

#### **CONTENTS**

(Hyperlinks Incl., CTRL Click for quick access)	Page
Summary	2
Plates 1 & 2: Collages of some of the press cuttings from 2006 to 2008	3
Plates 3 & 4: Collages of more press cuttings from 2006 to 2011	4
Plate 5: Collage of further press and periodical cuttings to early 2012	5
Introduction	6
Perceptions of depleted inshore fisheries in the GBRMP	6
Oral history study of fishing in Douglas Region by JCU, 2010	7
Concerns about effects of gill netting on iconic marine life	7
Final recognition of need to reduce gillnetting levels	7
Conclusion: urgent management changes necessary	8
Table 1. Four Public Petitions to Government totalling around 5,000 Queenslan signatures requesting reductions in levels of gillnetting	nd 9
Table 2: Main meetings attended, local reports, reviews, summaries by NSF	9
Table 3: Selected Correspondence, Press Articles and Letters to the Edito 117 items from 2005 to early 2012	r, 14
Bibliography: key scientific research, fisheries status reports and independent studie including a short summary of key relevant points	es 29
Acknowledgements	38

#### **SUMMARY**

A record is presented of attempts by the Far North Queensland public, since 2006, to bring the depleted conditions of our inshore fisheries to the attention of the Queensland authorities and to encourage the introduction of the industry restructuring and management changes necessary to halt this decline and rebuild resources for social, economic and environmental benefits. Similar attempts, campaigns and/or concerns are present in Weipa, Cooktown, Cairns, Mackay, Rockhampton and beyond. The political implications of failing to adequately respond to these community efforts and concerns are noted.

The attempts mentioned above include petitions from the Douglas Region, Cooktown and Cairns totalling around 5,000 Queensland signatures, calling for areas in each region (and in Douglas Region, grey mackerel) to be closed to gillnetting. Some petitions call for recognition of the higher value to communities of recreational and charter fishing in relation to over-fishing of urban and popular tourism areas by under-regulated gill netting.

The Network for Sustainable Fishing (NSF) is a network throughout the urban coast of the GBRMP of recreational, charter/tourism and commercial fishers as well as other stakeholders, including those with sustainability and wildlife concerns. Key issues addressed during community meetings leading up to and following the establishment of NSF are summarised.

Summaries, extracts or pertinent points raised are also presented from the minutes of meetings with authorities and politicians, and various reports and reviews prepared by contributors to NSF, as well the majority of 117 listed press articles, letters to the Editor and correspondence with Fisheries Queensland, a previous Fisheries Minister and the last two Labor Premiers. The bibliography provides facts, figures and/or conclusions from 18 recent, important, relevant scientific research reports, fisheries status reports and independent studies.

CAREFISH/ NSF recommendations for management changes to the ECIFF necessary to help halt the decline of fish stocks and improve the profitability of inshore fishing sectors are presented in a discussion document '*The Bones of Contention, 3<sup>rd</sup> Edition*' (Aubin & Cook, Aug. 2012) as a follow-up to this report.



Plates 1 & 2: Collages of some of the press cuttings from 2006 to 2008.





Plates 3 & 4: Collages of more press cuttings from 2006 to 2011.





Plate 5: Collage of further press and periodical cuttings to early 2012

#### INTRODUCTION

The purpose of this report, following a change in State Government, is to present a permanent record to the new government, in relation to the East Coast Inshore Finfish Fishery (ECIFF), of:

- four petitions totalling around 5,000 voters signatures from FNQ regarding the need for closures to gillnetting of overfished waters in or around estuaries (see Table 1);
- the scale of the anxiety and indeed anger felt by many of the informed fishing public in relation to the marked and in most cases continuing decline in numbers and sizes of larger inshore fish species experienced in Far North Queensland over recent years (see Tables 2 & 3 and Plates 1 to 5);
- the social, economic and environmental impacts of the decline of inshore fish;
- the high level of dissatisfaction with the quality of inshore fisheries management and the poor response to public concerns displayed, at least until recently, by Fisheries Queensland and the *political implications* of this;
- the poor level of representation in the North Queensland by the relevant peak bodies for both the recreational and commercial fishers;
- selected cuttings from the popular press and fishing periodicals highlighting key issues (Table 3 and Plates 1 to 5);
- summaries of some public meetings on fisheries issues in the region (Table 2);
- a bibliography including summaries of key points from a series of important, relevant peer-reviewed scientific publications and other selected reports published in the grey literature requiring examination in any independent review of the changes needed to fisheries management in North Queensland.

The current inability of Queensland authorities to manage fishing effort by gillnetters spatially i.e. regionally and according to the stock levels of different fish populations along the State's coastline disqualifies the ECIFF from meeting the requirements of ecologically sustainable development (ESD) and the Guidelines for the Ecologically Sustainable Management of Fisheries (2007) as required under the Environmental Protection and Biodiversity Conservation Act (1999). Close examination will reveal it is largely "spin" that is allowing the ECIFF to operate under this Act and for it to be certified as a Wildlife Trading Operation.

The past refusal of the Authorities under the previous State Government (i.e. prior to March 2012) to recognize and adequately address the public angst over what informed members of the public perceive as blatant overfishing by gill netters in Queensland's inshore waters almost certainly contributed to the last government's downfall in the March 2012 Elections. The electorate simply felt their concerns and angst were being either ignored, belittled or disputed by government.

#### PERCEPTIONS OF DEPLETED INSHORE FISHERIES IN THE GBRMP

Where a community, such as the Douglas Region, has profound concerns over an undocumented decline in natural resource levels, as expressed in the meetings and press articles listed in Tables 2 and 3 and Plates 1 to 5, in the interests of ecologically sustainable development and responsible resource management, authorities have a legal responsibility to record the concerns and to closely investigate and monitor such trends. If this is not done, shifting baseline perception<sup>1</sup> is the inevitable result, where the current generation comes to think that present day resource levels are 'normal'.

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<sup>&</sup>lt;sup>1</sup> Google 'shifting baselines' and the name 'Pauly' for much more on this universal problem in fisheries management.

As funding and staff issues of the relevant authorities responsible for ensuring ESD in relation to our fisheries are inevitably stretched, the temptation may be for the authorities to merely gloss over as fanciful 'anecdotal information' "stories" of once abundant large barramundi, queenfish, threadfin salmon, snub-nosed dart, fingermark, grunter and other fish in the Daintree Estuary and regular big schools of grey mackerel gathering on their spring spawning grounds off nearby Snapper Island. This report aims to prevent that possibility.

#### ORAL HISTORY STUDY OF FISHING IN DOUGLAS REGION BY JCU, 2010

In order to establish a formal record of the memories of abundant large fish of several species from the inshore waters of the Douglas Region, the community including NSF supported a study of the oral history of fishing in the Douglas region undertaken by staff of James Cook University, Townsville, led by Dr Renae Tobin in 2010 funded by a FRDC grant. Many NSF members participated and are keen to learn of the collated results which, members understood at the time, would be freely available in a timely manner<sup>2</sup>.

The information provided by most participants in the JCU oral history study had already been given to NSF under less formal arrangements. It is clear that those senior members of the community as well as regular holiday visitors of the 'grey nomad' fraternity, who have fished the area for many years, have observed significant declines in the sizes, numbers and diversity of their catches.

While recognizing that environmental impacts of development will be partly responsible for lower inshore fish numbers, all or almost all of those aware of the drop in numbers of large fish consider that gill netting plays a major role in keeping sizes and numbers of larger inshore fish species at very low levels.

#### EFFECTS OF GILL NETTING ON ICONIC MARINE LIFE

Many NSF members are equally concerned that inshore netting has had, and is continuing to have, a significant negative impact on numbers of iconic marine animals through accidental drowning. Tables 2 and 3 and Plates 1 to 5 record some of the efforts of community members to make government aware of the concerns and conflict within the Douglas Region regarding what world's best fisheries practices would label as underregulated activities of gillnetters posing unacceptable risks to dugong, inshore dolphin, turtle and iconic members of the shark family such as sawfish, shovel-nosed and other rays.

A quick review of the collages in Plates 1 to 5 will reveal the levels of concerns over the numbers of dead stranded dugong and turtle, including a call by a Cairns Vet to ban gillnetting in areas frequented by dugong.

#### FINAL RECOGNITION OF NEED TO REDUCE GILLNETTING LEVELS

A major breakthrough came in March 2012 when political parties announced they recognized that the ECIFF had too many gillnets, resource levels were down and there is a need to buyback gillnet licences. Predictably State Labor was the last to acknowledge this and had even by then failed to adequately respond to the four petitions presented to them, totally around 5,000 Queensland voters. *The impact of this failure was certainly felt at the ballot boxes.* 

The political policy statements announcing allocation of funding for the buyback of gillnet licences indicated a paradigm change had occurred in Queensland fisheries management. It

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<sup>&</sup>lt;sup>2</sup> So far we have not been made aware of any analysis of the information we provided.

suddenly became "respectable" to recognize that our inshore fish stocks are depleted and better management of the industry and resources is essential.

#### CONCLUSION: URGENT MANAGEMENT CHANGES NECESSARY

As the NSF expanded to other areas it became apparent that public concerns about the poor state of inshore fish stocks are shared throughout the length of the urban coast of the GBRMP and beyond. Key individuals from Weipa, Cooktown, Cairns, Mackay, Rockhampton, and further south have for long pushed for something to be done about their impoverished inshore fish stocks and the perceived levels of overfishing by gillnets. The Douglas Region just happens to be keeping detailed records of their campaign.

The first indication that authorities were beginning to recognize deficiencies in ECIFF management was in 2008 when Peter Garrett MP, Federal Minister for the Environment, received an independent review of our inshore fishery management arrangements. This is/was available at <a href="https://www.environment.gov.au/coasts/fisheries">www.environment.gov.au/coasts/fisheries</a> (Ref. No. R3 by Gunn, Meere & Stevens in the Bibliography, below).

The Review notes new fishery management measures "do not adequately reflect a precautionary approach" and identifies "a clear need to lower catches and effort and hence reduce the risk." It recommends "a fundamental rethink of the management approach..." and notes that "a *delay can be extremely costly to a resource* ...".

A quick glance through the summaries in the Bibliography will reveal how and why such delays may be costly: Queensland Fisheries must now recognize the phenomenon of philopatry, so long recognized by developed fisheries in the West and something for which the current management system of the ECIFF is not equipped to deal adequately. By 2012, the introduction of spatial management of gillnetting effort, a condition for the granting of a permit to the ECIFF as a legitimate Wildlife Trading Operation in 2008, still has not been implemented. It is essential for resource security to implement this as soon as possible.

International fishery consultancy company, Poseidon ARM Pty Ltd, undertook a scoping study in October 2008 of the processes for establishing management arrangements for a local inshore grey mackerel fishery, against best available evidence. Their report, (R5 in the Bibliography below) is available from their website and notes that, in view of the clear concerns identified for sustainability of the resource: "management authorities ... are required by law to apply the Precautionary Principle, or at the very least, undertake a participatory risk analysis evaluation ..." To date consultation with stakeholders for such a risk analysis has been inadequate.

There was a report published earlier this year (2012) of a further 'Assessment of the East Coast Inshore Fin Fish Fishery' but again this fails to appreciate the extent by which the ECIFF fails to meet the required standards for ESD. It also fails to adequately address this fisheries' inability to meet the requirements set out in the previous Assessment's conditions required to meet international wildlife trading operation standards.

Significant changes must be made in the management practices of this fishery to meet modern day standards, remove the significant risks to certain inshore species, and improve the sustainability and indeed the value of the ECIFF. These are increasingly being demanded by the informed fishing public in Queensland and are discussed in "*The Bones of Contention*" a CAREFISH & NSF report, (Aubin & Cook, 3rd Version *in prep.*, August 2012) to be available in September 2012 online at <a href="www.ffc.org.au">www.ffc.org.au</a>.

Table 1. Four Public Petitions to Government totalling around 5,000 Queensland signatures requesting reductions in levels of gillnetting

Ref. No.	Date: yyyy.mm.dd	Title and outline/summary
P1	2006.08.16.	Petition organised by Lester McDonald and commercial fisher Mark Harris requesting the closure of the grey mackerel fishery off Snapper Island to any gill netting in keeping with a long held gentlemen's agreement observed in the Douglas community. Petition had <i>658 signatures</i> of persons with interests in fishing in the then Douglas Shire and was presented to local State MP Jason O'Brien.
P2	2011.05.25	Petition to Legislative Assembly, principal petitioner Michael Hale, head ranger, Yuku-Baja-Muliku, Archer Point Land Trust, Cooktown listing concerns about sustainability of commercial gillnetting in the Annan River estuary near Cooktown, unreported levels of drownings of turtle and dugong in gillnets and the value of recreational and tourism fishing outweighing value of commercial fishing in region. Requested closure of areas to all commercial gill netting and a recognition of the values of recreational fishing to the area. <i>!8 Traditional Owners from Cape York signed the petition</i> .
P3	2011.05.	Petition to Legislative Assembly principal petitioner David Cass. Cooktown Fishing Restoration Group, listing concerns about sustainability of commercial gillnetting in the Annan River estuary near Cooktown, unreported levels of drownings of turtle and dugong in gillnets and the value of recreational and tourism fishing outweighing the value of commercial fishing in region. Requested closure of areas to all commercial gill netting and a recognition of the values of recreational fishing to the area. <i>Around 950 persons mostly from Cooktown and elsewhere in Cape York signed the petition</i> .
P4	2011.11	Parliamentary Petition arranged by Paul Aubin of CAREFISH and local Member of State Parliament for Barron River, Steve Wettenhall. The call was for a closure of inshore waters around Cairns to all gillnetting. The <i>online petition ran for just three weeks and attracted 674 Qld voters</i> with 38% of the votes being given in the last 30 hours of the petition indicating a last minute increase in awareness of the petition. An additional 3,000 'hard copy' votes were gathered on the street by the CAREFISH campaign in the three

## Table 2: Main meetings attended, local reports, reviews, summaries prepared by NSF

weeks including 252 in three days from the Douglas Region.

Ref. Date: Title and outline/summary

No.

yyyy.mm.dd

M&R1. 2006.10.23

Meeting of the first East Coast Inshore Fin Fish consultation meeting, Port Douglas. The minutes are a six page summary of observations and information given by Douglas Shire attendees to the meeting. These record DPI&F being alerted to: 1. Serious drop in inshore catches and CPUE in region. 2. Requested information on grey mackerel research 3. Evidence for overfishing of local inshore waters highlighted. 4. Local insistence that 'anecdotal' information must not be dismissed but when everyone is saying the same thing, the significance must be recognized and acted upon. 5. Possibility of environmental changes reducing survival of spawn and larval fish must be considered — all more important not to overfish pre-spawners. Recommendations: Ban on use of gillnets to capture grey mackerel, localised fisheries management, ban on offshore netting in inshore waters of Douglas Shire, dugong protection area should be declared in inshore waters, estuaries

Ref. Date: No. yyyy.mm.dd

#### Title and outline/summary

and adjacent waters should be zoned as no-netting areas. 6. Ban on recreational bait netting. 7. Reduction of bag limits required, 8.Review of net attendance, 9. Change Fisheries regulations regarding privacy of data so that total catches and locations for any year, in any square, are available to the public regardless of how many fishers operated in that area. 10. Review need

to buyback netting licences.

M&R2. 2007.01.23

Meeting of commercial net fishers of Douglas Shire at Daintree Palms Hotel, Wonga. 6 – 7 pm The meeting was called by Mark Harris, commercial fisher and QSIA net delegate for the area. Meeting secretary: D Cook.

Minutes recorded that local commercial net fishers in the Douglas Shire have observed an increase in netting by non-local commercial fishers and considered this was probably unsustainable. The local netters said they were getting blamed for overfishing and dugong deaths when it was the outsiders doing the harm. They discussed their gentleman's agreement never to net grey mackerel and recommended at least a seasonal closure for offshore netters in inshore waters and the need to establish a local net management area. They presented details of what this should involve, including closing the area to the big live-aboard boats doing the offshore netting in inshore waters. Mark Harris also expressed concerns of loss of fish habitat in estuaries, both nursery area and deeper pools and snags because of silting.

M&R3. 2007.01.23

Meeting: Joint meeting of Douglas Shire Local Recreational, Charter and Commercial Fishers at Daintree Palms Hotel, Wonga Beach, 7 – 9.30 pm. called by QSIA net delegate, commercial fisher, Mark Harris. Attendance register names 39 people. Meeting secretary: D Cook.

This followed on from the private meeting of the commercial fishers. Local commercial fishers all agreed they are aware of "a very noticeable drop in numbers and sizes of catches in these waters" and they were "outraged to see out-of-towners coming in and decimating the local schools of grey mackerel". They said they feared management "action might come too late to save local grey mackerel fishing grounds if netting of local waters continues in 2007." The Mtg agreed that M Harris should write an open letter to QSIA as an interim measure to request that Cairns-based fishers recognize that local stocks are in trouble and to stay away. Minutes widely circulated.

M&R4. 2007.03.29

Meeting, Wonga, **Launch of NSF**, attended by MP J. O'Brien, Fisheries insp. S. Pollard and 44 signing attendance register: D. Cook meeting secretary.

Minutes available. PowerPoint presentation by D Cook on background to campaign, also presented summary of research results by D Welch and others on grey mackerel. MP O'Brien reported on meeting with Fisheries Minister when he presented the minister with petition of 658 signatures requesting a ban on netting of grey mackerel. Discussion on serial overfishing and hyperstability. All 44+ participants requested to be kept informed through the new Network for Sustainable Fishing initiated at this meeting. Unanimous support given to D Cook to serve as coordinator of the NSF until further notice.

M&R5. 2008.01.15

NSF Report, 'A Review of the report: 'Fisheries Biology and interaction in the northern Australian small mackerel fishery (Cameron & Begg, 2002) in relation to sustainability concerns for the grey mackerel fishery in Far North Queensland'. The review prepared for NSF by D Cook

Widely circulated to NSF members, GBRMPA, DPI&F. The review highlights Cameron & Begg's conclusions include: "there is no evidence to indicate grey mackerel travel long distances" "female grey mackerel reach sexual maturity at 75-80 cm total length". Key recommendations of the report are that

Ref. No. Date: yyyy.mm.dd Title and outline/summary

"small mackerel species (incl. greys) should be managed with utmost caution until detailed stock assessments are undertaken" and the need to develop "a reliable indicator of stock abundance for each species, i.e. a means of estimating independently of total annual landings, whether annual stock numbers are relatively steady, decreasing or increasing AND "determine whether individuals ... Intermingle freely throughout their range or are there different centres of population with very little if any exchange of individuals between different populations."

This NSF review of Cameron & Begg's paper recommends that based on the findings of their own research (Cameron & Begg, 2002) and the Douglas Shire community's observations of depleted fish stocks, they should follow the Precautionary Principle and "as an interim and absolute bare minimal management measure", they should close the area inshore of lines drawn from Cape Tribulation to Low Isle to Port Douglas (i.e. the Port Douglas Partially Smooth and Smooth Waters, on a seasonal basis to all offshore and out-of-town netting from 1 June till 1 February every year, commencing 1 June 2008.

M&R6. 2008.02.10

Report: 'Summary of observations in changes to fish stocks over 14 years from 1994, in Packer's Creek' (the Port Douglas town marine inlet) by Dario Balog. In letter addressed to MB&FC, Cc: DPI&F, GBRMPA, DLMAC. Prepared for meeting with FQ, NFC, DPI&F, Cairns. Full text can be obtained as part of Appendix 2 M&R7, to M&R8 (available from <a href="https://www.ffc.org.au">www.ffc.org.au</a>).

Commencing 2003 a big drop off in baitfish and larger fish numbers is recorded, detailed notes given for each species. The only fish to show an increase in numbers, and that was from 'hardly any caught' to 'dominant, say 80% of catch during winter and spring' has been the pikey bream.

M&R7. 2008.02.11

Meeting: Douglas Community members and Cairns Northern Fishing Centre re declining inshore fish stocks. The following Douglas community members met with senior FQ staff to present their concerns about overfished condition of Douglas inshore waters: Brian Roberts (President Mossman Boat & Fishing Club), Jamie Beitzel (Charter Fisher Daintree), Ron Savage (Community Member, past president of Mossman RSL), Mark Harris (Commercial Fisher), David Cook (Conservation & Liaison Officer, MB&FC & Co-ordinator NSF). Dario Balog sent apologies and a detailed report (M&R6, incl in meeting minutes available as Appendix 2 to M&R8, full report of which can be downloaded from <a href="https://www.ffc.org.au">www.ffc.org.au</a>.

M&R8. 2008.10.23

NSF Report: 'The possible collapse of a grey mackerel population and the decline of an inshore fishery within the World Heritage Great Barrier Reef Marine Park: the need to implement the precautionary principle to immediately close local inshore waters to all offshore and itinerant gillnetting: a case study.' 44p. Prepared for NSF by D Cook. Available online from Fishers for Conservation:

www.ffc.org.au/Grey Mackerel.html#latest.

An account of the grey mackerel line fishery and its importance to the community of the Douglas Region, the decline of catches from 2003 attributed to night gillnetting, and, following daytime gillnetting of the Snapper Island aggregation site just 2 km off the Daintree coast, the total, albeit temporary collapse of the fishery in 2008. The remaining two commercial line fishers each caught in the entire season no more than what used to be a good catch in a single day.

Recommendations include the authorities recognizing that local waters are overfished, that they use the precautionary principle to close local waters to most forms of netting, that they develop strategies to help rebuild inshore fish

Ref. No. Date: yyyy.mm.dd Title and outline/summary

stocks, including protection of spawning aggregations and assumption that key inshore species restricted to turbid waters have local populations unless proven otherwise.

A study by an independent Fisheries Manager to review grey mackerel and other offshore and itinerant netting in the WHA is recommended in the report. Since the collapse in 2008 the big net boats have not returned to fish grey mackerel at Snapper and for that the local mackerel fishers are greatly relieved as stock numbers have increased.

M&R9. 2007.12.12

Meeting J O'Brien MP & D Cook, at MP's office, Cairns.

Discussed the outrage felt in the community about what the community perceive as heavy overfishing by out-of-town gillnetters, particularly those targeting grey mackerel. O'Brien requested a letter with the minimal acceptable compromise with the industry. This was written and sent the following day by D Cook.

M&R10. 2008.10.31

NSF Report: 'Concise Extracts from Independent Review of Proposed Management Arrangements for Qld ECIFF dated 31 October 2008'. Extracts prepared for NSF by D Cook. Full text of the actual government sponsored report by Gunn et al was released 27 November 2008, and was available, but no longer is online at:

<u>www.environment.gov.au/coasts/fisheries/qld/east-coast-finfish/index.html;</u> Extracts widely circulated on NSF.

M&R11. 2010.05.21

NSF Report: background for meeting, 'The missing links, diminishing numbers of iconic wildlife in a neglected area, the inshore waters of the Marine Park' submitted to Marine and Tropical Sciences Research Facility Workshop: 'Key marine species in the GBR: scoping workshop on issues, impacts and sustainable management'. Held at Rydges Tradewinds Cairns Esplanade, Cairns.

Presentation highlights that an important area of GBRMP, of high tourism importance but often overlooked and overshadowed by the reef, is subject to a management regime inappropriate for a World Heritage Area. Iconic inshore fish have been reduced to a fraction of their former numbers whilst dugong, turtles, dolphins and even humpback whales form unquantified by-catch of the so-called 'offshore' netters. This does not conform to the requirements of the EPBC Act, the Code of Conduct for Responsible Fishing and the Precautionary Principle as the risks to such iconic species are significant. Knowledge levels of stocks and breeding patterns are insufficient for the offshore gillnet fishery to be WTO accredited whilst there is such a high level of concern for depleted stocks. The fishery (esp. around urban areas) would have much higher market value, through recreational fishing, including charter fishing and tourism, if stocks were allowed to recover and managed for high or optimum resource levels.

M&R12. 2010.08.01

NSF 'Flagship' Report 'A review of concerns relating to the offshore gillnet fishery in the inshore waters of the Great Barrier Reef Marine Park in relation to the Guidelines for the Ecologically Sustainable Management of Fisheries with recommendations for early intervention.' Network for Sustainable Fishing. NSF contributors: David Cass (Cooktown), David Cook (Douglas), Paul Aubin, (CAREFISH, Cairns), Kim Martin (Rockhampton), Lance Murray (Mackay). Editor: David Cook, 62pp.Publ. online by Fishers for Conservation, <a href="https://www.ffc.org.au/Grey\_Mackerel.html#latest">www.ffc.org.au/Grey\_Mackerel.html#latest</a>.

This is the flagship document of the NSF prepared with input from five authors living in different regions of the GBRMP urban coast. Closer examination of

## Ref. Date:

#### Title and outline/summary

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the ECIFF along the entire urban coastline of the GBRMP has since revealed that the majority of the shortcomings of the offshore gillnet fishery attributed in this review are also attributable to the region's inshore gillnet fishery.

The paper examines the offshore (water deeper than two metres) gillnet fishery in the context of the 'Guidelines for the Sustainable Management of Fisheries, 2007' and shows that the management of the ECIFF fails to meet any of its 17 principles, objectives and guidelines and as such, strictly speaking should not be approved as a WTO under the EPBC Act.

M&R13. 2011.04.06

NSF PowerPoint Presentation: 'The urgent need to reverse the decline of fish stocks and other iconic marine life in the inshore waters of the GBRMP'. Prepared for NSF by D Cook.

A 20-slide PowerPoint presentation being a quick introduction to NSF concerns, findings and recommendations. Available to download from: www.ffc.org.au.

M&R14. 2011.04.14

NSF Presentation to Minister: **Concerns over dugong deaths in Douglas Region, FNQ.** PowerPoint presentation delivered to QLD State Minister for the Environment, Kate Jones, Cairns, 14 April 2011. By David Cook & David Solomon, Senior TO, Jalunwarra People, Eastern Kuku Yalangi, Daintree

13 Slide presentation of Douglas Region press cuttings and concerns raised by local indigenous Traditional Owners and elders about overfishing by gillnet boats and deaths in gillnets of dugong and turtle, and their call for a dugong protection area to be declared.

M&R15. 2011.10

Report: 'Bones of Contention' 1<sup>st</sup> Public Release Oct 2011, Paul Aubin, CAREFISH, the Cairns-based sustainable recreational fishing network affiliated to NSF

M&R16. 2011.10.18

Submission (to DSEWPAC) from the Douglas NSF on environmental concerns and sustainability aspects of the ECIFF- wide distribution

M&R17. 2012.03.12

NSF report: 'The depleted inshore fisheries of the GBRMP need urgent management change. Final Submission to the UNESCO delegation to Queensland, March, 2012'. Prepared for NSF by D Cook. Available: www.ffc.org.au;

The report considers the Federal Government's Assessment of the East Coast Fin Fish Fishery (ECIFF) to be overly lenient and probably politically expedient. It points out that the previous assessment done in 2008 was far more accurate but still required key improvements have not been implemented, whilst those that have, are largely ineffective. Detail is given for the reasons for concerns of overfishing by gillnets in inshore waters of the GBRMP and the report identifies those fish species most susceptible to overfishing by gillnets. It lists some short-comings of the current fishing regulations, discusses illegal netting, four-inch mesh, bait nets and lack of fisheries surveillance and enforcement. The report highlights the mindset in the fishery of "I'd better catch them before someone else does", and also the risks to inshore fish stocks from dredging and dumping, incidental by-catch of iconic marine mammals and turtle, and waste of bycatch of large fish of low market value. It also addressed past compensation paid for RAP being used to buy more fishing boats.

The report concluded that Queensland fisheries are not yet suited to comanagement and authorities need to learn from history and take firm action to halt declining stocks. A repeat of environmentalists and sports fishers suing

Ref. No.	Date: yyyy.mm.dd	Title and outline/summary	
		the US Gov. for failing to protect fish stocks could happen in Queensland. Recommendations for urgent change are given. Key Appendices were included.	
M&R18.	2012.04.30	NSF Submission 'Comments on the GBRMPA draft Terms of Reference for	

NSF Submission 'Comments on the GBRMPA draft Terms of Reference for the Strategic Assessment of the GBRMP World Heritage Area'. Prepared for NSF by D Cook. Sent to: Strategic Assessment Project, Great Barrier Reef Marine Park Authority.

Included fourteen attachments supplied as integral parts of the comments from the Network for Sustainable Fishing, Douglas Region, on the draft TOR for the above strategic assessment. These included four confidential statements on overfishing from outside the Douglas Region but within the GBRMP and of direct relevance.

M&R19. 2012.05.03

NSF Submission on 'Role of Science in Fisheries Management' to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry, House of Representatives Committees

Submitted as attachments 4 items namely: the NSF 20 slide PPT presentation on declining fish stocks in the GBRMP, the NSF submission to DSEWPAC for the recent assessment of the ECIFF, the NSF submission to UNESCO, (March 2012) and the NSF 'Review of Concerns...' (2010) and requested that these be required reading for anyone undertaking the assessment.

Table 3: Selected Correspondence, Press Articles and Letters to the Editor, 117 items from 2005 to early 2012

items from 2005 to early 2012			
Ref. No.	Date	Article/letter	Summary
P1.	2005.12.08	Press article: 'Slaughtered death of dugong investigated'. Dugong found with tail hacked off and stomach slit at Rocky Point. Just one of a number of such findings along populated beaches. How many more on unpopulated beaches go unreported?	Rocky Point (near Wonga Beach) commercial fisherman informs NSF that this is almost certainly work of one of the out-of-town gillnet boats. [Comment: when a dugong's tail is trapped in a net it often spins in the water making it even more tightly entangled and often impossible to remove without either cutting a large section of the net or hacking off the tail. The stomach is slit to try to reduce floatation caused by build up of gases during decomposition.]
P2.	2006.08	Society for the Conservation of Reef Fish Aggregations, Newsletter No.9. In "Breaking news" section.	"A spawning aggregation of grey mackerel, Scomberomorus semifasciatus, is reportedly being overfished by commercial netters in Australia, according to fisher records. The Queensland State Government is looking at the issue in its review of inshore net fisheries." News item taken from Cairns Weekend Post"
P3.	2006.08.16	Letter to local Labour MP to present petition requesting closure of grey mackerel to netters	23 points made accompanying petition with 658 signatures requesting closure of grey mackerel spawning grounds to netters
P4.	2006.08.29	Survey of fishers Rocky Pt boat ramp	16 people turned up for photograph for Gazette, each interviewed & recorded stating significant reduction in inshore fish numbers and sizes. Those

Ref.	Date	Article/letter	Summary
			who fished for mackerel said esp. in mackerel
P5.	2006.08.31	Lead, front page article, Port Douglas & Mossman Gazette	lead story: 'Mackerel fear – Local fishermen fear species will disappear'
P6.	2006.09.05	Letter from TO Bennet Walker to the Editor, Gazette	Stating dugong numbers have no chance to build up because of the netting and that the big boats are the worst. Asked that " gov. stop netting mackerel to save the dugong".
P7.	2006.09.06	Four page NSF press release	Photos and record of concerns about overfishing of (pre-) spawning aggregations of grey mackerel off Daintree Coast
P8.	2006.09.07	Letters to Editor Gazette:  'Mackerel Investigation needed' by D Cook	Points out the local signs are that there is overfishing of grey mackerel and DPI&F should investigate, also that there is a growing body of evidence to suggest that there may be local stocks. DPI&F officials advised that the demise of grey mackerel is occurring on their watch.
P9.	2006.09.07	Letters to Editor. 'Netting drowns dugongs' by Daintree and Snapper Island TO, David Solomon	Says that the netting of grey mackerel also drowns dugong and turtle and it is wrong for these big boats to come inshore to fish. He says local resources are not enough to support the big Cairns Boats and urges his people to vote for the politician that listens to them.
P10.	2006.09.09	Cairns Weekend Post p8 Three column article entitled: 'DPI BLASTED FOR ALLOWING SERIAL OVERFISHING. Breeding site being bled dry'. Two photos, one of grey mackerel showing roe	States a claim that mackerel line fishers have seen a drop of 80% in landings in 5 years since netters started targeting grey mackerel in the region and records concerns that DPI&F is allowing targeting by netters of spawning of grey mackerel. Mr Cook warns of serial overfishing and calls for regional quotas for grey mackerel. DPI&F say no evidence of overfishing.
P11.	2006.09.14	Letter to Cairns Post by commercial fisher, Mark Harris 'My experience with grey mackerel'	Copy sent to NSF but not sure if CP printed his article which documents how his caches and the sizes of the schools he has observed over the last four or five years steadily decline.
P12.	2006.09.22	six page brief presented to Jason O'Brien, local MP on the event of his spending a half day to investigate the problem	D Cook took MP to meet bait and tackle shop owners, commercial mackerel line fishers, owners and guests at two caravan parks, Daintree charter fishers and Daintree TO, David Solomon & press.  Jason O'Brien promised "action" on the need for better fisheries management.
P13.	2006.09.25	Cairns Post article with photo of TOs David & Christine Solomon: 'Call to ban gill netting'.	'Douglas Shire residents, Aboriginal elders, tourists and tour operators have called on MP Jason O'Brien to ban gill netting in shallows off the Daintree Coast. About 50 frustrated residents confronted Mr O'Brien on Friday' etc.
P14.	2006.09.26	Cairns Post p2 article: 'Mackerel battle. Gill	Commercial grey mackerel netter quoted as claiming mackerel do not spawn at Snapper Island

Ref. No.	Date	Article/letter	Summary
		netters in uproar.' The article reports on press release on the local MPs visit to see for himself the concerns of the Douglas community about overfishing and states that locals are threatening physical violence quoting Mark Harris as saying "People are talking about going out and giving them a hiding to get rid of them (the out-of-towners netting grey mackerel).	but "migrate up and down the entire coast from Hervey Bay to Cape York". Science has now shown that there are at least two non-mixing populations of grey mackerel on the east coast with "sub-populations likely at the embayment level" i.e. more than two populations!
P15.	2006.09.28	Email from Mayor, Mike Berwick, supporting the move for a broader sustainable management regime	Continued support from all council members for there to be more focus on sustainability and local use of local fish resources rather than removal by outsiders.
P16.	2006.10.02	Letter to Alan Jones, QSIA netting delegate from Douglas commercial fisher, Mark Harris, cc Council	Attached copy of "petition with 658 signatures requesting banning of offshore netting of grey mackerel in waters off Douglas shore." "the community are very angry with them (the offshore netters) also mentioned drowning of turtle and dugong
P17.	2006.10.10	Brief to Douglas LMAC presented by David Cook	'Concerns over Inshore & Estuary fish stocks in World Heritage Waters along Douglas Shire Coastline'
P18.	2006.10.11	D Cook emailed DPI&F Minister	re commercial netting of grey mackerel
P19.	2006.10.12	Gazette, Letters, from DPI&F. 'Data kept confidential'	DPI&F say that: "Making assessments on an entire fishery based on the catch data of one operator, as has been done by Mr Cook, does not give a true indication of the fisheries' sustainability' and "there is no suggestion at this stage that grey mackerel stocks in Queensland are overfished".
P20.	2006.10.19	Gazette Letters to the Editor: D Cook's letter: 'Grey mackerel demise'	Pointed out that DPI&F were seriously misquoting me to claim that I had based my assessment on the catches of only one commercial fisher and that he seems to have ignored the concerns of two generations of Douglas fishers
P21.	2006.10.20	TOs David & Christine Solomon wrote to Chairman of ECIFF Consultation Committee	Requested waters off the Douglas shire to be made a dugong protection area as they were "worried that there were almost no dugongs left in our areas" and "netting had killed too many of our dugongs"
P22.	2006.10.23	Bamanga Bubu Ngadi Munku of Mossman wrote to Chairman of ECIFF	Requested local waters be made a dugong protection area and ban all big boats from netting in local waters, small local netters could continue as they are considered to have very little impact on

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		Consultation Committee	dugongs.
P23.	2006.10.26	Gazette, p5: 'Fishermen call for netting ban at fiery consultation meeting'	"Tempers flared between local fishermen, out-of-town commercial fishermen and officers from DPI&F at the first consultation meeting to ban net fishing in waters off the Douglas Shire" Note a mis-reporting here, it was to ban <b>offshore netting</b> not all netting. The launching of web pages on grey mackerel fishing on <a href="https://www.ffc.org.au">www.ffc.org.au</a> was announced.
P24.	2006.10.26	Cairns Post, lead article Environment page, p19. 'Angler's anger boils at fisheries review'. Incl. photo of local MP talking with TOs David & Christine Solomon, Daintree charter fishers Jamie Beitzel & David Patterson and David Cook	Article notes that "tempers flared in Port Douglas as consultation started for the review of Queensland's largest fishery" and that " local commercial fishers pointed out that all net fishers from outside our area are not welcome in the area". The article quoted Mr Cook as saying "It is extremely important that a netting ban (on grey mackerel) be in place before the start of next year's (2007) grey mackerel season."
P25.	2006.10.28	D Cook emailed DPI&F Minister	
P26.	2006.10.28	Cairns Weekend Post, article 'Increased protection needed. Shire may lose treasured gem'	Traditional Owner. Bennet Walker and sons, and local commercial fisher M Harris interviewed about upsurge in deaths of dugong and turtle reported and attributing this to increase in gillnetting by out-of-town gillnetters
P27.	2006.10.29	Email from Mayor M Berwick, widely circulated	Proposed Douglas Area "is trialled as a special (fisheries management) zone where local catch and effort data are recorded and publicised over time." He advocated the area should be closed to roving net licences and locally managed for sustainability and local consumption.
P28.	2006.11.03	Reply received from Minister acknowledging email of 11.10.06	No useful information was provided
P29.	2006.11.13	Brief presented to Lindsay Nelson-Carr, Minister for the Environment and Multiculturalism in Port Douglas	'Concerns over inshore and estuary fish stocks in World Heritage Waters along the Douglas Shire Coast'
P30.	2006.11.21	Reply received from Minister acknowledging email of 26.10.06	Thanking NSF for interest in the fishery, saying there will be opportunity to comment in mid 2007.
P31.	2006.12.06	Article in Gazette, based on photos of five different dead or dying turtles taken by D Cook at various times in last year, at least some suspected of drowning in	Gazette contacted Parks & Wildlife where a spokesperson claimed the turtles had most probably died by ingesting plastic bags. This denied by experienced veterinarian and turtle specialist Jennie Gilbert, who said in over 100 turtle autopsies, she has never seen indications that any

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		nets.	turtle has been killed by eating plastic bags.
P32.	2006	Douglas Local Marine Advisory Committee to GBRMPA formed a sub- committee to report back on perceptions of depleted local inshore fish stocks and dugong deaths in fish nets	Sub-committee reported back to LMAC at meeting which coincided with David Cook's first attendance at the LMAC. Because of his background, Mr Cook was requested to draft a letter to Fisheries, Cairns, to request them to address the concerns of the LMAC at the next Port Douglas LMAC meeting.
P33.	2006	Local commercial and amateur fishers combined to run a petition to request closure of the Snapper Island spawning grounds to any gillnetting.	Total of 658 signatures were gathered and presented to Labour MP. The PD & Mossman Gazette ran a front page story on the issue, 28 Aug 2006.
P34.	2007.01.22	Email statement by Jennie Gilbert, turtle veterinarian on over 100 necroscopies she has done on turtle	Never found plastic bags in any of the 100 turtles she had cut open and examined their gut content, only one case of ingested fishing line.
P35.	2007.01.24	Press release sent out on meeting of 23 Jan 07.	
P36.	2007.01.29	Cairns Post article: 'Calls for fish ban'	Report on the Wonga Beach meeting of commercial, charter and local fishers giving an outline of the recommendations including no netting of grey mackerel in 2007.
P37.	2007.02.03	Cairns Post article: 'Fish stocks collapse at Port denied'	Commercial fisher quoted as saying he has a Qld-wide licence and Port Douglas fishers will have to "get their cheque books out if they want to shut commercial fishers out". He pointed out that "grey mackerel are (now read 'were thought to be') migratory fish and you will notice changes in fish populations as they pass up and down the coast"
P38.	2007.02.08	Gazette, Letters to the Editor from D Cook: 'Stop netting'	Corrected the error in reporting saying that the community was trying to stop all roving out-of-town gillnetting in the Shire and fear that permanent damage may be caused to local stocks.
P39.	2007.02.13	Letter to Mackerel Biologist attending DLMAC Mtg, D. Welch from D Cook	Whole series of important questions asked. For response see reply of 13 April from D Welch
P40.	2007.03.26	Letter from Bamanga Bubu Ngadimunku (BBN) to Minister for DPI&F requesting banning of all offshore netting in DS by 1 June 2007	Enquired about what Minister was doing about the petition, saying they had joined NSF to request ban on offshore gillnetting as they were worried about declines in grey mackerel, dugong and turtle.
P41.	2007.04.02	Email from D Cook to Minister	Relaying concerns from the community regarding the need to stop local netting of grey mackerel.

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P42.	2007.04.04	Letter to Minister from D Cook sent by recorded delivery	Noted the support recd. from MP O'Brien, and others at the NSF foundation meeting 29 March and their support for closure of local waters to grey mackerel netting, etc.
P43.	2007.04.07	Email from Dr D Welch confirming receipts of letter to him of 13 Feb 2007 presented at LMAC mtg was tabled at Scientific Adv. Grp (SAG) which advises Inshore MAC	Dr Welch said as most of the four questions were management related he said it was not appropriate for him to respond but that FQ management would respond.
P44.	2007.04.09	Letter to FQ (M. Lightowler) from QSIA net delegate Area 8, Mark Harris re meeting on 23 January 07 with commercial fishers at Wonga, copied Minister Mulherin & NSF	Complained about net boats wiping out the prespawning school of grey at Snapper in 2006 taking entire school in 3 days and leaving nothing for the community and nothing to spawn. Said whole community calls for a ban on netting of grey mackerel and asked for closure by 1 June or G Mack may be wiped out. Mr Harris said they had joined NSF and they were not against out-of-towners coming to troll but netting of grey mackerel was not acceptable.
P45.	2007.04.13	email from D Welch to D Cook giving response to queries raised in letter of 13 Feb. 2007 at LMAC mtg	D Welch agrees that it is possible that the grey mackerel are in decline and agrees that the data may not show this because it may be masked by hyperstability.
P46.	2007.04.17	Phone call from Minister's office	
P47.	2007.04.27	Letter from Minister to D Cook thanking for emails of 30 March & 2 April and letter of 2 April. States that DPI&F consider it unlikely that increased catches (i.e. by gill netters in Douglas area) pose a significant risk to the sustainability of the broader stock of grey mackerel.	"The Sci Adv. Gp agreed no clear assessment could be made about the sustainability of the grey mackerel stock until current research on stock structure is complete". He said that "a more thorough assessment of catches on a finer spatial scale would be made by midyear" and notes "it is thought at this stage that there is a mixing stock of grey mackerel throughout the east coast" [This later proved to be a misconception; there are at least two populations, with more "sub-populations at the embayment level".]
P48.	2007.04.28	Letter to Minister from NSF Call for emergency closure of G Mack net fishery off Douglas Shire response to Mulherin's letter Copied O'Brien, MP & FQ (Lightowler)	Said that the DPI&F's response was not evidence based and challenges the Minister's statement and said evidence points to the opposite and as such the stocks should be managed as though they are local stocks returning annually to traditional spawning grounds. Called on Minister to close grounds to gillnetting under Section 46 of the Fisheries Act on at least a temporary basis.
P49.	2007.05	Society for the Conservation of Reef Fish Aggregations, Newsletter No.10 article by D Cook: 'Grey mackerel in	One page account of the decline in grey mackerel numbers noted by local fishers, the suspected link to large net boat drum hauling and the lack of a closed spawning season. Announcement of the

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		trouble in far North Queensland'	formation of NSF.
P50.	2007.05.02	Brief on Grey Mackerel situ. to Douglas Shire Sustainability Group committee meeting	Informed the DSSG of community observations and concerns regarding perceptions of over-netting of grey mackerel.
P51.	2007.05.24	Email from Martin Tenni, ex Govt minister	Used to fish Snapper Island grey mackerel from 1954-1985. Schools of greys were from 700 to 1,000m in diameter, would catch 30 in two hours.
P52.	2007.06.01	Line Burner Vol 78. Three page Article by D Cook: 'Save the Grey Mackerel' gives the history of the campaign to make grey mackerel a sustainable local fishery.	Called for the area to be made a local management area managed by locals for locals for a ban on all offshore netting within 6nm of the Douglas Coast and announced the formation of NSF.
P53.	2007.6.14	Gazette article: 'Fishermen lose fight to save grey mackerel'	"Local fishers have been knocked back again More than 60 people turned up to meet with DPI&F to discuss the issue. Local fishers have been campaigning since last August when a petition containing nearly 700 signatures to stop netting"
P54.	2007.06.21	Radio Interview ABC Far North, George White commercial fisher, Kier Shorey with FQ (Lightowler) & NSF (Cook) re mackerel fishing	Cook noted that Lightowler fails to recognize the collapse of grey mackerel in Douglas waters and ignoring the observations of two generations of fishers, discussed hyperstability, and noted need to use precautionary principle. Called for closure of grey mackerel to netting under S46 of FA and for independent study.
P55.	2007.06.21	Letter to Premier Beattie from Mossman Boat & Fishing Club, president Brian Roberts & Conservation, Publicity & Liaison Off. D Cook: 'Request for Independent Review of Offshore Netting of grey mackerel'	Pointed out eight areas where DPI&F's response to our requests for a closure of the netting falls short and called for a review by an independent fishery consultancy company
P56.	2007.06.21	Letter to DG DPI&F from D Cook, Formal Complaint against staff member following his comments and handling of the Wonga Beach meeting	Two pages of concerns regarding the inappropriate way the Wonga Beach, June 2007 meeting between DPI&F and the Wonga Community (about 60 persons attending) was handled by the lead FQ facilitator.
P57.	2007.07.01	Line Burner Vol. 79. Four page article by D Cook 'Grey Mackerel response falls short' includes one page comprising a letter by MP J.	D Cook gives a detailed reply to DPI&F saying he is 90% sure that DPI&F's response falls far short of what is required to prevent overfishing of grey mackerel at Snapper island and explains why.

Ref. No.	Date	Article/letter	Summary
		O'Brien giving DPI&F's response saying there was little risk of overfishing grey mackerel in the Port Douglas area.	
P58.	2007.07.06	Cairns Post, Your Say letter from D. Maric of Cairns: 'Mackerel decline hurting tourism'	Notes that since netting of mackerel has commenced off Cairns, numbers of mackerel have "gone from great to almost non-existent" with even queenfish becoming very scarce. Says fishing tourists are beginning to bypass Cairns for the now more prolific waters of NT.
P59.	2007.07.09	Cairns Post, Editors Pick in Letters to the Editor from D Cook, 'Inshore netting disaster recipe'	D Cook points out deficiencies in DPI&F's claims that mackerel management is based on science and calls for a ban on netting of mackerel.
P60.	2007.07.11	Letter from DG DPI&F acknowledging letter of complaint	Matter referred to dept's Corporate Integrity and Governance unit.
P61.	2007.07.14	Cairns Post, Environment page, leading article: "Plan to manage mackerel"	"Local stocks of eastern grey mackerel face oblivion if gill net fishing continues in their inshore spawning grounds, Port Douglas fishing groups say" "A 60-strong delegation of local fishermen met DPI&F officers last week but requests for a (net) ban were turned down". "The dept does not believe there is an emergent need to close waters off Port Douglas to netting" DPI&F said.
P62.	2007.07.30	Letter to DG DPI&F from D Cook with further details of complaint	Added that many attending meeting had complained about the superior attitude of the officers running the meeting and their lack of interest in listening to what people had to say whilst insisting on delivering a formal presentation with minimal time allowed for audience participation, people walking out in anger, etc.
P63.	2007.07.31	Cairns Post, article with large, colour photograph of net boat and two rec. fishing dinghies: 'Battle over mackerel causes a FISHING FEUD'	The paper states that: "Recreational anglers have clashed with the crew of a fishing trawler (sic) near Snapper Island as tensions build over claims of overfishing" Mis-reporting here, the boat was a gillnetter. The report notes "fisheries officers stepped in during confrontation" and "During the incident (when the 600m net was being hauled) two humpback whales passed by less than 300m away."
P64.	2007.08.29	Email to DG DPI&F from D Cook	requesting info on follow up to complaint and need to clear his name
P65.	2007.09.01	Email to from Jim Prescott, Manager, AFMA, Torres Straits, D Cook & DPI&F staff member	Statements on his personal behalf and not speaking for AFMA include: "The fact is hyperstability could be a reality in that fishery. I don't think it should be ruled out a precautionary approach would seem reasonable"

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P66.	2007.09.07	Letter from Premier's Office re netting of grey mackerel in response to MB&FC letter of 21 June, ref: MCU	No risk indicated but said that DPI&F is proposing a "consultation process that aims to achieve local solutions to local issues" that can "address local issues such as closures, fishing times, use of certain apparatus and other issues"
P67.	2007.09.27	Gazette, p 16 full page feature article: 'Drama on the high sea' with two colour photos record community ire at DPI&F's refusal to act on the 658 signature petition to close grey mackerel spawning grounds to gill netters.	Article record that gillnetters took six tonnes of grey mackerel from the spawning aggregation grounds at Snapper Island that season (2007) whilst grey mackerel line fisher, Col Patterson " confirmed his catch had dropped from an average season catch of 400 to just 37. "I'm being wiped out" he said." Caravan park manager and clients quoted as saying lower catches attributed to gillnetting were causing tourists to shorten their visits and deter them from returning.
P68.	2007.09.28	Letter from DPI&F in response to request for clarification regarding grey mackerel data, Dept. ref: 07/14153	Three page very inadequate response to request for further details. It said "a package of management measures to protect the sustainability of grey mackerel in the long term on the East Coast" is "expected to be released this year for public comment". Reply to be delayed until this comes out.
P69.	2007.10.01	TV Win News ran a three minute news item on problems with the grey mackerel in Douglas waters that it had been the WORST EVER SEASON	DPI&F gave phone interview to say they had no evidence to indicate the grey mackerel fishery is unsustainable thereby ignoring the evidence from the community.
P70.	2007.10.15	Letter from Office of Premier signed by Deputy Chief of Staff, ref: MCU,	Same content/letter as that signed by Chief of Staff on 7 Sept. 2007 namely "unlikely to be small localised populations"
P71.	2007.10.23	Letter to Anna Bligh, Premier from Mossman Boat & Fishing Club signed by Brian Roberts, President, cc O'Brien, MP	Saying not satisfied with ex-Premier Beattie's response of Sept/early Oct. and were request an independent review outside of the authority of DPI&F as "we have lost faith in DPI&F's ability to recognize what we see as a very serious problem"
P72.	2007.11.	Letter from Premier's office	Passed to DPI&F and Mulherin to respond
P73.	2007.12.06	Cairns Post, Environment Section, lead article: 'Commercial fishing hitting mackerel stocks. Anglers call for net ban.'	'Vocal Port Douglas and Mossman fishermen have renewed pleas for State Gov. to halt decline in inshore mackerel stocks' "We have lost faith in the DPI&F's ability to recognise what we see as a serious problem affecting inshore fish stocks along the Douglas Shire coastline" club president Brian Roberts wrote in a letter to Premier Bligh, pleading for help to re-build fish stocks'
P74.	2007.12.11	Letter from DSSG to Minister DPI&F requesting and independent review of Offshore Netting in Douglas	Points out that DPI&F are omitting to consider "the most reliable indicator of stock abundance you have at your disposallocal commercial line fishers, charter fishers, local recreational fishers, interstate regular visitors, caravan park

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		waters. cc O'Brien, DPI&F	owners" have been recorded in the press and even written to you or the Premier personally "to bring to your attention a sharp drop in abundance of inshore fish, grey mackerel in particular"
P75.	2007.12.11	Letter, Invitation to hold Fisheries Consultation meeting at Mossman MB&FC, from B Roberts, signed D Cook	This meeting was subsequently cancelled by DPI&F because of road flooding on the day.
P76.	2007.12.13	Letter to J O'Brien, MP from D Cook on behalf of Mossman Boat & Fishing Club: 'Netting Closure, Absolute Minimal requirement"	Warned of talk within the community of civil disobedience of 'Rainbow Warrior' style if netting went ahead and that it would be "political suicide for the Labor Party in this area" to ignore this request. Requested closure to all offshore and out-of-town netting inshore from lines drawn from Cape Trib to Low Is Light to Port Douglas Island Point. from 1 June to 1 Feb.
P77.	2007.12.18	Letter from MB&FC signed D Cook copied Premier, Obrien MP, Minister Mulherin & NSF members signed D Cook.	Letter demonstrates the flaws in the response by G Hall, DPI&F in letter of 28 Sept. Requested meeting in Cairns with the "leading departmental scientists" who provided him with the advice for his response.
P78.	2007.12.23	Win Television showed a program on the Daintree presented by Lynn Sutherland in which she interviews a 2 <sup>nd</sup> generation Douglas fisher, now working as a charter fisher on the Daintree and around Snapper Island. D Cook hosted the TV crew and introduced them to local contacts.	The charter fisher stated that numbers of fish around the Daintree Estuary and Snapper Island, and grey mackerel in particular had fallen drastically in past years and attributed this at least partly to overfishing by netters. (Comment: Not the sort of thing you would do to your business unless you were sincere and worried!)
P79.	2007.	Rep. of Northern Fisheries Centre, Cairns responded to the concerns raised at a Douglas LMAC meeting	LMAC learned that Fisheries Qld (FQ) are powerless to restrict the number of gillnetters that operate in any given area.
P80.	2007.	Email from V Veitch, wetlands officer, ACTFR, JCU	Past Vice Chair of Sunfish, Qld '98-06, sat on Qld ReefMAC '96-05. Believes we are seeing hyperstability in action and that there should be no netting of spawning aggregations. Believes G Mack to be local stock and no evidence of migrations.
P81.	2008.01.12	Flier to MB&FC members from D Cook adv. on meeting at clubhouse on 27 Jan to discuss proposed new fishing regulations.	Confirming NSF currently being run from the Club and inviting all members and anyone else interested to attend the meeting.
P82.	2008.01.18	Cairns Post, News Item	'Sixty fish full of roe (sic - Comment: actually fish frames i.e. fillets removed, head and guts) caught

Ref. No.	Date	Article/letter	Summary
			off Port Douglas have been handed to fisheries authorities by angry fishermen pushing for a netting ban during the spawning season'
P83.	2008.01.22	Press Release, Mossman MB&FC: "NEW FISHING REGULATIONS IGNORE FISHERS WARNINGS"	"Mr Roberts said: "these new regulations actually favour the netters; these boats can continue to target our grey mackerel even whilst they are attempting to spawn and, for the first time, the net boats will be allowed to keep some spawning Spanish Mackerel. <b>This is unacceptable</b> ; they have given us nothing to address our concerns"
P84.	2008.01.22	Letter from Minister DPI&F from J O'Brien,	Received your letter dated 14 January "on behalf of Mr David Cook regarding proposed new fishery regulations" Response to be provided as soon as possible.
P85.	2008.01.25	Discussion paper, Mossman B&FC by D Cook, 5pp. Are proposed changes to ECIFF appropriate and beneficial to the community.	3 ½ pages of introduction/background and one page of comments on proposed regulations including need to increase minimum size of grey mackerel from 60 cm and the need for more maximum sizes for some species.
P86.	2008.02.01	Line Burner Vol. 86. One page article by D Cook: 'Grey Mackerel & IFFF Update Feb 07'	Article quotes DPI&F's claim they have no information to indicate offshore netting is damaging stocks of grey mackerel and other species but Cook notes that no reputable scientific organisation would ignore the level of 'anecdotal information' in the area. He notes that researchers Cameron & Begg (2002) recommend that " <i>mackerel species should be managed with utmost caution</i> ". He also presents a photograph of Spanish mackerel being caught by a large gillnetter at Snapper Island.
P87.	2008.02.14	Cairns Post, Environment page lead story: 'Fishermen want net ban'	'Douglas Shire fishermen have repeated calls for a ban on net fishing in inshore waters'. This week a community delegation met with DPI&F and 'called on the dept. to recognize that inshore fish stocks were being depleted by current levels of netting' etc.
P88.	2008.02.14	Gazette, News p7. 'Douglas Fishers netting concerns' quotes press release from Mossman Boat & Fishing Club president, Brian Roberts on the meeting with DPI&F staff in Cairns regarding overfishing in Douglas waters.	'In a two hour meeting with senior fisheries department officers Brian Roberts said: "we are going to have to give our inshore fish stocks the chance to rebuild It makes sense that our community gains maximum economic benefit whilst we do this." The club called for a ban on all out-of-town netting as it gives no benefit to the local economy'
P89.	2008.02.21	Letter from Minister Mulherin to J O'Brien, MP in reply to that of 14 Jan from J O'Brien.	Said new regs introduced to help sustainability of G Mackerel, namely increase in minimum size limit to 60cm and larger mesh size.
			Comment, NB: these will have little to no effect here as it is the large mesh nets operating on the spawning grounds that are totally capable of wiping

Ref. No.	Date	Article/letter	Summary
			out what are most probably the entire population of the local spawning stock.
P90.	2008.03.09	Press release from Mossman B&FC re cancellation of consultation meeting by DPI&F due to road flooding and refusal to schedule an alternative date.	Points out the new regulations actually promote greater netting effort, allow taking by net of some individuals of species that could previously only be caught by line whilst doing nothing to attend to community concerns regarding overfishing of grey mackerel or other species by gillnetters.
Group to DPI&F, ECIFF, RIS Response, Brisbane "Response to have your say proposed fishing regulations".	"Very disappointed to find that there is nothing in the new regulations that address our requests as raised in our attached (the copies of) letters. To make matters worse you are proposing to allow gillnetting in Dugong Protection areas. The 'in- attendance rules will not prevent gillnets drowning dugongs"		
		MP, Alliance to Save Hinchinbrook, NSF	
P92.	2009.01.01	Line Burner Vol. 97 one page article by D Cook: 'Collapse of our Grey mackerel Fishery: Feds Highly critical of Qld Fisheries Management'	The article records that 2008 'was the first year ever that commercial line fishers failed to find any trace of grey mackerel schools. It took two commercial line fishers each a whole season to land what was once just a single day's catch' An introduction to the Federal review of the ECIFF by Gunn, Meere and Stevens was given including the following quote from their report: " Yet in schooling species with local residency and/or those that form seasonal spawning aggregations, the risk of localised depletion is high e.g. grey mackerel" The report states that management by area should be a priority. Much of what NSF members have been saying for over two years has been vindicated by this review.
P93.	2009.02.	Gazette feature article: 'Anglers fear mackerel to be fished out'	Dissatisfaction with new regulations due to be introduced on 1 March expressed by NSF coordinator, D Cook.
		An account given of collapse of the grey mackerel line fishery at Snapper Island in 2008 with no grey mackerel schools encountered by two commercial mackerel line fishers who fished the entire season and no net boats returning to Snapper Is.	DPI&F spokesperson Mark Lightowler is quoted as saying "You don't need many fish to spawn to replenish stock" and admitting that "netting fish that only ever school to breed is controversial". "It has been debated around the world for years" he said. "The answer is it is believed to be sustainable" (Comment: both these statements are indefensible and are strictly incorrect, the body of evidence is weighted in the opposite direction.)
P94.	2009.02.05	Press feature article 'Anglers fear mackerel to be fished out'. Large colour photograph of net boat at Snapper Island and extensive quotes from DPI&F, commercial line	Classic quote from DPI&F spokesperson 'admitted netting fish that only ever school to breed is controversial "It's been debated round the world for years" he said. "The answer is it is believed to be sustainable. You don't need many fish to spawn to replenish the stock". [Comment: if this is an

Ref. No.	Date	Article/letter	Summary
		fisher Col Patterson and Coastal Fisheries Specialist, D Cook	accurate quote it is appallingly cavalier; the competence of any fisheries manager who comes up with a statement like that needs to be investigated thoroughly].
P95.	2009.02.12	Letters, Gazette. 'Overfishing no balancing act' from D Cook	Points out the statements made by DPI&F in last week's article (Anglers fear 05.02.2009) is outdated. Said that DPI&F are denying what the community can see is the obvious and points out the futility of having one TAC when there are at least two stocks of Grey mackerel along the East Coast, etc.
P96.	2009.03.	Cairns Post News Brief: 'O'Brien fishes for ministerial support'	Member Jason O'Brien weighed into the commercial net fishing debate with a letter to Qld minister for DPI&F calling for the minister to assist resolve the issue of commercial net fishing at Snapper Island. Mr O'Brien is quoted as writing "I have been writing to you in support of the call to ban commercial net fishing in this area since August 2006 to no avail."
P97.	2009.03.13	Press release from NSF (by D Cook). Shortened and released from a similar one released in January but not used by the press. '2008 worst grey mackerel season ever'	Records two commercial grey mackerel line fishers stating that 2008 was the "worst grey mackerel season ever". Each caught what used to be one good days catch in the entire season and were heavily out of pocket as a result. A charter fisher and a commercial line fisher using echosounders both failed to find any trace of grey mackerel schools on their echosounders throughout the season for the first time ever.
P98.	2009.03.18	Letter, Editors pick, Cairns Post, with photo. 'Inshore fish need better protection'. From D Cook	Says inshore catches are a fraction of what they used to be and that big offshore gill net boats are " <i>mining our resources</i> ". Points out the Garrett review of fisheries considers the new regulations do not adequately reflect a precautionary approach and that the Poseidon ARM scoping study reports that management authorities are ' <i>legally required to apply the precautionary approach</i> '.
P99.	2009.04.16	Gazette, pick of the week letter to the Editor, with photo of dead dugong found after netting boat left area: 'Requesting good fisheries management is not radical but common sense'.	Cook's comments include: "Failure by our 'Smart State' to learn from past global mistakes has seen drastic falls in our local dugong and inshore fish stocks, much to the concern of this community"
P100.	2009.05.01	SCRFA Newsletter 12 full page article: 'Grey Mackerel: line fishery failed in World Heritage Waters of Far North Queensland'.	Records the failure of Grey Mackerel line fishery in 2008 despite the net boats not returning. Two fishers each made the equivalent of what used o be a day's catch in the entire season. No trace of grey mackerel schools were detected in 2008. The article also mentions the scoping study undertaken by Poseidon ARM on grey mackerel management saying the authorities are legally obliged to apply

Ref. No.	Date	Article/letter	Summary
			the precautionary approach.
P101.	2009.08.20	Gazette p10 News, half page article: 'Grey mackerel numbers to be scrutinised in pilot study'	The journalist gives an introduction to a study which will look at fair access for both commercial and recreational fishers and quotes the FRDC lead researcher as saying: "The local level is where fisheries management is most meaningful". D Cook is also extensively quoted including noting: "Last year was the worst ever year for grey mackerel" and "We need to recognise that local inshore waters are overfished and bring in management measures to make fishing sustainable".
P102.	2010.03.18	Letters, Gazette. 'Fisheries fight goes on' from D Cook	On reasons for failure of co-management talks, the issue is not one of allocation but sustainability, the big boat gillnet fishery fails the EPBC criteria for a sustainable fishery.
P103.	2010.04	Article, three pages, NQ Fish & Boat Monthly, by Dick Eussen. 'Regional Comanagement – Fishing'. Gives an account of the fisheries co-management meeting held in Mossman, Douglas Region, 12 November, 2009.	Mr Eussen notes that: "The meeting ended with a verbal brawl between the two commercial fishing fractions, with the rec-fishers seldom getting a word in. The chair lost control. It was the worst meeting I have ever been in." Surmises that co-management is doomed to failure because of the hostility between recreational fishers and gillnetters. States that rec fishers "do not trust the Government, particularly the Minister the minister should approach the issue with leadership, direction and most of all the conservation of fish stocks by introducing a line only fishery in the disputed Zone (Port Douglas inshore waters) he should listen to the voice of the locals who have witnessed firsthand the raping and pillaging of the area by being overfished with nets in only a few short years (Will) cause more ill-feeling between warring factions Many recfishers believing the whole thing is designed to fail in favour of more commercial fishing no matter the future of grey mackerels in the GBR Marine Park."
P104.	2010.04.15	Letter to Gazette. 'Shame on' from D Solomon, TO.	"Back in 2006 the Gazette and Cairns Post had stories about me and others asking Jason O'Brien to stop the big net boats coming to our sea country as now we have much less fish and because the nets kill turtle and dugong. I am very worried about this. Government should listen to the right TOs and not just those (who) live near Cairns and talk the loudest at meetings"
P105.	2010.04.15	Gazette, Editor's 'Thumbs up award' 'Solomon has our backing' by D Cook.	Confirming that as past Sec. of the Douglas LMAC, Cook vouches for Solomon (who had been attacked in the press) that he has many attended LMAC and NSF meetings and <i>Mr Solomon has also "consistently campaigned for the need to stop the offshore gillnet boats fishing our inshore waters</i>

Ref. No.	Date	Article/letter	Summary
			because of their impact on dugong, turtle and fish stocks".
P106.	2010.06	Line Burner, two page article 'Rose to the bait but not hooked'. By D Cook	Gives an account of the failure of the attempts at co-management of local fisheries. Conclusion is that the inshore stocks are so depleted the large out-of-town, live-aboard net boats efficiency risks permanent damage to those fish stocks having small non-mixing local populations. The community considered years of talking would be pointless, better to take a hard line now and have the area closed off to outside netters being the legally required, logical precautionary approach.
P107.	2010.07.22	Press article, Independent (regional newspaper). 'New report slams large scale gillnetters'. Colour photo of dugong with tail hacked off, presumed by gillnetter.	Introduces the newly released NSF report, 'Review of Concerns relating to offshore gillnetting in inshore waters of the GBRMP'. Quotes include FQ ignoring impact of large-scale gillnetting on inshore resources and gives website of FFC from which the report can be downloaded.
P108.	2010.07.29	Press article. Gazette. 'Politicians try to lure votes of fishermen with promises.' large article full page width.	" LNP candidate for Leichhardt, Warren Entsch said he was keen to see a netting exclusion zone implemented round Snapper Island." It states "Local recreational and commercial fishers have mounted a long campaign to have Snapper Islanddeclared off-limits to commercial net boats."
P109.	2010.08	Press article Independent newspaper. 'New report slams large-scale gill netters'.	Feature article following release of NSF (2010) Review of Concerns relating to offshore gillnetting in inshore waters of the GBRMP.
P110.	2010.10.07	Press article, Gazette: 'Snapper Island fish stocks devastated in five years'	Records Sunfish as acknowledging that netting for mackerel is unsustainable and that localised depletions of mackerel as a result of netting are common in the GBRMP. They recommend that all mackerel netting should be phased out within 5 years. Cook & commercial line fisher Patterson recorded as saying that stocks at Snapper will be wiped out if netting is continued.
P111.	2011.04.11	Press article. Cairns Post. 'Calls for Netting ban to keep our dugongs safe'. Pagewidth photo of vet on beach	CAREFISH calls for fishing net free zone off Cairns to protect dugongs. Doug English of Marlin Coast vet has performed autopsies on dugongs washed up on Cairns beaches which showed the animals had been caught in nets. English said 'There should be no netting in dugong habitat' Etc.
P112.	2011.11.	Letter, Cairns Post. 'Fisheries closure for sustainability' from D Cook	Says that claiming fresh fish supplies will dry up if Cairns inshore waters are closed to gillnetting is scaremongering. Most fish sold in cairns is frozen and fresh sustainable reef fish supplies will not be affected. Current management practices will not prevent the extinction of local threadfin populations. The closure will help rebuild fish numbers and be a

Ref. No.	Date	Article/letter	Summary
			boost to tourism and jobs.
P113.	2011.11.10	Press article, Cairns Post. 'Row over fish net ban push'	Re petition to close Cairns inshore waters of Trinity Inlet to all gillnetting. Gillnetter claims that 100 tonnes are taken out of Cairns Inlet annually and that this would impact availability of local seafood. Cook quoted as saying the signs were that the resources were being depleted and there is far more value to communities around urban areas in recreational fishing.
P114.	2011.11.24	Article Cairns Post. 'Concern as over-fishing takes toll' 'Call for ban as recreational fishers want to see an end to gill net fishing in local inshore waters'. Large photo of gill netter.	Covers the concerns that large boat gillnetters are overfishing grey mackerel during pre-spawning and spawning period. Introduces petition on proposed ban on Trinity Inlet.
P115.	2011.12.03	Letter, Cairns Post.  "Managed fisheries attract tourists" from Bruce Sharples, used to run Holloways Beach Fishing Club but closed it because results from inshore waters were very poor. Runs a high traffic retail business on the beaches.	"volume of fish taken (by netters) has decimated the fish stocks in this area I've had thousands of conversations with customers, club members and public about fishing in Cairns waterways. There is no doubt there is growing frustration among the beach, bay and river fishermen due to present situation." Notes Darwin has a well managed fishery to benefit of tourism.
P116.	2011.12.16	Letter, Cairns Post.  'Spawning areas vital for fish stocks' by D Cook	States that FQ have no means of verifying whether the claimed 100,000 kg of fish caught annually in Trinity Bay is sustainable. Bruce Sharples (local fishing club chair) says inshore fish numbers have been decimated over the years. Need to rebuild numbers. Protecting spawning areas in Trinity Bay is a good start.

# BIBLIOGRAPHY: Key Scientific Research, Fisheries Status Reports and Independent Studies including a short summary of key relevant points

Ref. Year Report reference and *(in some cases) a* brief summary of relevant material no.

R1. 2002 Cameron, D. and Begg, G.A. 2002, *Fisheries biology and interaction in the northern Australian small mackerel fishery.* Final report to the Fisheries Research and Development Corporation (Projects 92/114 and 92/144.02), Fisheries Research Development Corporation, Canberra.

Key findings for grey mackerel: (i) from tagging studies they found no evidence to indicate grey mackerel travel long distances; tagging of school mackerel support concept of a number of (different) local stocks; (ii) female grey mackerel reach maturity between 651 and 700mm FL (approx. 750-800cm Total Length.) [Comment: as at 2012 legal minimum length for grey mackerel is still 15 to 20 cm less than this]

Key recommendations: ... (i) Mackerel species should be managed with utmost caution until detailed stock assessments are made. (ii) need to develop a reliable indicator of stock abundance, i.e. means of estimating independently of total landings whether stocks are

steady, increasing or declining (iii) the respective stock structures need to be taken into consideration when formulating management arrangements. (iv) further research should include investigating localised spawning grounds. Note large numbers of immature grey mackerel were taken by smaller mesh gillnets. (v) Improve Qld commercial logbook program as data collected is inadequate to monitor the fishery.

R2. 2005 Anon. 'Fisheries of Qld East Coast, current state of knowledge, May 2005', CRC Reef at: <a href="https://www.reef.crc.org.au/research/fishing-fisheries/statusfisheries/inshoregreymackerel.htm">www.reef.crc.org.au/research/fishing-fisheries/statusfisheries/inshoregreymackerel.htm</a>;

Gives reported catch data for east Coast commercial inshore grey mackerel fishery for 16 years, 1988 to 2003, varying from about 55 tonnes in both 1995 and 2000, to maxima of around 265 in 1990 and 235 in 2003. Average reported catch of grey mackerel over 16 years prior to 2003 was around 135 tonnes. Prior to 1993 around 50% was caught outside the GBRMP, by 2003 only about 15% was outside the GBRMP. [Comment: is this evidence of serial overfishing of local populations?]

R3. 2008 Gunn, J., Meere, F. and Stevens, J.D. *Independent review proposed management arrangements for Queensland's East Coast Inshore Fin Fish Fishery,* Australia. Department of the Environment, Water, Heritage and the Arts, Canberra, ACT.

This review is extremely critical of the management of the ECIFF and vindicated the concerns of NSF expressed since 2007. The Review found the ECIFF to be characterised by:

- a serious lack of validated and species-specific data on the fishery catch,
- very limited knowledge of the sustainable levels of catch for most target, byproduct and bycatch species,
- inadequate fishery-independent data on the interactions with vulnerable and protected species that are susceptible to gillnets, and
- inadequate levels of precaution being adopted by DPI&F in the management arrangements and the setting of catch limits for target species.

They found some significant gaps in a number of important areas which make managing the ECIFF difficult .... and considerable scope to improve the management framework. The reviewers encourage a review of policy and legislative settings. They noted that a delay in providing a management response can be extremely costly to a resource or the broader ecosystem.

The team noted documented localised depletion for some species and that depletions are not always obvious *when fishery "assessments" are based on aggregate data*, as they have been in the ECIFF. They state that in schooling species with local residency and/or those that form seasonal spawning aggregations, the risk of localised depletion is high e.g. grey mackerel.

They recommended exploring *greater spatial management to be a priority* and that DPI&F should seek broad public and scientific input on the use of spatial management to reduce the potential for localised depletion of key species and interactions with protected species such as dugong, inshore dolphins and humpback whales

They noted that the current DPI&F approach does not allow the flexibility necessary to deal with a fishery operating in a complex, dynamic, World Heritage listed ecosystem. They concluded there needs to be a fundamental rethink of the management approach for the ECIFF ... to reduce complexity, ensure sustainability of all species, and to take into account significant spatial heterogeneity in the risks.

R4. 2008 Macfadyen, G. & Huntington, T. 'Certification and Sustainable Fisheries'. Poseidon ARM PTY Ltd. /United Nations Environment Programme. 91p. <a href="http://www.consult-poseidon.com/reports.asp">http://www.consult-poseidon.com/reports.asp</a>.

"This document has been prepared by Poseidon Aquatic Resource Management Ltd. The document draws on a wide range of data and information sources provided in Appendix A.

It has also been complemented with the help of email and telephone communication with various certification scheme managers, and with industry and government sources, as referenced accordingly in the text. Survey questionnaires were also completed with certified businesses in the supply chain and with certified producers in a number of small-scale and developing country fisheries".

R5. 2008 Banks, Richard. Poseidon ARM Pty. Ltd., 'Evaluation of prospective management arrangements and control actions that could be applied to the grey mackerel (Scomberomorus semifasciatus) fishery in the Daintree (N. Queensland)'. 23p. Available on Company website for download:

http://www.consult-

poseidon.com/reports/Evaluation%20of%20prospective%20management%20and%20control%20actions\_V4.pdf.

Poseidon, a well-known international fisheries consultancy company, was requested by NSF to 'undertake a short scoping study to evaluate the processes that could lead to the establishment of management arrangements for the localised fishery in North Queensland, against best available evidence. The report contains a review of best available data, including catch information from local fishers and anglers. Poseidon also analysed the legislation and consultative processes that can and should be applied to the fishery by the Management authorities and undertook a risk analysis (<a href="https://www.poseidon-consult.com">www.poseidon-consult.com</a>;).

The report's conclusions contain the following statements:

"The management authorities, including the Department of Primary Industry, Queensland, and the Great Barrier Reef Marine Parks Authority are required by Law to apply the Precautionary Principle, or at the very least undertake a participatory risk analysis evaluation in the event of any doubt as to the state of the stocks. Were the principle to be subjected to the appropriate participatory process it would point to significant concerns in respect to commercial gill netting in the Douglas shire area, and a damage to economic well being of the local economy if left unchecked:"

"Precautionary principle management decisions are upheld when applied, providing that the appropriate risk assessment mechanisms is used. There is therefore no reason to wait for scientific evidence to demonstrate that a management problem exists. The prescribed analytical process will already show that there is cause for concern."

"The Department of Primary Industry and the Great Barrier Marine Parks Authority require WTO/fishery accreditation for all fisheries from which product is exported. ... If applied, the grey mackerel fishery under its current management regime is unlikely to secure a WTO."

R6. 2009 Welch, DJ, RC Buckworth, JR Ovenden, SJ Newman, D Broderick, RJG Lester, AC Ballagh, JM Stapely, RA Charters and NA Gribble. 'Determination of management units for grey mackerel fisheries in Australia. Final Report', Fisheries Research and Development Corporation Pr. 2005/010, Fishing and Fisheries Research Centre Technical Report 4, F&FRC, JCU, Townsville. 158p.

The paper reports on research to determine whether there are non-mixing populations of grey mackerel in Australia. The results prove that there are at least four different genetic stocks across N Australia, namely in WA, NW NT, Gulf of Carpentaria and Eastern Australia. Otolith isotopes indicated there are at least two stocks in Eastern Queensland. Parasite fauna suggests a separation of east coast stocks somewhere between Mackay and Townsville.

Management implications indicate need for management of grey mackerel fisheries to be carried out on regional scales finer than are currently in place. ... on the east coast managers should at least monitor fisheries on a more local scale dictated by fishing effort and assess accordingly. Stock assessments should also consider the stock divisions identified, particularly on the east coast..."

"We also emphasise that where we have not identified different stocks does not preclude the possibility of the occurrence of further stock division"

Recommendations incl: status of each stock to be assessed; potential for localised depletions be investigated, development of a reliable estimator of grey mackerel stock

abundance and/or harvest rates.

R7. 2010 Newman, S.J., Wright, I.W., Rome, B.M., Mackie, M.C., Lewis, P.D., Buckworth, R.C., Ballagh, A.C., Garrett, R.N. Stapley, J., Broderick, D., Ovenden, J.R. and Welch, D.J. 'Stock structure of Grey Mackerel, Scomberomorus semifasciatus (Pisces: Scombridae) across northern Australia, based on otolith stable isotope chemistry. Environmental Biology of Fishes, 89 (3-4). pp. 357-367. "Proceedings of the 4th International Otolith Symposium, 24-28 August 2009, Monterey, California"

From Abstract: 'Stable isotopes in otoliths were used to determine the stock structure of Grey Mackerel. Otoliths were collected from Grey Mackerel at ten locations representing much of their distributional and fisheries range across northern Australia from 2005 to 2007. Fish from four locations-Western Australia, Northern Territory and Gulf of Carpentaria, Queensland east coast mid and north sites and Queensland east coast south site had stable isotope values that were significantly different indicating stock separation. The spatial separation of these populations indicates a *complex stock structure* across northern Australia. Stocks of *S. semifasciatus* appear to be associated with large coastal embayments. These results indicate that optimal fisheries management may require a review of the current spatial arrangements.'

R8. 2010 Charters, Robbie A., Lester, Robert J.G., Buckworth, Rik C., Newman, Stephen J., Ovenden, Jennifer R., Broderick, Damien, Kravchuck, Olena, Ballagh, Aaron, and Welch, David J. 'The stock structure of grey mackerel Scomberomorus semifasciatus in Australia as inferred from its parasite fauna'. Fisheries Research, 101 (1-2). pp. 94-99.

Abstract: The scombrid *Scomberomorus semifasciatus* is an important component of inshore fisheries in tropical Australia. Data on the parasite fauna of 593 fish from areas off northern and eastern Australia were examined for evidence of discrete fish populations. The parasites used ..... Tukey Kramer pairwise comparisons gave significant differences in the abundances of two or more parasites between fish from the east coast, the eastern Gulf of Carpentaria and the remainder of northern Australia. Multivariate analysis gave further evidence of differences and the results suggest that *at least 4 populations of stocks of arey mackerel occur along the northern and eastern coastline of Australia* 

R9. 2011 Anon. 'Vulnerability Assessment for the Great Barrier Reef 2011: Grey mackerel.' commissioned by GBRMPA.

Vulnerability assessment rated at 'Medium' noting particularly the potential for localised depletion of spawning aggregations. Grey mackerel are targeted and valued by both commercial and recreational fishers. The minimum legal size (MLS) for retaining grey mackerel (60 cm total length (TL)) is significantly smaller than size at sexual maturity for females (65-70 cm fork length (FL))1.For males, size at sexual maturity is 55-60 cm (FL), which equates to a total length between 64 and 69.5 cm respectively1. This means that that a MLS of 60 cm TL allows for the retention of a proportion of the immature male [Ed's comment: NB critical omission here, it should read 'and female' population: as females were found to mature between 750 - 800 cm total length (650 - 700 mm fork length,) Cameron & Begg 2002 whereas, Welch et al found that 50% of females matured by TL of approx 700 mm total length which is still 10 cm longer than the legal minimum size resulting in the possibility of significant proportions of the female population being taken before they ever spawn.]

Recent research indicates that grey mackerel exist in two discrete populations on the eastern coast of Australia and there is further indication that there may also be smaller meta-populations within those populations at the embayment scale. This possibility presents fisheries managers with further considerations when undertaking stock assessments and developing management responses as intensive localised fishing pressure does have the potential to cause localised depletions as experienced in the Douglas Region (2008-9);

There is significant year to year variability in grey mackerel catches which is likely to be

attributed to fishery-dependent factors as well as seasonal and environmental factors, particularly rainfall variability;

R10. 2011 Broderick D., J. R. Ovenden, R. C. Buckworth, S. J. Newman, R. J. G. Lester, D. J. Welch .'Genetic population structure of grey mackerel Scomberomorus semifasciatus in northern Australia'. Journal of Fish Biology, Volume 79, Issue 3, pages 633–661, September 2011. The Fisheries Society of the British Isles.

Abstract includes: 'This study used mtDNA sequence and microsatellite markers to elucidate the population structure of Scomberomorus semifasciatus collected from 12 widespread sampling locations in Australia. Samples (n = 544). ... Combined interpretation of microsatellite and mtDNA data identified four genetic stocks of S. semifasciatus'.

R11. 2011 GBRMPA: A Vulnerability Assessment for the Great Barrier Reef: Threadfin salmon Appeared on their website in 2012 at:

http://www.gbrmpa.gov.au/ data/assets/pdf\_file/0003/21747/gbrmpa-VA-ThreadfinSalmon-11-7-12.pdf

A detailed assessment which should be read in full, extracts include: "Considering the stock structure of blue threadfin along the east coast stock,1 there are also indications that the minimum legal size for blue threadfin may not be sufficiently precautionary to protect a proportion of the breeding stock from harvest prior to first maturity. • Recent research using multiple methods (genetics, otolith chemistry, parasite abundance, life history and mark-recapture data) shows that threadfins can be very long lived (20+ years1) and exist as discrete local populations at spatial scales of less than 100 km.1 In parts of northern Australia, king threadfin stocks are showing signs of overexploitation. These findings should be considered when undertaking stock assessments and developing management responses as intensive localised fishing pressure may have the potential to cause localised depletions in parts of their east coast range. • Threadfins die quickly when netted, so mortality of undersized individuals as by-catch may be high. Catch records may significantly underestimate fishing mortality, due to mortality of discarded fish." In short, the conclusion that can be drawn from this assessment is that both species are highly vulnerable to overfishing and marked changes are required in their fisheries management.

- GBRMPA: A Vulnerability Assessment for the Great Barrier Reef: Grey mackerel. Again worth reading in full. Appeared on their website in 2012 at:

  http://www.gbrmpa.gov.au/ data/assets/pdf file/0016/21733/gbrmpa-VA-GreyMackerel-11-7-12.pdf
  GBRMPA give a vulnerability assessment rating of 'Medium' to grey mackerel and note "particularly the potential for localised depletion of spawning aggregations" and state that "•
  Recent research indicates grey mackerel exist in two discrete populations on the east coast of Australia and there is further indication there may also be smaller meta-populations at the embayment scale. The possibility of embayment-scale meta-populations should be considered when undertaking stock assessments and the potential for localised stock depletions." (Comment: where there have been localised depletions as a result of over netting of pre-spawning aggregations, the local fishers would undoubtedly upgrade the vulnerability assessment from medium to HIGH.)
- R13. 2011 Gutierrez N.L, R. Hilborn and O. Defeo. Leadership, social capital and incentives promote successful fisheries. Nature 470, 386–389. At:
  <a href="https://www.nature.com/nature/journal/v470/n7334/abs/nature09689.html">www.nature.com/nature/journal/v470/n7334/abs/nature09689.html</a>;

Their study of 130 co-managed fisheries throughout the world, including five in Australia, found that certain conditions are necessary for successful co-management of fisheries. They "found that the most important co-management conditions necessary for successful management of fisheries are presence of community leaders, strong social cohesion, individual or community quotas, and community-based protected areas. Additional key attributes were enforcement mechanisms, long-term management policies and influence of fishers in local markets." They found that "Leadership was critical for successful co-management of fisheries"

[Comment: Gutierrez, Hilborn and Defeo may have predicted that effective co-management

of the ECIFF under present conditions would be most unlikely as some most important preconditions for its success in Queensland are lacking. This will remain the case until major changes are made to the ECIFF. Where there is significant conflict amongst commercial line and net fishers and recreational and net fishers the required "social cohesion", including trust, is clearly lacking. It would be remiss of the authorities and politicians not to recognize this key point.]

R14. 2012 DPI&F. Annual status report 2010, East Coast Inshore Fin Fish Fishery.

www.daff.gld.gov.au/documents/Fisheries SustainableFishing/2010 ECIFFF ASR Final.pdf.;

Presents past catches for Grey Mackerel - 2006-07, 350t (343, 7), 2007-08: 356t (350, 6), 2008-09: 444t (438, 6), 2009-10: 193t (181, 12). The 2009 ASR gives annual catches by year for 2006: 332 (327, 5), 2007: 332 (325, 7) 2008: 390 (386, 4) tonnes. *Note CRC gives 16 yrs data up until 2003 with landings between 55 and 265 tonnes approx., at an average of 135 tonnes per year*. NB it also shows a shift of majority of catch from S of GBRMP *to within GBRMP*.

R15. 2012 *IUCN List of threatened species*, <u>www.iucnredlist.org/apps/redlist/details/170337/0/biblio</u>; lists the species as of least concern however states that: 'This species may be threatened by targeted fishing in spawning sites'.

Taken from the IUCN website: 'The biology of this species is virtually unknown. Along the eastern Australian coast, length of 50% maturity is 67.45 cm fork length (FL) for males and 81 cm (FL) for females, and longevity is estimated to be 12 years based on a growth study using otoliths (Cameron and Begg 2002).'

'The commercial fishery fundamentally changed with the introduction of new conservative quota management arrangements [Comment of 250t] in July 2009 [Comment: but average catch over 16 years to 2003 was 135 tonnes, how can 250t be classified as conservative especially when a number of stocks are involved and there is no way of allocating catch ceilings to the various populations and "sub-populations at the embayment level"??] so it is not yet possible to determine regional catch trends and overall stock status (SS 2011).' This species is taken with others of its genus in a fishery in Queensland. The reported annual catch has varied between 193–444 tons during 2006–2010 with the most recent catch (2009–2010) 193 tons of which 181 tons were caught with nets and 12 tons by line (ASR 2011). There seem to be at least four stocks or population management units of this species (Charters 2010, Newman et al. 2010) complicating management (SS 2011).

R16. 2012 DPI&F 'Grey mackerel fishery, East Coast'. http://www.daff.qld.gov.au/28\_18377.htm;

This web page states: "There is uncertainty in the assessment of current catch trends and stock status, given that the commercial fishery fundamentally changed with the introduction of new conservative quota management arrangements on 1 July 2009. Only two years of routine biological data (length of fish caught in the fishery) were available, which was insufficient to assess trends."

Exploitation status of grey mackerel in the ECIFF is currently "Uncertain". The introduction of a conservative commercial total allowable catch for this species that commenced on 1 July 2009 has meant that it is difficult to interpret the recent catch history for grey mackerel with certainty. Adding to the assessment complexity, results of recent stock discrimination research have suggested that there are two stocks of grey mackerel along the east coast, with the split occurring somewhere between Townsville and Mackay (Welch et al. 2009). The status of grey mackerel will remain 'uncertain' until a longer time series of commercial catch history and fishery-dependent monitoring data (stratified for the two stocks) are available for assessment.

R17. 2012 'Assessment of the East Coast Inshore Fin Fish Fishery'. By: Assistant Secretary, Marine Biodiversity Policy Branch, Department of Sustainability, Environment, Water, Population and Communities, (DSEWPAC) Canberra.

"This document is an assessment carried out by the Department of Sustainability,

Environment, Water, Population and Communities of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2<sup>nd</sup> Edition.* It forms part of the advice provided to the Minister for Sustainability, Environment, Water, Population and Communities on the fishery in relation to decisions under Part 13 and Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999.* The views expressed do not necessarily reflect those of the Minister for SEWPAC or the Australian Government"

R18. 2012

Daryl McPhee, *Future Management and Governance of the Queensland East Coast Inshore Finfish Fishery*: Report Prepared for the World Wildlife Fund for Nature; [comment: Dr McPhee is Associate Professor of Environmental Science, Bond University, Gold Coast, an authority on the fisheries of Australia being author of the book *Fisheries Management in Australia* (2008) The Federation Press 257pp.1

[Comment: an excellent report to prepare WWF leading up to their participation in the Stakeholder Working Group for the 2012-initiated gillnet buyback scheme. Prof. McPhee's intimate knowledge of the ECIFF and fisheries management practices in general is evident throughout. The conclusions and positions taken align strongly on most issues with those presented over the years by NSF. Some points may need to be talked or worked through before NSF can finalise their position on these but we are definitely in the same ballpark (see Bones of Contention 3<sup>rd</sup> Ed for more discussion).

The standard merits the presentation of entire executive summary here. The question arises as to why WWF had to fund this report and not government? Certainly government would be justified in refunding the consultancy fee to WWF.

#### WWF McPhee 2012 Report: Executive Summary

- Significant changes in the management regime and governance arrangements for the Queensland East Coast Inshore Finfish Fishery need to be undertaken to ensure that the economic performance of the fishery improves and the ecosystem impacts of the fishery are reduced. "Business as usual" is not a viable option for the fishery as a whole.
- With money pledged for structural adjustment with a focus on the ECIFF, there is an opportunity to significantly reduce effort in the fishery and this has significant environmental benefits as well as improving the economic outlook for operators that remain in the fishery.
- Overall, management of the ECIFF needs to further reduce latent effort, but also reduce active fishing effort. Both are necessary in order to make a difference with respect to effort reduction. It is recommended that structural adjustment expenditure focus primarily on removal of active effort occurs, and this should be prioritised ahead of removing latent effort.
- It is recommended that the Structural Adjustment Package (SAP) should be administered by the Queensland Rural Adjustment Authority. The design and implementation of the SAP should be undertaken by an independently chaired panel (SAP Panel) with the following expertise:
  - o Queensland government officials with expertise in net fisheries;
  - one or two independent professionals with expertise in Australian net fisheries;
  - o a representative of the Great Barrier Reef Marine Park Authority;

WWF McPhee 2012 Report: Executive Summary, continued:

- a representative from the conservation sector;
- o a recreational fishing representative;
- a commercial fisher with expertise in net fishing but with no direct or indirect
- o investment in the ECIFF; and
- a legal person with expertise in business law.
- It is uncertain how much latent effort remains in the ECIFF, and the amount of latent effort also depends on how it is defined. To potentially address latent effort, there are three options recommended:
  - compulsory acquisition of net fishing symbols that are deemed latent;
  - a specific component of the buyback targeting latent effort, with the total funds capped at a certain level (e.g. no more than 20% of the funds should be available for the purchase of latent effort); and,
  - o making symbols that are deemed latent non---transferable.
- It is recommended that the targeting by the SAP of active effort focus on the removal of both net fishing symbols and licence packages with active net fishing effort.
- It is recommended that a tender based approach (reverse auction) be used as a basis for attracting bids to the SAP, and this is one of the most common approaches to implementing a buy-back. "Value for money id the over-riding determinant asto whether a bid is accepted or not; however, value for money in this context is broader than just economic terms and can including (sic) prioritising the purchase of active licences in high conservation areas (e.g. Dugong Protection Area "B").
- A priority issue for the proposed SAP Panel is to ensure that a reduction in overall fishing effort in the ECIFF does occur and effort removed does not become reactivated in the fishery. This issue can in part be addressed by further considering and addressing latent effort in the ECIFF, but also through specific provisions that prevent re-entry into the fishery. The fishing industry and the fisheries management agency has a significant role in developing such provisions.
- Ex-post assessment of the SAP should be undertaken.
- Regional management has a significant potential role to play in the future management of the ECIFF; however, zoning of the fishery is critical to ensuring that regional management can meet its potential.
- Zoning of the ECIFF is required to provide a better approach to managing fishing effort; allowing the tailoring of exact fishing practices to a local area to minimise environmental impacts; and producing a greater level of social cohesion. It is recommended that zoning of the ECIFF be pursued after the SAP is completed, and that significant input from the industry and the fisheries management agency be utilised in the design of zoning arrangements.

WWF McPhee 2012 Report: Executive Summary, continued:

- The report identified important deficiencies in terms of the spatial scale in the information reported and the public disclosure of catch and effort in the ECIFF (and Queensland commercial fisheries in general). To address these deficiencies, the report recommends:
  - Catch and effort information on ChrisWEB be updated and kept updated;
  - Information on catch and effort in grids with less than five boats be routinely made publicly available with a delay in public access to this information to minimise concerns regarding "commercial inconfidence"; and,
  - Information be collected and reported at a finer spatial scale, with investigations into cost effective and practical methods of electronic reporting that can capture spatial information.
- The report endorsed the concept of rights-based fisheries management and a move towards better defined and tradeable property rights in the ECIFF.
- The report reviewed the overall applicability of an individual transferable quota (ITQ) arrangement for the fishery, but considered it likely to be impractical and not cost---effective. The challenges identified in the application of ITQ arrangements for the ECIFF are common to small scale fisheries in general.
- The report recommended using "net length" as a tradeable unit in the ECIFF with initially trialling of this approach in the N2 (set net fishery). Initial allocation should be based on a tender process but with a cap on the on the maximum number of net per symbol. After initial allocation, net lengths could be traded between operators with mechanisms to reduce the amount net available overall in the fishery.
- It is recognised that this is a significant potential change to the management arrangements of the ECIFF and as such significant input from the fishing industry and the fisheries management agency is required.
- There needs to be a fundamental rethink into consultative and participatory frameworks for fisheries management in Queensland, including but not limited to the ECIFF.
- Industry led initiatives to further modify net fishing apparatus should continue to be encouraged, however the use of pingers is unlikely to yield conservation benefits.

Acknowledgements/ over

#### **ACKNOWLEDGEMENTS**

NSF acknowledges that similar campaigns, efforts and/or concerns are on-going to a greater or lesser extent, all along the Queensland coast. We are not trying to make a special case for the Douglas Region. The only difference here is that we have systematically recorded evidence of most of the steps of the long and frustrating process and assimilated recent relevant scientific research publications, all of which point to an urgent need to restructure the gillnet industry.

Many people in Far North Queensland, networking with NSF, have been a source of invaluable information, moral support and encouragement essential for the persistence and accuracy of our campaign and the preparation of this document. You are too many to mention here, but you know who you are: thank you so much. It would be remiss of me not to make mention of Paul Aubin of CAREFISH, Cairns and David Cass of Cooktown Fishing Restoration Group for years of consistent outstanding moral and technical support especially at times when the battery has run low.

The Douglas Local Marine Advisory Committee, including past Chairs Dougle Baird and Alex Mateer, supported by their committee members, as a result of their prior investigations into community concerns, were instrumental in starting me off in this campaign as a new LMAC member in 2006. The good work of the Douglas LMAC in this field has continued into 2012 chaired by Robert Hanan.

I must also acknowledge the local expertise and knowledge of ex-charter fishers Dario Balog of Port Douglas, Les Marsh of Cairns, and current charter fishers Jamie Beitzel and David Patterson of the Daintree and two commercial fishers of the Douglas Region, Mark Harris and Col Patterson for sharing their unrivalled local technical knowledge and experience.

Further South, a huge thank you to Lance Murray of MacKay, Kim Martin of Rockhampton and Dr Randal McLellan and further North, to Dave Donald of Weipa, all of whom provided regular, to the extent of almost weekly support, discussion, technical information and inspiration over the past few years.

Josh Coates and *Fishers for Conservation* have ensured our case is open for examination by the rest of the world through their website: <a href="https://www.ffc.org.au">www.ffc.org.au</a>.

During the lead up to the March 2012 elections it transpired that *members of the Opposition and one minor political party were listening to the concerns of the public and the industry itself and recognized the need to reduce gillnet effort and buyback gillnet licences.* They formally recognized what for so long had been denied by the previous Ministers for Fisheries. Thank you to those politicians for this paradigm change in policy. Now may you accept the challenge and make good use of your time in office. It is probably no coincidence that the party who had denied us for so long lost the election by an outstanding margin.

Thank you not least my wife, Julie, for your patience and support when our spare time together would have been so much more enjoyably spent fishing, tree planting or gardening, rather than my so often feeling compelled to retreat behind my computer at weekends. Her question is always 'There are people in Brisbane who are paid to do that but what are they doing?" My reply is always "Are there?" Perhaps that pin points the dilemma?

Here we have a genuine 'Can Do' challenge for the new Queensland State Government.

David C. Cook davecook@bigpond.com 26 August, 2012.