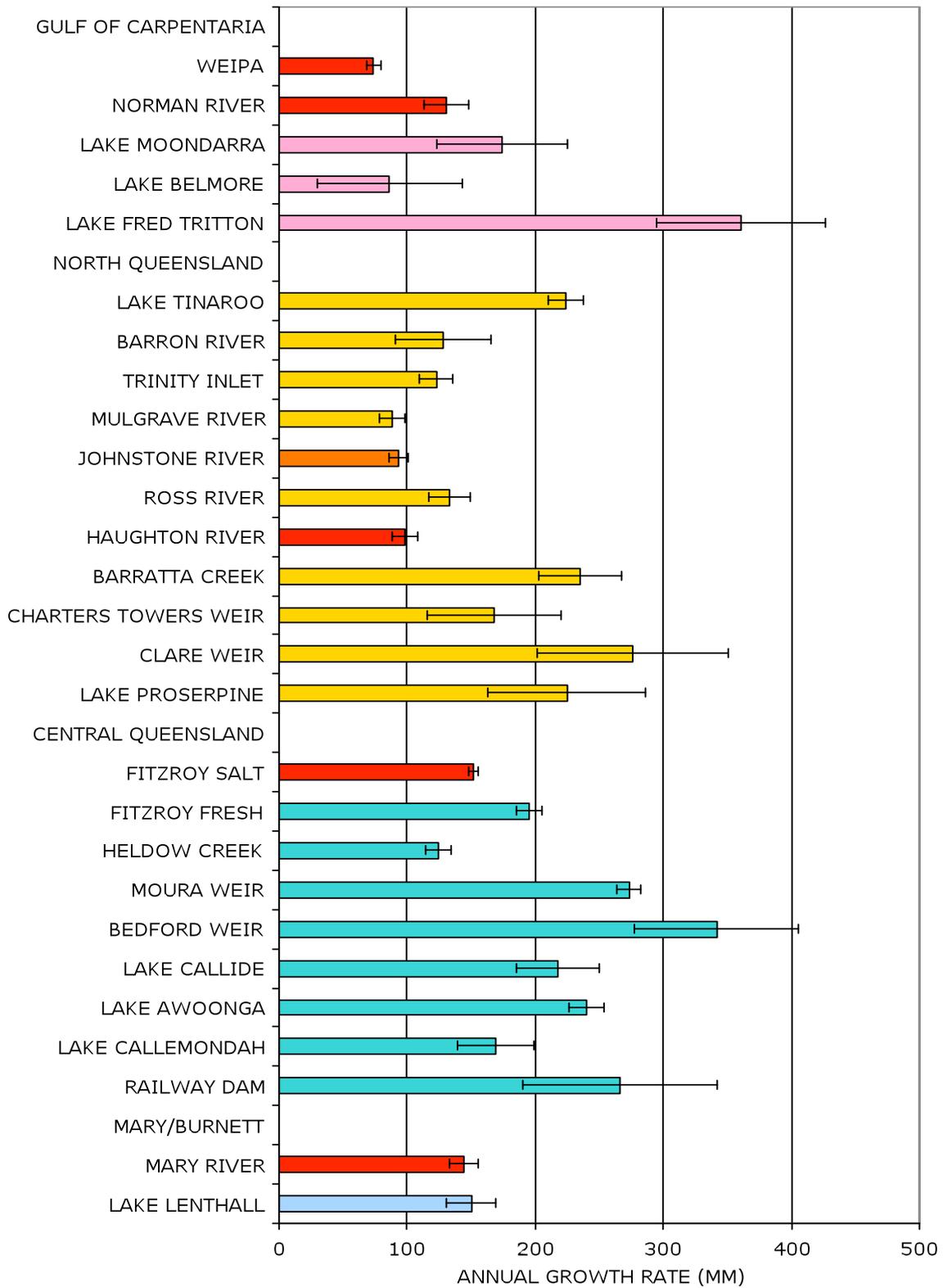
Many fishers became interested in tagging barramundi in the Weipa rivers and tag return data resulted in some very interesting findings. When compared with other barra stocks, Weipa fish exhibited the slowest growth rate of any area in Queensland and grew half as quickly as those in Karumba. This fact has obvious management implications and implies that local barramundi need specialist regimes to ensure that stocks are kept sustainable.

The following table and graph developed from tagging data by *Infofish Services* confirms the low growth rate of Weipa barramundi:

	RECAPS	USED FOR GROWTH	AVERAGE DAYS OUT	AVERAGE TAG LENGTH	AVERAGE RECAP LENGTH	AVERAGE ANNUAL GROWTH	95% CONFIDENCE
GULF OF CARPENTARIA							
WEIPA	550	463	644.6	518.1	618.2	74.0	5.8
NORMAN RIVER	144	108	557.6	558.8	718	130.2	17.2
LAKE MOONDARRA	63	29	977.2	576.8	921.6	174.0	50.6
LAKE BELMORE	11	9	888.3	790.3	952.0	86.3	56.3
LAKE FRED TRITTON	13	12	136.7	299.3	430.4	360.7	66.2
NORTH QUEENSLAND							
LAKE TINAROO	137	135	611.4	303.0	636.2	223.7	13.6
BARRON RIVER	51	43	467.3	296.6	431.9	128.3	37.7
TRINITY INLET	159	146	658.8	293.7	488.5	122.9	13.2
MULGRAVE RIVER	32	26	663.7	284.2	453.5	87.9	9.8
JOHNSTONE RIVER	633	579	550.8	397.2	517.4	93.2	7.0
ROSS RIVER	405	338	699.5	538.1	717.6	132.6	16.3
HAUGHTON RIVER	167	150	776.2	487.6	661.8	98.2	10.2
BARRATTA CREEK	24	24	744.0	240.0	680.3	234.7	32.5
CHARTERS TOWERS WEIR	5	5	508.6	439.2	640.0	167.9	52.1
CLARE WEIR	53	52	429.7	188.4	537.8	276.2	75.1
LAKE PROSERPINE	6	6	774.8	292.8	659.2	224.9	61.7
CENTRAL QUEENSLAND							
FITZROY SALT	4585	3198	514.1	435.4	612.2	151.8	3.8
FITZROY FRESH	76	43	1014.9	201.9	735.9	195.6	10.2
HELDOW CREEK	45	41	851.5	449.0	722.3	124.2	10.1
MOURA WEIR	114	96	607.1	229.9	673.7	273.3	9.5
BEDFORD WEIR	34	29	311.0	205.6	445.0	341.6	64.3
LAKE CALLIDE	14	14	704.9	280.1	679.6	217.5	32.6
LAKE AWOONGA	226	212	966.3	240.8	741.5	240.2	13.3
LAKE CALLEMONDAH	42	33	431.6	539.1	711.4	169.2	29.8
RAILWAY DAM	13	9	334.8	479.4	676.1	266.4	75.7
MARY/BURNETT							
MARY RIVER	362	284	464.6	448.6	600.9	144.7	11.1
LAKE LENTHALL	13	10	490.3	470.5	670.0	150.3	19.1

Table 1: Summary of growth of Barramundi in stocking divisions with natural populations for comparison

STOCKED BARRAMUNI GROWTH



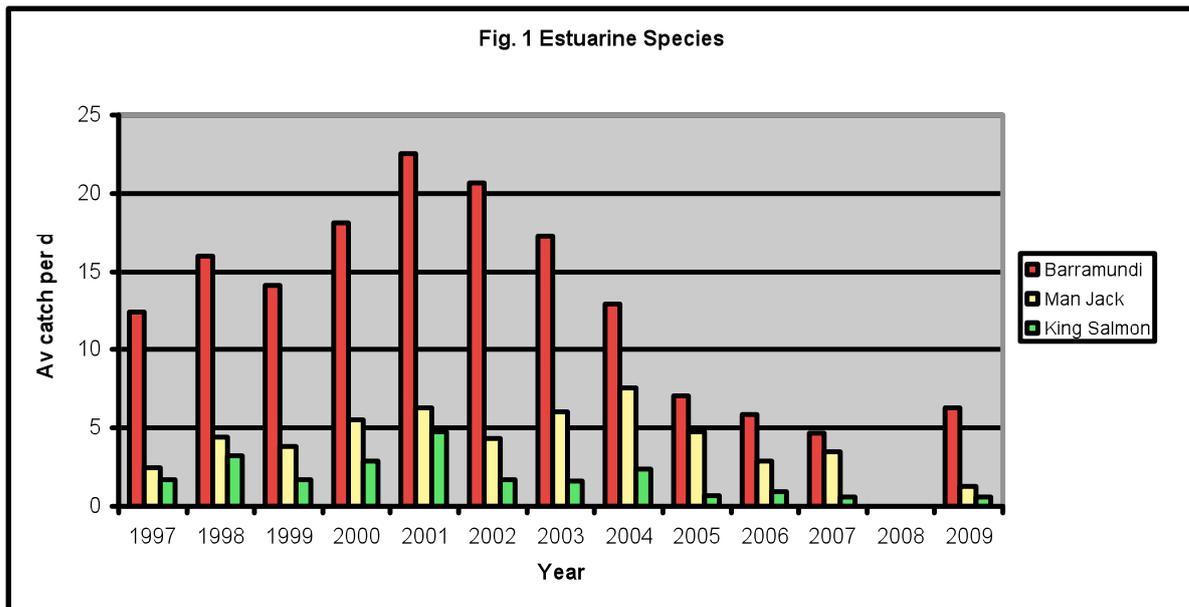
The Pine River Catch and Release Zone was presented to Weipa recreational fishers as a means of protecting and preserving barramundi stocks. Such an area is of little consequence when commercial net fishers can target fish moving from the protected part of the river during their pre-spawning activities into the open areas in Pine Bay. All this initiative does is allow commercial fishers to catch more barramundi as they are no longer being removed from the upper Pine by recreational fishers.

The Catch and Release Zone is therefore ineffective without a netting closure of the whole Pine River complex, a scenario that was 'promised' as part of those initial consultations that suggested a Closure of Albatross Bay would happen shortly after the GOCMP had been released.

Long term Weipa residents and charter operators have witnessed a sharp decline in barramundi numbers since the 2000 season and while commercial netting of brood stock and poor wet seasons have certainly had their effect, the increase in recreational fishing effort must also be taken into account. While resident numbers have now reached totals that are only just higher than former peak levels in 1995, the number of tourist fishers has grown significantly. Therefore, any management changes aimed at sustaining local barramundi stocks must include further recreational fishing restrictions as well as netting closures.

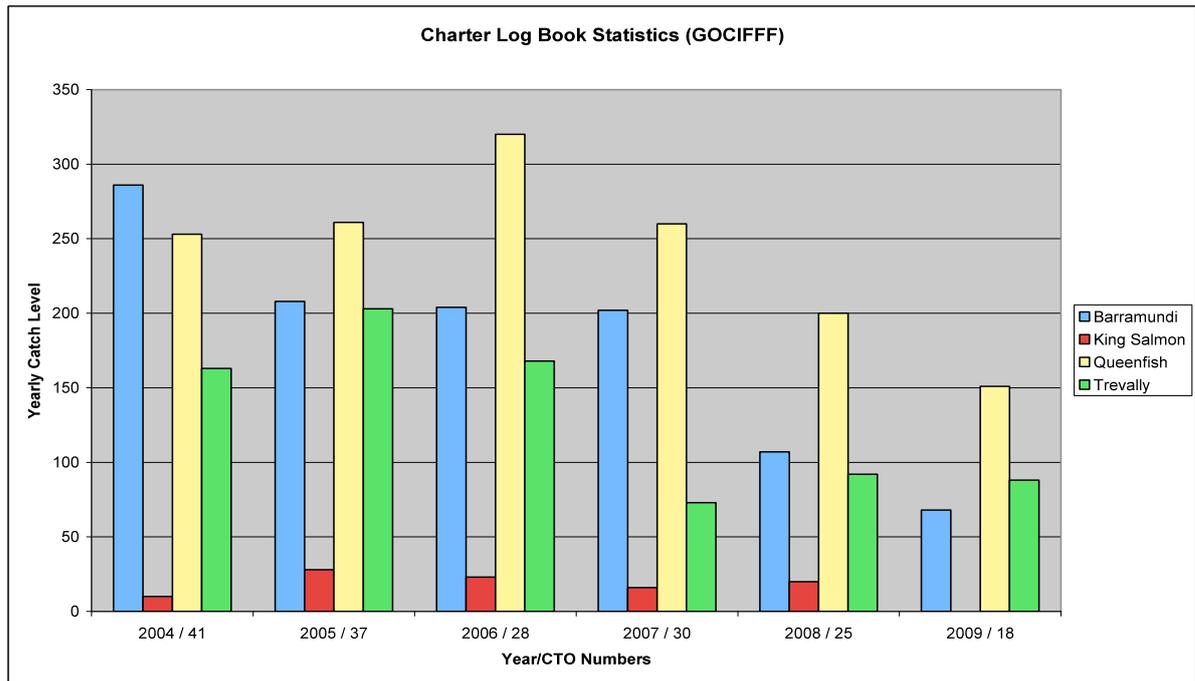
When the Albatross Bay Closure looked imminent in 2004, community suggestions to compliment the closure included the bag limit being lowered from 5 to 2 and the maximum legal length being lowered to 100cm, with only 1 fish being permitted between 80 to 100cm. As the NT (which has researched its barra population extensively) does not impose a closed barramundi season on recreational fishers, it was also proposed that a bag limit of 1 be set for that period to allow local fishers to retain a fish for the table.

Figure 1 provides an insight into local fluctuations of the barramundi population



The graph demonstrates that there has been a significant decline in stocks since 2003 (approximately 75% from 2001 levels) but this level has seemed to remain steady from 2006 to 2009. Some of the shortfall may be due to the repeated targeting of the beaches south of the Embley mouth by commercial fishers which has depleted an area that figured significantly in charter catch statistics.

FIG 3 GOCIFF CHARTER FIGURES



GOCIFF (2010) figures for all GOC tour operators appear to confirm the dramatic drop in charter barramundi catches between 2004 and 2009, with recorded catches falling steadily from 286 in 2004 to 68 per operator in 2009, a 76% decline (Note: This correlates with the figure from private CTO records above). This would suggest that the fall in numbers has been reasonably constant throughout the GOC estuaries.

Given the 'hands on' nature of regional management and the responsibility such measures impose on the local community, the husbanding of Albatross Bay barramundi after a netting closure could provide a fisheries model for future development. As will be shown in other sections of this study, the economic and social benefits will far outweigh the relatively small income generated by a couple of tonnes each season of commercially caught fillets.

Mangrove Jack

Another iconic estuarine species is the mangrove jack (*Lutjanus argentamaculatis*), a member of the sea perch family commonly known as snapper in many other parts of the world. This species is an ambush predator, typically hiding under fallen trees and around submerged rocks then rushing out to grab passing bait. It is keenly pursued by recreational fishers using both bait and lure and exhibits excellent table qualities.

While mangrove jack numbers are small compared to barramundi, it is arguably the second most important estuarine species in angling terms. Research has shown that mangrove jacks move into the estuaries as juveniles then remain until they approach maturity, generally from 40 to 45cm. The larger fish then move offshore where they aggregate in large schools while spawning. Mature fish, known as 'reef jacks' are occasionally caught on offshore rock outcrops and can weigh up to 8 kilos.

Mangrove jacks are one species that have been officially recognized by fisheries managers as recreationally important probably due to the small numbers caught by commercial fishers. This led to the species being delegated as 'regulated' in the GOCMP with both commercial and recreational bag limits of 5 fish larger than 35cm in possession at any time. The relative scarcity of mangrove jack makes such limits very generous.

Unlike Queensland's east coast where breeding jacks are protected by the Great Barrier Reef, the GOC has no significant reef structure offshore meaning that spawning aggregations there have to do so over a largely featureless bottom. With the advent of the developmental fish trawl fishery, suddenly these stocks were under attack and extremely vulnerable.

Protests were made to both GULFMAC and QFJA about the numbers of jacks being harvested by fish trawlers but no action was taken. Being classed as 'developmental', this fishery can be refused a permit if it can be seen to be having a detrimental effect on the species being caught. In spite of grave concerns that mangrove jack numbers were under severe threat by this wholesale harvesting of its spawning biomass, the QFJA has continued to issue yearly permits.

Another major problem surfaced while GULFMAC was meeting in Cairns in July 2003. Boating and Fisheries Patrol staff reported that undersized jacks were being openly sold in local fish shops and when questioned on where the fish had been caught, shop proprietors produced invoices issued by the Weipa based fish trawler. It was subsequently discovered that because the trawler was operating under a Commonwealth issued permit, the fish it sold were exempt from Queensland regulations, an anomaly that needed to be urgently addressed. In spite of repeated assurances that the issue would be clarified, both state and commonwealth management have still not resolved the situation.

The once healthy mangrove jack population in the Pine River complex has suffered the most noticeable decline, particularly in the past 5 years. As mentioned, with a 2009 total of 55 tonnes of mangrove jack being listed as taken by the fish trawler, it can be calculated that somewhere around 22,000 to 27,000 fish have been removed from the biomass in 1 year, an incredible figure given their relative scarcity in recreational catches.

The propensity of mangrove jack to form these major aggregations poses the possibility that the species may be susceptible to a trawl shot that takes the 'last' population of fish in that area as happened with Atlantic cod. Combined with the fact that the NT fish trawler has no recorded take of mangrove jack, it would seem that at the very minimum, the trawler based at Weipa should be immediately excluded from all areas where mangrove jacks are taken, both in the past and in the future. It is obvious that there are offshore areas where mangrove jack catches could be minimized and even excluded.

King Threadfin Salmon

King salmon (*Polydactylus macrochir*) are a somewhat 'mysterious' species that have become a highly regarded recreational catch. They didn't become commercially important until barramundi numbers declined back in the early 1990's but are now an important component of the inshore net fishery, with catches rising from a mere 3.9 tonnes in 1988 to 290 tonnes in 2008 and 2009.

Like the barramundi, king salmon are protandrous hermaphrodites, that is, they are born as males then change sex to females as they get older and larger. Although research on the species is limited, it is speculated that in the GOC, sex change occurs at 4 to 8 years of age and around 70 to 100cm length with spawning occurring from August to September, before the start of the wet season. Tagging by recreational fishers has shown growth rates to be highly variable in the Weipa rivers.

These salmon usually have a highly localized population structure and that, combined with the large size of maturing females, makes them vulnerable to overfishing through local depletion. Figure 1 shows that catch rates vary appreciably from year to year and don't seem as susceptible to outside influences such as poor wet seasons. More research locally is sorely needed, in particular the identification of spawning sites.

Offshore Status

With almost half of the 700 privately registered boats in town measuring over 4.5 metres in length, recreational fishing in the waters of the GOC adjacent to Weipa is obviously very important to the community. Fishers regularly range up to 40NM south and north from the town on day trips and as far as the Mitchell River and Thursday Island on extended excursions. While fishing outside of the rivers is always weather dependant, the arrival of dry season south east trade winds allows vessels to travel close to the shoreline for many miles, particularly south of the Embley mouth, in reasonable safety as the wind direction is essentially offshore.

The most popular offshore fishing area is bounded by Boyd Point and Thud Point and extends seawards to the aptly named 9 Mile Reef. Other favourite grounds occur from Duyfken Point north to Pennefather River, along the shipping channel, seawards of the rocky outcrop called Westminster and west of the Red Cliffs. Commercial fishers are well aware of the productivity of these areas, particularly those offshore from Boyd Point, Pera Head, Thud Point and there has been a great deal of effort concentrated in these water for many years.

In formulating the GOCMP, TROPMAC members were well aware of the importance of this area to local fishers and by establishing the N9 fishery were led to believe that offshore netting would be concentrated outside of 7NM, thereby keeping the waters inside of that boundary free of drifting mesh nets (N3 fishers had to use 'set mesh nets', usually sited along the shoreline). As already mentioned, this did not happen and in the free for all that eventuated, this area was heavily targeted, particularly at night.

By the end of the 2002 season, long term locals and charter fishers started reporting a noticeable drop in offshore catch rates with some estimates around 30 to 50%. Since that time, the decline has continued with those who spend up to 250 days at sea each year conceding that the once prolific marine environment has been reduced to '*a shadow of what it was like in the late 90's*'. Long term charter clients, many of whom visit each year, readily concur, with some having already relocated their trips to alternative destinations. This loss of business is set to worsen if the current management status quo is maintained.

'Ecological sustainability' and 'species diversity' are terms that appear regularly in the GOCMP and fishery based government literature but the words are meaningless unless applied. In the case of the GOC offshore net fishery, it is difficult to rationalize that the removal of 600 tonnes of shark and 500 tonnes of grey mackerel from a fishery each year will not effect 'species diversity', even when the largely anecdotal evidence of the enormous by-catch generated is ignored.

If the observations of the Weipa recreational fishing community, commercial tour operators, commercial line fishers and some N3 license holders are taken into account, species diversity has been severely impacted by a fishery effort that is far from ecological sustainable during the past decade.

Queenfish

Queenfish (*Scomberoides commersonianus*) were once the prominent species in close inshore waters of Albatross Bay ranging from the beaches and headlands to shallow reef areas, and from the river mouths to the upper limit of tidal influence. The species is highly sought after by recreational fishers and has gained a reputation as a renowned sport fish both in Australia and internationally. Most fishers are happy to practice catch and release as the flesh is of mediocre table quality. While there is some mortality of released fish, the use of barbless hooks, large landing nets and careful revival methods helps keep any losses to a minimum.



A medium sized talang queenfish

Catches of queenfish, both large and small, have plummeted from pre 2000 levels and are now almost totally absent from some areas that held healthy resident populations at that time. The Embley River mouth could be relied upon to produce medium to large queenfish almost all year round in the 1990's but now catches are spasmodic and large schools rare. Similarly, the sight of small queenfish chasing baitfish along the tide lines at the major estuarine junctions on the early flood tide is no longer a regular occurrence. Boyd Bay was once renowned for its consistent catches of big queenfish, trevally, mackerel and large schools of marauding barracuda, but in the past 3 to 4 years, that fishing has become a mere memory and queenfish seemingly absent.

Queenfish were one of the first noticeable casualties of the offshore net fishery. Thousands were sighted floating in lines hundred of metres long when the netting started but once crews started gut spiking fish, the evidence disappeared. One net vessel crewman reportedly remarked to another commercial fisher recently that

“we don't have to spend hours getting those (expletive) queenies out of the net anymore, we've got rid of them all!”

In the paper, *Population Dynamics and Fishery Benefits of a Large Legal Size of a Pelagic Sportfish, the Talang Queenfish, Scomberoides commersonianus, in Northern Australia*, (Griffiths 2006) Griffiths, Fry, and van der Velde studied GOC queenfish in the Weipa area and found that

‘Although queenfish are not a primary target species of commercial fisheries, they can be taken in large numbers, due to their formation of large monospecific schools, and (are) often discarded ..’ Their research mentions the fact that *‘during February 2005, a number of large fish (>853 mm) were captured approximately 7–10 nm offshore with ripe running eggs (late stage V), indicating they were in fact spawning in this offshore region.’*

This discovery would seem to confirm why queenfish stocks can be so vulnerable to offshore netting as the practice is obviously depleting the breeding population.

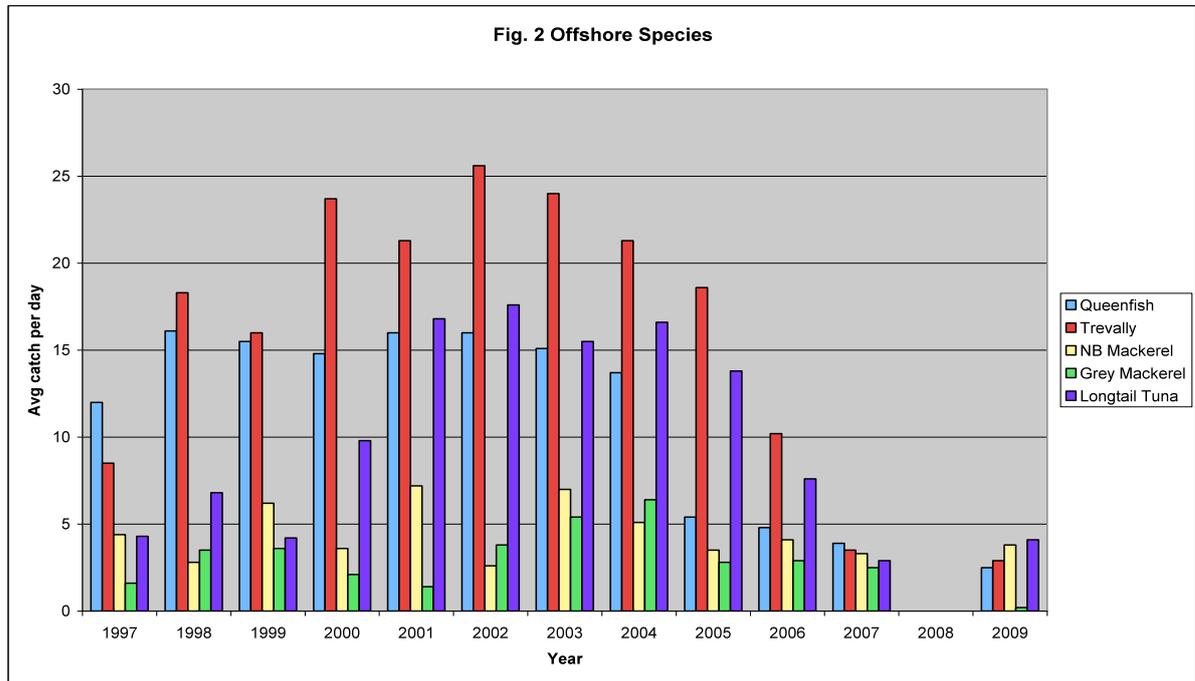
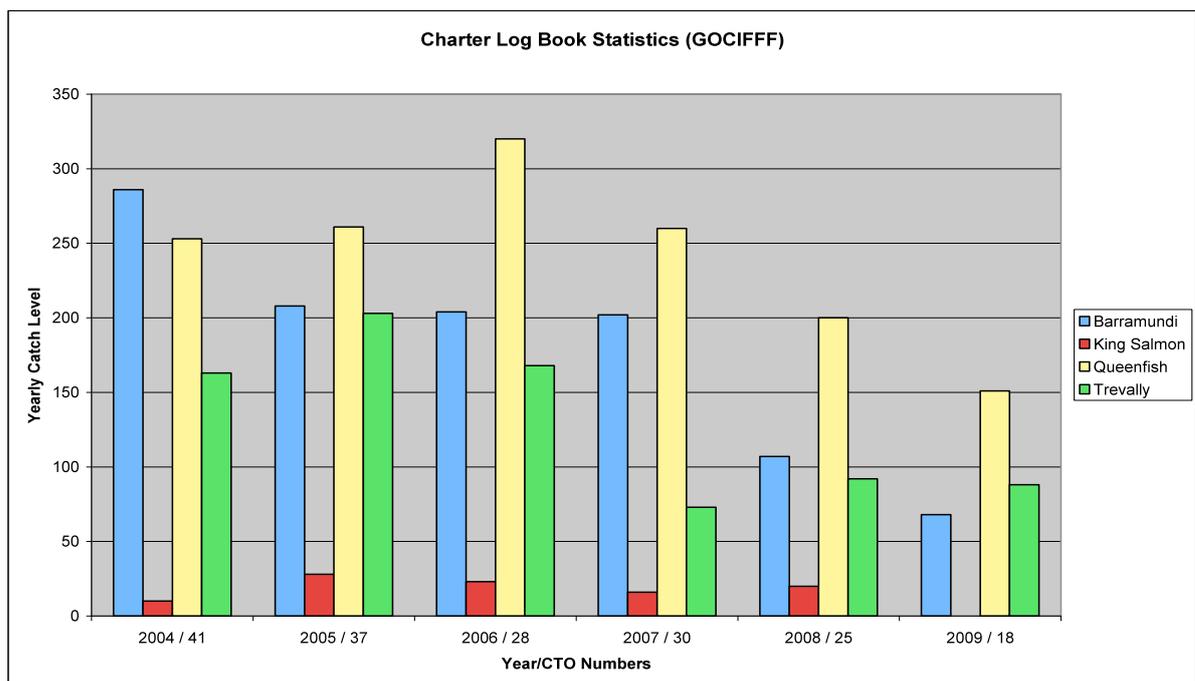


Fig 2 clearly shows the severity of the decline in local queenfish stocks recorded by a typical charter operator. There is a marked drop in catches during 2005 and this decline continues to the present with current numbers approximately 85% reduced from those registered from 1998 to 2003. If this loss is reflected in the remaining spawning biomass, then the local population (and possibly the entire GOC stock) has been placed in a very precarious situation. This possibility needs urgent investigation, offshore netting halted immediately and recreational bag limits reviewed. While GOCLIFF figures (FIG 3 below) don't show as dramatic a fall in the overall GOC queenfish population, they still indicate a 40 to 50% decline from 2004 to 2009.



Trevally

Considering the myriad of trevally species that occur in the Weipa region as one has significant drawbacks, but for the sake of simplicity, they are being treated as a single entity. For the record, the most common trevally found locally are golden, giant, brassy and tea leaf, but include to a lesser extent, species such as diamond, cale cale, big eye, tilley, bludger and fringe finned. There is very little commercial fishing effort for any of the above species and those that are caught in estuarine, offshore or trawl nets are usually discarded.

Trevally are not a popular table fish but have become renowned for their fighting abilities. In places such as Japan, clubs have formed whose anglers travel the world looking to catch the famed GT or giant trevally and some members have visited Weipa. Tangling with medium to large trevally is certainly high on the list of traveling Australian fishers. With so many species on offer and a wide variety of venues to explore, Weipa has earned a solid reputation for the quality of its trevally fishing.

The downside of there being so many species ranging across all marine environments while having little commercial value means that there has been almost no research carried out to date. It is therefore difficult to assess what effect reports of the large scale dumping of trevally by both offshore net fishers and trawlers might be having on local stocks.

The decline in trevally numbers shown in Fig2 show a remarkably similar trend to queenfish except that the major fall happens a year later in 2006. The scale of the stock depletion, however, is even more pronounced and at approximately 85% is very disturbing. While large numbers were once commonly made by CTO clients and local fishers, nearly all those captured were released with minimal mortality.

These statistics are reflected by the catches of charter operators and local fishers who are reporting

(1) that areas that were once regular producers of golden trevally now give occasional catches of fish that are much reduced in average size

(2) that the shipping channel has 'lost' its resident population of tea leaf trevally which were once prolific

(3) that the once enormous schools of tea leaf and brassy trevally that formed in the area from Red Cliffs to Pera Head during May, June and July, have now been reduced to a scattering of individuals much reduced in size

(4) that individual schools of large giant trevally are much less prevalent than they once were and resident populations no longer appear to be sited around headlands such as Boyd Point and Pera Head.

Former crew members of offshore netting vessels have reported killing large numbers of schooling trevally at times, including one shot that purportedly netted over 4 tonnes, all of which were discarded. Information regarding by-catch from the fish trawler shows that trevally make up a high proportion of discarded species.

With so little data or research on trevally available, it is very difficult to get a picture of what is happening to Albatross Bay stocks but if Figure 2 is anywhere close to the mark, the situation is very serious. GOCIFFF statistics (FIG 3) also suggest a wider ranging problem with a GOC population drop of 47 to 57% since 2004/05.

Narrow Barred Spanish Mackerel

Commonly called Spanish mackerel or 'Spaniards' (*Scomberomorus commerson*), this pelagic species is a ravenous predator that feeds on garfish, pilchards, herring and host of other smaller baitfish. Mackerel are keenly sought by recreational and commercial fishers alike who fish using a method referred to as 'trolling'. Both baits and lures can be trolled to attract the mackerel.

Prior to the mid 90's, most Spanish mackerel landed in Albatross Bay were caught by commercial line fishers during a season which ran from June until November. Catch rates remained stable until offshore netting began in earnest, when about half of the line fishers moved elsewhere due to the depletion of their most productive grounds.

Because of the relatively large size of the average Spanish mackerel landed in the Weipa area, recreational fishers tend not to take more than a couple at a time. Most charter operators will move away from areas where mackerel have congregated once a few have been landed due to concerns about the possible mortality by sharks attracted to the released fish. This makes the catch statistics shown in Figure 2 of doubtful use in showing trends in Spanish mackerel numbers.

Reports during the 2010 season indicated that Spaniard catches were good early in the year, declined sharply during the normally productive months of August and September but numbers then improved in late October and November (after offshore netting ceased). However, the bait congregations of the early 2000's are now noticeably fewer so most of the fish are being taken from reef areas rather than open water locations as was once the norm when numbers were high. It has been speculated that the apparent lack of bait congregations is due to significantly less predator numbers concentrating the mass aggregations.

Broad Barred Spanish Mackerel

The broad barred or grey mackerel (*Scomberomorus semifasciatus*) grows to over 10 kilos and regularly can be located congregating in large schools. Juveniles are often found feeding well up into the estuaries and have sometimes been sighted as far as 15 kilometers upriver in the Embley/Hey system. While they are often taken by recreational fishers on both bait and lure, grey mackerel do not attract the effort of their larger counterparts. However, their table qualities are just as good provided they are handled appropriately.

These fish are the main target of offshore netters and huge catches have been landed in the Albatross Bay area. The paper, '*Fisheries Resources of Albatross Bay – Gulf of Carpentaria*' (Baker and Shepherd, 2006) reports that 130 tonnes of grey mackerel were taken out of Albatross Bay in 1997, representing 35% of the total catch of that species for the GOC that year. This may explain why the area has been so heavily targeted by netters in the years since.

Prior to offshore netting, line fishers caught an average of 1 to 2 tonnes per boat per year of grey mackerel but confirm that they rarely catch any these days. Charter fishers often encountered schools of grey mackerel that were up to a couple of hundred meters in diameter prior to 2004, usually losing many lures to their razor sharp teeth in the process, but, by 2009/10, reported that this species had declined to be only an occasional catch and schooling fish rarely encountered. Figure 2 reflects this decline but, due to the relatively small charter effort, is certainly not representative of overall changes in species status.

Longtail Tuna

Being predominantly a surface feeding species, the longtail tuna is a fish that makes its presence readily known to those out on the water. Currently, Australia allows no commercial fishing of this species and has declared it 'recreational fishing only'. A change to this status in the GOC has been recommended in the latest fisheries RIS, with a take of 500 kilos per trip suggested for net fishers.

Griffiths in his paper '*Stock assessment and efficacy of size limits on longtail caught in Australian waters*' (Griffiths 2009) reports a lack of information on this species, including an identified area where the Australian stock originates. Waters as far away as Thailand and Indonesia have been suggested but new information points to spawning happening in the Arafura Sea between Australia and New Guinea. Identifying these grounds is vital to ensuring the sustainability of this species in GOC (and Australian) waters.

The paper also notes that the N9 fishery results in a significant by-catch of longtail tuna and that the numbers involved are rarely recorded. This again illustrates the lack of information available pertaining to non-commercial species that are vitally important recreationally.

Charter operators have established an important sector of their sportfishing activities based on the fact that tuna schools are easily visible and lures may be cast to sighted fish. While catch numbers overall are not high, targeting the tuna is an exciting activity and high on the list of client expectations. Most longtail captured are released but those kept for the table make excellent sushi and tuna steaks.

Long time charter operators all agree that the numbers of tuna have reduced significantly since 2005. The schools that once stretched to the horizon during May and June have now been reduced to relatively small numbers of fish that feed for proportionally smaller intervals and are faster moving. Longtails that once frequented the Embley River mouth and the southern side of the swing basin in front of Grandma's Creek are no longer in evidence. It has been speculated that the smaller number of fish is unable to concentrate the bait schools as in days past and this accounts for the tuna being scattered and much harder to catch.

Figure 2 demonstrates the fall in longtail catch rates since a high in 2001. It should be noted that the charter operator involved developed the tuna casting sector of his business steadily from 1997 until making it a major activity from 2001 to 2010. Another factor is the increased presence of sharks following tuna schools in recent years, a probable consequence of reduced tuna numbers. In any case, these figures seem to illustrate that even a species designated non-commercial can be severely impacted by commercial practices.

Large Marine Fauna

Regular sightings of crocodiles, dolphins, manta rays, turtles and sea birds are part of a healthy marine ecosystem and such experiences help to make a fishing trip more memorable. When the rarer species such as dugong, pilot whales, Bryde's whales, sailfish and marlin come along, the day becomes even more special. Tourists, in particular, relish the opportunity to see wildlife that they would never normally encounter.

Crocodiles

Seeing a crocodile in the wild is usually number one on the 'things to do' list of every new Cape York traveler. As a tourist drawcard, they are without peer so maintaining a healthy population is a sound economic as well as environmental decision. River and foreshore nets do pose a problem for local crocodiles but a seemingly low interaction rate would appear to have had little impact on local stocks. Still, a netting closure of Albatross Bay would ensure that crocodiles in the area were spared any deaths from commercial netting.

Dugong

Because of their affinity for seagrass beds, dugong generally range close inshore and into the rivers. There have been regular sightings of dead dugong in the Weipa area and often, commercial fishing vessels have been working close by. One incident, reported to TROPMAC some years ago, involved the netting deaths of multiple animals at once in local waters. Removing nets from the areas frequented by dugong in Albatross Bay should be a priority and would provide a much needed sanctuary for the species along the GOC coast. There have been no reported instances of boat strikes on dugong in the Weipa area.

Manta Rays

The fact that manta rays are usually accompanied by an entourage of fish such as cobia, trevally and queenfish make them of special interest to fishers as a lure cast in the right place will usually get attention from the followers. This means that the numbers of manta rays have been keenly noted, particularly by charter operators who may spend over 200 days a year on the water. All agree that manta ray numbers have decreased to the extent that their incidence has changed from regularly sighted in 2000 to occasionally seen in 2010, and that the average size of the rays sighted has become smaller.



A commercial fisher attempts to remove a drowned manta ray from an offshore net.

Numbers once peaked when the juvenile or 'jelly' prawns moved along the beaches at the end of the wet season when it was not unusual to see up to a dozen large mantas regularly working close to the shoreline between the Red Cliffs and the Embley mouth. Both the numbers and frequency of sightings at this time of year have diminished appreciably. Anecdotal reports of manta rays becoming regularly entangled in offshore nets would seem to indicate that such unreported

interactions have impacted heavily on the local population of these graceful animals.

Dolphins

Line fishers, in particular, have noted that many dolphins in Albatross Bay now exhibit dorsal fin damage, a marked change from the days prior to the onset of intensive offshore netting. Numbers also appeared to have dropped from those present a decade ago. Significant numbers of dolphins were reported as being killed by former N3 and N9 crew members and this was confirmed by data from the early days of the observer program.

Pilot Whales



Pilot whales are another species that have gone from being sighted regularly to rarely in recent times. Encountering a pod of these large but friendly mammals, which will often come to within a couple of meters of a slowly moving boat, is a wonderful experience. There have been unconfirmed reports of the net death of individuals of this species by offshore nets as well.

Turtles

Research into the GOC's turtle population has shown that they are under serious threat from entanglement in so called 'ghost' or discarded nets as well as suffering increasing egg predation on their beach laying sites by wild pigs. Again, with GOC commercial fishers not required to report details of turtles (or any marine fauna) caught in their nets, any contribution that they may have made to turtle mortality is unknown. Former crew of the offshore net vessels reported that the numbers of turtles killed during their days at sea were very significant. Measures aimed at reducing deaths in 'ghost nets' need to be urgently supported by appropriate action regarding offshore nets.

Billfish

Recent exploratory trips by recreational fishers seeking marlin and sailfish have found good numbers in GOC waters offshore from Weipa at certain times of year and there is possibly potential for a charter fishery to develop that includes these species. Although not a marketable species for offshore net fishers, the bills of entangled fish are often removed as souvenirs by crew members when they are taken as by-catch.

Conclusion

The almost complete lack of hard information regarding the impact on large marine fauna by the N3 and N9 net fisheries in these times of enlightened environmental awareness shows a blatant dereliction by Queensland fisheries management of its stated aim of sustainability. The offshore net fishery has been operational for over 15 years and in spite of its controversial reputation and borderline status as a fishing method that is condemned world-wide, has not required its license holders to report by-catch numbers or species. This is in spite of GULFMAC being asked on at least three separate occasions to establish such a requirement. Even more disturbing is the fact that the federal Environmental Protection Agency approved export licenses for these fisheries knowing that a proposed By-catch Action Plan would have no effect.

The large marine fauna issue alone is reason enough to create an immediate sanctuary from netting for their protection and Albatross Bay offers a diversity of marine habitat that few other western Cape areas can rival. Establishment of a large marine fauna sanctuary in Albatross Bay as part of the netting closure would also provide an opportunity for major tourism and environmental marketing initiatives.

APPENDIX 4

Data extracted from *Planning for the future of the Northern Territory's guided fishing industry*, Northern Territory Department of Regional Development, Primary Industry, Fisheries and Resources, August 2009

FISHING TOUR OPERATORS' LOG DATA SUMMARY

JULY 2007 TO JUNE 2008

Number of Licences Issued	161
Number of Licensees who submitted NIL Returns Only	40
Number of Licensees who submitted NO Returns at all	0

Total Fishing Days	6871
Total Line Hours	188304
Number of Target Trip Methods	7865

Month	Fish Caught	Fish Released	Line Hours	Clients	Total Days Fished	Active Returns	Nil Returns
JULY 2007	18555	13928	19788	3705	642	649	31
AUGUST 2007	17913	13723	18823	3495	709	717	34
SEPTEMBER 2007	22229	17330	18693	3192	689	695	45
OCTOBER 2007	21343	17338	17516	3035	678	695	53
NOVEMBER 2007	18104	14186	14884	2355	561	563	66
DECEMBER 2007	6715	4999	5632	1053	157	157	106
JANUARY 2008	1722	1125	2545	534	76	76	115
FEBRUARY 2008	1369	827	2377	440	90	90	123
MARCH 2008	15258	11439	14672	2549	592	596	79
APRIL 2008	25615	19661	25785	4115	956	956	66
MAY 2008	25435	19811	26807	4368	959	974	69
JUNE 2008	18824	14713	20782	3768	762	774	80
TOTAL	193082	149080	188304	32609	6871	6942	867

Barramundi	46160	39347	%Released	85%	% of overall catch	24%
------------	-------	-------	-----------	-----	--------------------	-----

Fishing Target Method	Barra	Crab	Game	Reef	Other	Total
Line Hours	77725	3450	12985	93489	655	188304
by percentage	41%	2%	7%	50%	0%	

Clients	Aust	O/Seas	NT	Non NT
	30382	2227	6975	25634

Most clients overall	NSW	NT	VIC	QLD
by percentage of	6667	6975	8294	3695
all clients	25%	26%	31%	14%

Average Stats	
Line Hours per Fishing Day	27
Fish per Fishing Day	28
Released per Fishing Day	22
Clients per Fishing Day	5
Fish per Line Hour	1

FTO Client Origins 2007/08

Origin	Client Count
VICTORIA	8294
NORTHERN TERRITORY	6975
NEW SOUTH WALES	6667
QUEENSLAND	3695
SOUTH AUSTRALIA	2212
WESTERN AUSTRALIA	1729
UNITED KINGDOM	595
TASMANIA	454
AUSTRALIAN CAPITAL TERRITORY	354
UNITED STATES OF AMERICA	283
GERMANY	232
SINGAPORE	163
NEW ZEALAND	162
ENGLAND	122
ITALY	91
IRELAND	82
CANADA	56
FRANCE	55
NETHERLANDS	33
CHINA	32
SWITZERLAND	32
JAPAN	29
POLAND	23
RUSSIA	23
INDIA	20
MALAYSIA	20
SPAIN	16
SOUTH AFRICA	25
GREECE	13
KOREA	13
SWEDEN	13
UNITED ARAB EMIRATES	12
AFRICA	11
SCOTLAND	10
NORWAY	9
PAKISTAN	8
THAILAND	7
UKRAINE	5
WALES	4

FTO Caught, Released & Retained Species for 2007/08
(by FTO species group)

Logbook Species	Number caught	Number released	Number retained	% released
BARRAMUNDI	46160	39347	6813	85%
BLUE SALMON	3474	2614	860	75%
BREAM-GENERAL	1135	1061	74	93%
CATFISH	5982	5937	45	99%
COBIA	224	115	109	51%
COD-GENERAL	9862	8070	1792	82%
CORAL TROUT	1229	491	738	40%
GOLDEN SNAPPER	17489	10225	7264	58%
JAVELIN FISH	4523	4218	305	93%
JEWFISH	4722	1451	3271	31%
MACKEREL-GENERAL	1389	759	630	55%
MANGROVE JACK	5875	4943	932	84%
MOONFISH	3072	2918	154	95%
MUD CRAB	1185	346	839	29%
MULLET-GENERAL	1772	76	1696	4%
QUEENFISH	6280	5904	376	94%
RED EMPEROR	700	398	302	57%
SADDLETAIL SNAPPER	7548	5412	2136	72%
SARATOGA	1131	1125	6	99%
SHARK-GENERAL	8453	8219	234	97%
SOOTY GRUNTER(BLACK BREAM)	463	439	24	95%
SPANISH FLAG	19272	14926	4346	77%
SPANISH MACKEREL	3486	1786	1700	51%
SWEETLIP	945	825	120	87%
TARPON (OXEYE HERRING)	850	845	5	99%
THREADFIN SALMON	2095	1328	767	63%
TREVALLY-GENERAL	13379	12721	658	95%
TRICKY SNAPPER	15037	9091	5946	60%
TUNA-GENERAL	604	399	205	66%
TUSK/PARROT FISH	2682	1452	1230	54%
TOTAL	191018	147441	43577	77%

Other Species Recorded	Number caught	Number released	Number retained	% released
ARCHERFISH (RIFLEFISH)	21	21	0	100%
BARRACUDA	430	415	15	97%
BARRAMUNDI COD	1	0	1	0%
BATFISH	3	3	0	100%
DART-GENERAL	2	2	0	100%
EEL	8	8	0	100%
EEL-TAIL CATFISH	4	4	0	100%
FINNY SCAD	16	15	1	94%
FLATHEAD	29	18	11	62%
GARFISH	48	48	0	100%
GIANT HERRING	8	8	0	100%
GROPER	9	9	0	100%
GRUNTER	2	2	0	100%
HERRING (BONEY BREEM)	232	0	232	0%
TRIPPLE TAIL	3	3	0	100%
LIZARDFISH	10	10	0	100%
MAORI SEA PERCH	6	0	6	0%
MARLIN	3	2	1	67%
MILKFISH	27	27	0	100%
MONKEY FISH	24	24	0	100%
MORWONG	22	22	0	100%
MOSES PERCH	35	12	23	34%
MOUTH ALMIGHTY	1	1	0	100%
NURSERY FISH	5	5	0	100%
PRAWNS-GENERAL	20	0	20	0%
PUFFERFISH	3	3	0	100%
RAINBOW RUNNER	9	8	1	89%
RED FISH	808	768	40	95%
REMORA	4	4	0	100%
ROSY SNAPPER	13	13	0	100%
RUSSELL SNAPPER	31	6	25	19%
SAILFISH	30	30	0	100%
SAND BASS	152	103	49	68%
SLEEPY COD	8	8	0	100%
STAR GAZER	6	6	0	100%
STINGRAY	3	3	0	100%
STONEFISH	9	9	0	100%
TOADFISH	15	15	0	100%
TRUMPETER	3	3	0	100%
WOLF HERRING	1	1	0	100%
TOTAL	2064	1639	425	79%
TOTAL ALL	193082	149080	44002	77%

LOG BOOK

DATE: 11 / 05 / 05 HOURS FISHED: 8:30 - 3:45

AREA(S) FISHED: OFF BOYD BAY

NO. ANGLERS: 3 ANGLER COMPETENCE: 3 x 2

TIDE: LOW 300 CONDITIONS: 10KSE

SPECIES	Kept	Released	Tagged	Undersized	Lure	Bait
Barramundi						
Mangrove Jack						
Fingermark Bream						
Giant Trevally		1			1	
Other Trevally ^{TEAF}		80			80	
Queenfish	2 ^{12h}				2	
Black Spot Cod						
Gold Spot Cod						
Giant Threadfin						
King Salmon						
Northern Bluefin Tuna	1 ^{4h}	19			20	
Mackerel Tuna						
Narrow Barred Mackerel						
Broad Barred Mackerel						
Doggie Mackerel		1			1	
Barracuda						
Pikey Bream						
Saratoga						
SCAD		2			2	
REMORA		1			1	
ROCKET CATFISH		1			1	

CROCODILES SIGHTED: _____

COMMENTS: HUGE DAY! HEARS OF BAIT SCHOOLS, TUNA, MACROS + TREVALLY OFF NORTH END BOYD BAY. LOTS OF SHARKS, CAUGHT + LOST FISH ALL DAY.

BIBLIOGRAPHY:

- Baker R. & Sheppard R. – *Fisheries resources of Albatross Bay, Gulf of Carpentaria 2006*, Department of Primary Industries and Fisheries Queensland 2006
- Banks R. - *Evaluation of prospective assessment, consultation and management actions that should be applied to the Grey mackerel (Scomberomorus semifasciatus) fishery in the waters off the former Douglas Shire (Far North Queensland)*, Poseidon ARM 2008
- Broadhurst M.K. et al – *Mortality of discards from south eastern Australian beach seines and gillnets*, Diseases of Aquatic Organisms, Vol. 80: 51-61, 2008
- Buultjens J. et al – *The mining sector and indigenous tourism development in Weipa, Queensland*, Tourism Management (2009), doi:10.1016/j.tourman.2009.06.009
- Coastal Habitat Resources Information System (CHRIS), DEEDI 2010
- Diggles B – *On the science of the Coral Sea and the Great Barrier Reef*, Ministers Briefing Note, Cairns 2010
- Felan Consulting - *Weipa Tourism Needs Assessment* June 2004
- Fisheries (Gulf of Carpentaria Inshore Finfish) Management Plan 1999
- FRDC Resource Working Group - *Evaluating the Performance of Australian Marine Capture Fisheries* A Report to the Fisheries R&D Corporation July 2009
- Greiner, R., et al., 2004. *Community benefits from tourism: The case of Carpentaria Shire in North West Queensland*. CSIRO Sustainable Ecosystems: Townsville and Tropical Savannas CRC: Darwin
- Greiner, R. and Patterson, L. (2007) *Towards sustainable management of recreational fishing in the Gulf of Carpentaria*. Report prepared for the Northern Gulf Resource Management Group. River Consulting, Townsville.
- Griffiths S.P., Fry G.C., van der Velde T.D. - *Population dynamics and fishery benefits of a large legal size of a pelagic sportfish, the Talang queenfish, Scomberoides commersonianus, in northern Australia*, 2006
- Griffiths S.P. - *Stock assessment and efficacy of size limits on longtail tuna (Thunnus tonggol) caught in Australian waters*, 2009
- Griffiths S.P., et al., - *Age and growth of longtail tuna (Thunnus tonggol) in tropical and temperate waters of the central Indo-Pacific*, 2009
- Griffiths S.P., et al., - *Feeding dynamics, consumption rates and daily ration of longtail tuna (Thunnus tonggol) in Australian waters, with emphasis on the consumption of commercially important prawns*, CSIRO Marine & Freshwater Research 2007

- Gulf of Carpentaria Developmental Fin Fish Trawl Fishery, *Annual status report 2010*, DEEDI 2010
- Gulf of Carpentaria Inshore Finfish Fishery, *Annual status report 2010*, DEEDI 2010
- Gulf of Carpentaria Line Fishery, *Annual status report 2010*, DEEDI 2010
- Infofish Services – *Tagging of stocked fish in Queensland impoundments and waterways 1987 – 2008*
- Kidd K.A. et al – *Collapse of a fish population after exposure to a synthetic estrogen*, Fisheries and Oceans Canada, Freshwater Institute 2007
- Network for Sustainable Fishing – *A review of concerns relating to the offshore gillnet fishery in inshore waters of the Great Barrier Reef Marine Park in relation to the 'Guidelines For The Ecologically Sustainable Management Of Fisheries'*, August 2010
- Northern Territory Department of Regional Development, Primary Industry, Fisheries and Resources, *Planning for the future of the Northern Territory's guided fishing industry*, August 2009
- Northern Territory Government, Department of Resources, *Fishery status reports 2009*
- Page C.A. et al – *Influence of marine reserves on coral disease prevalence*, Diseases of Aquatic Organisms, Vol. 87: 135-150, 2009
- Reports to GULFMAC by Weipa members Lance Jarrett and David Donald
- Rio Tinto Alcan - *Initial Advice Statement, South of the Embley Project for Rio Tinto Alcan*, November 2008
- Taylor M.D., et al.,- *Responsible estuarine finfish stock enhancement: an Australian perspective*, Journal of Fish Biology (2005) 67, 299–331
- Western Cape Chamber of Commerce – *Strategic Plan 2010 – 2012*
- Zeller B. and Snape N. - *Ecological risk management of Queensland-managed fisheries in the Gulf of Carpentaria*, Department of Primary Industries and Fisheries May 2006