The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'Super trawlers' operating in Australia's Marine Jurisdiction

The Commonwealth Fisheries Association submission to the Senate Standing Committee on Environment and Communications

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This is a joint submission between the Commonwealth Fisheries Association, South East Trawl Fishing Industry Association, Sanford Australia, Great Australian Bight Fishing Industry Association, Petuna Sealord Deepwater Fishing Pty Ltd, Australian Longline, Small Pelagic Fishery Industry Association, Austral Fisheries, and Northern Prawn Fishing Industry.

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Submission to the Senate Standing Committees on Environment and Communications *"The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'Super trawlers' operating in Australia's Marine Jurisdiction"*

The Commonwealth Fisheries Association (CFA) welcomes the opportunity to comment on the Terms of Reference from the Senate Standing Committees on Environment and Communications inquiry into "The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'Super trawlers' operating in Australia's Marine Jurisdiction".

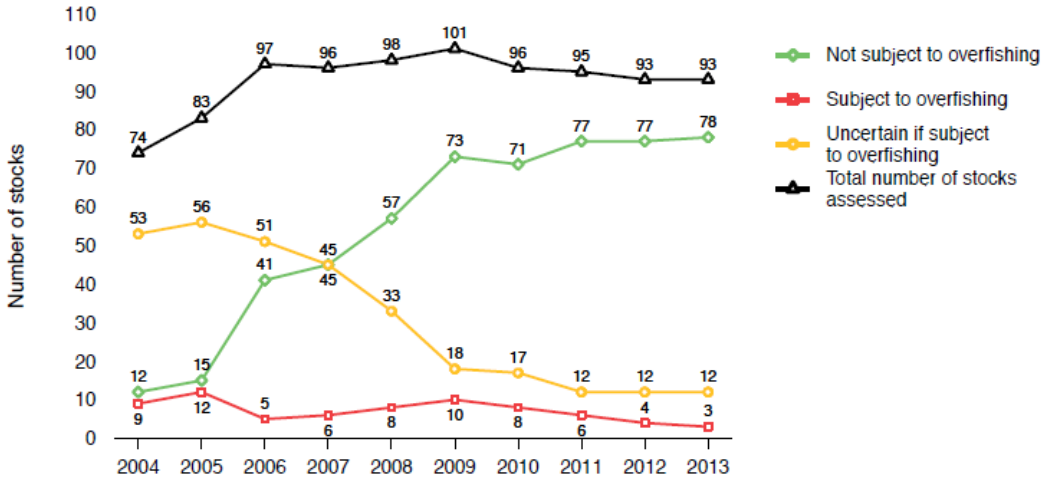
The CFA is the peak body representing the collective rights, responsibilities and interest of a diverse commercial fishing industry in Commonwealth regulated fisheries. This submission is headed by the CFA but has the full support of regional association members and fishing companies including the South East Trawl Fishing Industry Association (SETFIA), the Great Australian Bight Fishing Industry Association (GABIA), Sanford Australia, Northern Prawn Fishing Industry, Austral Fisheries, Small Pelagic Fishing Industry Association, Petuna Sealord Deepwater Fishing, and Australian Longline.

Commonwealth wild harvest fisheries are among the best managed and environmentally sustainable fisheries in the world. CFA's members are committed to managing fisheries for Australia's food security, community well-being and healthy marine eco-systems. **As a general rule, fisheries managed by the Commonwealth occur in deeper, offshore waters; in grounds where suitable capacity fishing vessels are required due to distances from ports and the need for freezer capacity.**

Each year the Australian Bureau of Agricultural and Resource Economics (ABARES) publishes a review of the stock status (sustainability) of Commonwealth managed fish stocks. The diagram below (titled Figure 1.3) is taken from this year's stock status report[1]. This report shows a clear trend toward reduced uncertainty (amber), a reduced number of stocks being overfished (red) and an increased number of stocks being fished sustainably (green).

[1] Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) Fishery Status Reports 2013-14 October 2014.

FIGURE 1.3 Fishing mortality status (number of stocks), 2004 to 2013



Source: ABARES Fishery Status Report 2014

The CFA and its members support nothing less than the best science to underpin fisheries management decisions, thus ensuring the long term viability of the resource and fishing businesses. CFA's members consist of Australian businesses that have a history of utilising suitable (freezer or fresh fish) capacity fishing vessels. Investments by the industry take the form of vessels, on shore infrastructure, vessel statutory fishing rights and quota/gear statutory fishing rights.

The Terms of Reference to the Senate Inquiry refer to "large capacity fishing vessels", however the size of the vessels has not been defined. CFA consulted the Secretary for the Environment and Communications Committee to confirm the definition around size of vessel, and an emailed (19th October 2015) response was provided to CFA as follows;

> *"I have checked with the Committee Chair's office about the terms of the inquiry. It was indicated that it was not intended to restrict the coverage of the inquiry to any particular size of vessel. Rather, the intention was to include vessels with factory/freezer capacity."*

Due to the lack of clarity around the definition of large vessels, the CFA have concentrated on presenting the facts in relation to operators utilising vessels in the Commonwealth fishery that have on board freezer storage and/or processing facilities.

Those fisheries that operate freezer vessels do so to optimise efficiency. Due to the sparse geographical location of fishing operations to ports and processing facilities on land, freezer storage and processing on board vessels is absolutely necessary to ensure that the highly perishable seafood product remains at its premium quality for consumption in the domestic and international markets. By taking these measures, the industry generates maximum economic returns both on their investment and to Australia's domestic and export economies.

The use of these freezer capacity fishing vessels is permitted by the Australian Fisheries Management Authority (AFMA), in accordance with subsections under the *Fisheries Management Act 1991* (FM Act). Like all parts of the industry, freezer vessels over a long period of time have operated responsibly, ensuring that measures required under the FM Act and the *Environmental Protection and Biodiversity Conservation Act (1999)* are in place to mitigate interactions with seabirds and marine mammals and to reduce the catch of non-commercial fish species. The Australian Government plays a major role in pursuing fisheries management objectives, including

with regard to consideration of the broader impacts of fishing on bycatch species (including protected species), marine habitats, communities and ecosystems and achieving maximum economic returns via the most efficient use of the resource.

CFA strongly advocates that the vessel size, dimension and/or capacity should not be the driver for fisheries management decisions. Vessels with freezer/storage capacity are not super trawlers within the definition of a super trawler (as defined by government and the Parliament as being in excess of 130m, notably the types of vessels listed by the Food and Agriculture Organization of the United Nations do not use the terminology super trawler) but are modern and efficient technologies that assist the industry to operate cost effectively. Support from the Government for Australian fishing business to continue to utilise modern methods of harvesting, including the operation of freezer capacity fishing vessels remains fundamental to maintaining economically efficient fisheries. CFA welcomed, as part of the Coalition's election commitments their policy on a 'More Competitive and Sustainable Fisheries Sector' (August 2013) that supports the fisheries sector to be appropriately regulated by the Commonwealth and not to be vilified and undermined through government policies.

Specifically addressing the Terms of Reference, CFA highlights the following.

The effect of large fishing vessels on the marine ecosystem, including bycatch and interactions with protected marine species.

AFMA operates under the FMA 1991 and EPBC Act requirements, which includes stock assessments, Fishery Independent Surveys, Ecological Risk Assessments, Bycatch and Discarding work plans, among other things. The Objectives of both Acts require Ecologically Sustainable Development, and setting of Total Allowable Catches (TAC's) and Total Allowable Effort (TAE) to best available science for target species. Many by-product species also have TACs and/or catch triggers, with the monitoring of bycatch data and programs are reviewed annually.

In terms of protected species interactions, working in conjunction with Australia's leading fisheries scientists and fisheries management authorities, industry is continuously improving its record of minimising interactions with seals, dolphins and other protected mammals, turtles and sea birds. Methods for reducing interactions that have been developed and implemented in Australia are world renowned.

The Australian Government has implemented a number of National Plans of Action, such as the National Recovery Plan for Threatened Albatrosses and Giant Petrels, and is a participating member of International Plans of Action for particular species, such as the International Plan of Action for the Conservation and Management of Sharks. There are also specific long-term plans under the EPBC Act to address certain groups of protected species, for example the Threat Abatement Plan for Seabirds. Information on these and other specific arrangements is again readily available on AFMA's website and has been for many years.

Furthermore, all Commonwealth fishing operations that wish to export product must first be accredited under the EPBC Act. Part of this accreditation is the requirement to monitor, mitigate and report any interactions with protected species. Accreditations are subject to regular re-assessment and often include requirements to undertake specific actions to reduce their effects on protected species.

Industry is driving their own voluntary measures to reduce their interactions with protected marine species, including for those fisheries that use freezer fishing vessels.

Freezer vessels operating in the winter blue grenadier fishery have been able to significantly reduce seal and seabird interactions by closing the net as it descends using an acoustically operated release device which opens the net at an optimal depth (i.e depth that is not frequented by seals) in addition to using a remotely operated grid that closes on the trawl on haul. Smaller trawl vessels (freshers) cannot use this technology given its cost and the deck space required to handle a grid. This technology is only possible on larger vessels. Acoustic devices have also been developed to mitigate the interactions with seals and other marine mammals and trialled commercial with positive results. These vessels all operate a nil offal discharge policy. The winter spawning blue grenadier fishery has also received independent certification by the Marine Stewardship Council (MSC). This assessment has been achieved with a long history of the fishery using freezer boats.

Seabirds are attracted to fishing vessels by the presence of offal and at times their frenzied feeding behaviour means they come into contact with the cables used to tow nets (warps) and potentially injured or killed. The danger that trawlers pose to seabirds is due to the warps not the size of the vessel. Australia's southern trawl fisheries have recognised this threat and led the world in reducing interactions with seabirds and seals. Vessels in the South East Trawl and Great Australian Bight Fishery have been able to reduce seabird interactions by 75% using buoys that deter seabird from the warps. These fisheries are now trialling other devices that are showing promising signs of further reducing interactions.

The Northern Prawn Fishery Industry uses trawlers that utilise on board processing and freezing capability. The fishery is highly regarded for its sustainability credentials, including reduction in bycatch of approximately 50% since 1997. NPF Industry recently committed to further reduce bycatch in the NPF by another 30% over the next three years. The fishery has from time to time fitted its trawl nets with cameras to better understand the dynamics of the trawl as it fishes. The NPF's processing/freezer boat fleet was one of the first Australian fisheries to achieve MSC certification, seen by many as the gold standard in independent sustainability benchmarks.

The Geelong Star, operating the Small Pelagic Fishery is a mid-water trawler which means there is limited impact on the sea floor. The Geelong Star is legally operating in the fishery, compliant with the EPBC Act and the FM Act. It has a relatively low by catch rate and efforts have been made to reduce their interactions with marine mammals. The Geelong Star is one of the most heavily monitored vessel in the Commonwealth fleet, requiring a Vessel Management Plan (VMP). The purpose of the VMP is to set out environmental management conditions that minimise interactions with seabirds and marine mammals and to reduce the risk of localised depletion; specify mandatory operational procedures that the concession holder, vessel master and crew are required to adhere to; specify a range of monitoring tools to evaluate the effectiveness of mitigation procedures and allow for continued improvements in physical mitigation methods through ongoing observation, information gathering and the review processes. http://www.afma.gov.au/wp-content/uploads/2015/09/Vessel-Management-Plan1.5.pdf

The Small Pelagic Fishery is also undertaking assessment to achieve MSC certification.

Social and economic impacts, including effects on other commercial fishing activities and recreational fishing.

Social Impacts on the Commercial industry
Due to the rise of social media information on commercial fishing activities, whether fact or fiction, is now more easily accessible. The response and reaction of the community to views propagated from non-experts about commercial fishing in Australian waters has the ability to negatively impact fishing businesses. As a result, these community views may sway fishery management decisions toward being overly precautionary or simply unwarranted, rather than being based on sound

independent scientific assessment. The CFA and industry are committed to continually monitoring and mitigating adverse social media campaigns by providing accurate information on commercial fishing activities on social and mainstream media platforms.

A report by King *et al* (2015) has found that chronic job insecurity has led to a mental health crisis and high rates of suicide among Australian commercial fishers. The report found that insecurity of fishing concessions (quotas and licences), financial issues arising from banks tightening money to the industry, challenges accessing health care, physical risk, and politically-driven changes to government policy were all major issues affecting fishers' health and well-being in small-scale fishing businesses.

The study found that particular concern for fishers is the insecurity around fishing concessions. This ultimately renders fisher livelihoods insecure and it is known that insecure livelihoods are a big contributor to poor mental health. Directly relatable to the smaller concession holders in the SPF, the constant politically-driven changes (restriction in vessel size) has affected rights in such a way that many operators do not have viable alternatives to harvest stocks through their fishing concessions rights in a manner that provides economies of scale that a freezer vessel can provide to be profitable.

Economic benefits to the Australian economy

The commercial fishing industry is large and regionally diffuse and makes a significant contribution to Australia's economy[2]. Australia's commercial fishing and aquaculture industry (both State and the Commonwealth) is worth around $2.2 billion annually and employs around 11 600 people (7300 directly and 4300 indirectly)[3]. Commonwealth fisheries alone generate over $300 million in value alone and annually produce about 52, 000 tonnes of catch.

Many variables affect a fishery's profitability over time. The key variables that influence a fishery's profitability include catch prices, input costs, vessel productivity and the stock biomass targeted in the fishery[4,5]. The effective management of Australia's Commonwealth fishery resources has become increasingly reliant on economic information. This has been driven by the Australian Fisheries Management Authority's (AFMA) legislated objective to manage fisheries in a way that maximises the net economic returns to the Australian community within the context of ecological sustainability.

The economic status of Commonwealth fisheries is evaluated against the economic objective of the FMA Act; to maximise the net economic returns to the Australian community. The ABARES *Fishery Status Report 2015* reviewed all Commonwealth fisheries which combined generated an estimated GVP of $338 million in 2013–14, or about 13 per cent of Australia's total fisheries and aquaculture GVP ($2.6 billion). Fishery GVP is dominated by production from a few major fisheries, in 2013–14:

1) The NPF $115 million
2) The multisector South Eastern Shark and Scalefish Fishery (SESSF) $72 million.
3) The wild-catch sector of the Southern Bluefin Tuna Fishery $39 million
4) The Eastern Tuna $31 million, respectively.

[2, 3] Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), 2012, The Australian seafood industry: Workforce information and stakeholder responses

[3, 4] Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), Australian Fisheries Statistics 2011

Together, these four fisheries accounted for 76 per cent of total fishery GVP. **It is important to note that these high valued fisheries that provide an economic return to the community all operate with fishing vessels that have the capacity to either store, process or freeze product on board.**

In addition, several other fisheries including the Great Australian Bight Trawl Fishery, Western Tuna and Billfish Fishery, East Coast Deepwater Trawl Sector, Heard Island and McDonald Islands Fishery and the Macquarie Island Toothfish Fishery have freezer processing vessels.

Fisheries resources are profitable firstly in industry's ability to catch the fish and secondly by selling fish at a price higher than the cost of catching it. The economic efficiency as paid returns derived from the catch, is necessary to assess the economic rent derived by the industry. Economic efficiency also requires that some attention be paid to the resources required to produce the catch, such as the capital and labour. An industry that relies on a relatively old and poorly equipped fleet, requiring a high labour input for a given catch, is presumably more costly and therefore less efficient than one which utilises modern, technologically advanced vessels such as those with the ability to freeze and store on board.

Current research and scientific knowledge

Research is a fundamental component underpinning sustainable fisheries resources management. Research is also important to improve management practises within industry. The CFA looks to government to support fisheries research that is collaborative across many research and scientific institutions. The fishing industry owes their sustainability to significant investment by industry and government in research over many years. Industry has long understood the importance of continuing investment in research, development, and extension to improve sustainability and increase their understanding of sustainable fisheries catch levels.

The Commonwealth Fisheries Harvest Strategy Policy and Guidelines (HSP) are widely acknowledged as a key driver of improvements in the performance of Commonwealth fisheries since its introduction in 2007. It has cultivated transparent, evidence and risk based approach to setting target and limit reference points for assessing a wide range of species along with decision rules for generating advice for managing key commercial species in Commonwealth fisheries. It is considered an example of world's best practice for managing fisheries, and has nothing to do with the capacity of a vessel[6].

The Fisheries Research and Development Corporation (FRDC) through industry levies and Government contributions have funded a wealth of projects that relate to Commonwealth fisheries, across issues such as fisheries policy, mitigation of interactions with marine mammals and other non- target species and stock structures.

The FRDC funded CSIRO research project to examine the *"Adaptive futures for SE Australian Fisheries & Aquaculture: Climate adaptation simulations"* found that smaller boats were socially tied to a specific geographic region (and port). Freezer capacity fishing vessels generally being larger than a fresher vessel have the ability to shift location to reduce such effects on localised depletion, however as seen in the past with the FV Margiris and now the FV Geelong Star, society at large would need to be carefully led through why larger vessels are required (and can be used sustainably), so as to avoid any kind of controversy around the potential use of larger boats.

AFMA also invests in research which is used to support fishery management decisions and regulate commercial fishing in Commonwealth fisheries. Scientific data and information from commissioned

[6] CSIRO & ABARES, 2012, Technical Reviews of Formal Harvest Strategies

research is reviewed by the resource assessment groups who then provide advice to their respective management advisory committees and the AFMA Commission on topics such as:

- the status of fish stock, sub-stocks, target and non-target species
- the impact of fishing on the marine environment
- economic and compliance factors affecting the performance of a fishery.

A list of research reports can be found at http://www.afma.gov.au/research/research-reports-2/

In particular the SPF has had a significant amount of research investment. The SPF has been the focus of stakeholder scrutiny in 2012 and more recently in 2015. Part of this scrutiny has been on the harvest strategy for the SPF and interactions with marine mammals by the FV Geelong Star. The recommendations from a technical workshop to explore options for mitigation marine mammal interactions in the SPF included an industry 'Code of Practice' should be established that documents procedures for mitigating the interactions of SPF mid-water trawlers with marine mammals and a Marine Mammal Working Group (MMWG) to be established to provide AFMA and Industry with ongoing advice regarding the effectiveness of the Vessel Management Plan, industry Code of Practice and other matters related to the interactions of SPF mid-water trawlers with marine mammals (e.g. data that need to be collected by industry, observers and researchers). The MMWG has been established and include scientists with expertise in pelagic fisheries, pinnipeds and cetaceans[7].

The effectiveness of the current regulatory framework and compliance arrangements
The CFA is highly supportive of AFMA's management and compliance arrangements. As evidenced by the ABARES stock status report the great majority of fished stocks are in very good shape and, even more importantly, the outlook for long-term sustainability is extremely positive. AFMA's compliance programs are underpinned by strong fisheries legislation, including strict rules and regulations with clear penalties and sanctions. In the rare event where fishers (and fish buyers) are caught breaking rules, they are subject to on-the-spot fines, suspension of licences to fish or, in the more serious cases, AFMA may prosecute them, have their catch seized, or remove (suspend or cancel) the concession altogether.

All vessels fishing in Commonwealth waters, including fishing vessels with on-board capacity for storage, freezing and/or processing fish are subject to the rules and regulations of that particular fishery. The individual fishery management arrangements can be found on the AFMA website http://www.afma.gov.au/fisheries/

Fisheries management is extremely complex. Below is a simplified version of monitoring and compliance arrangements for the Commonwealth fisheries.

Inspections
AFMA Fisheries Officers conduct targeted inspections of Commonwealth endorsed operators (these operators include the actual fishing boats and those who receive fish from fishing boats) in an effort to stop fishers from engaging in illegal activities.

Observers
On-board observers are also utilised, as part of the monitoring and compliance service delivered by AFMA. Highly trained AFMA observers are positioned on board vessels that have the ability to store, freeze and/or process in order to verify compliance with AFMA's management arrangements

[7] FRDC, 2014, Small Pelagic Research Coordination Program: Technical workshop to explore options for mitigating marine mammal interactions in the Small Pelagic Fishery

including in relation to target species, bycatch and monitor any interactions with threatened and endangered species.

Tracking the boats
All Commonwealth fishing boats are tracked via satellite – to vessel monitoring systems. Satellite tracking is the main way AFMA monitor fishing activity across the Commonwealth fleet. AFMA targets Commonwealth boats who fail to have their vessel monitoring system operating at all times. These boats may be ordered into port until the problem is fixed.

Tracking the catch
Operators are required to provide AFMA with catch and effort information. Catch within Australia's fisheries is monitored in several ways; this includes electronic logbooks, a Catch Documentation Scheme, electronic monitoring, paper logbooks, observers, audits and inspections.

Electronic Monitoring is in place in the ETBF, WTBF and the GHaT fisheries. The AFMA E-Monitoring program will utilise video and sensor data to independently validate fisheries' logbook information supplied by fishers. The e-monitoring program will generate verified, accurate, near real-time fisheries data which can be used for fisheries management decisions and verification of compliance with regulations.

E-monitoring systems will be required to be fitted to full time vessels fishing in the ETBF, WTBF and GHaT and be fully operational for as high a percentage of fishing operations as practicable; and identify when a boat engages in fishing activity, including:

- identification of the vessel;
- the location of fishing activity;
- the date and time of fishing activity;
- the species being caught;
- the quantity, both retained and discarded of each species; and
- the type of fishing gear used

Voluntary compliance
Fisheries Officers conduct education sessions before the start of all Commonwealth fishery seasons. Fisheries Officers also help fishers during inspections, providing one on one education.

Conclusion
CFA strongly disputes that the size of a vessel, or its freezer/storage capacity on board should be the driver of fisheries management policy and decisions.

The CFA Policy position on Vessel Efficiency is as follows;

1. Fisheries management decisions must be underpinned with the best available science;
2. Certainty of access for the commercial fishing industry should be explicitly considered in fisheries management decisions;
3. Vessel size, dimensions and/or capacity (including on board freezing and processing facilities) should not be the driver for fisheries management decisions in quota fisheries, or the ability to fish;
4. Changes to Commonwealth Fisheries Regulations must ensure there are no unintended consequences that flow on from introducing legislation, particularly where this may be happening "on the run"; and,

5. Where access issues and conflict arise, they are best addressed through mediation between Government, the community, and the commercial fishing industry leading to a comprehensive negotiated outcome.

The Commonwealth fishing industry owes their sustainability to significant investment in research to support sustainable fisheries management, and remains committed to continued investment. It is unrealistic and unfair to dictate that freezers on board vessels cannot be used. Most Commonwealth fisheries are quota managed, thus notwithstanding the size of the vessel, the storage capacity, or the freezing facilities on board, the operator has an access right to fish within the confines of the quota limits and other regulations set by AFMA and other regulators.

The difficulty with defining fishing capacity by the size of freezers is it creates a misleading impression of what is happening during fishing operations, and focuses on the inputs used to catch fish rather than the outputs, which is more important in quota managed fisheries i.e how many fish can be harvested sustainably. Banning or removal of vessels that have on board freezers, would see the loss of Australian prawns, blue grenadier and many other fisheries that freezes their product out at sea. Freezing product at sea produces premium seafood, which Australians love to eat.

The CFA recommends that with the review of large capacity fishing vessels known as ‘super trawlers’, the Senate Standing Committee on Environment and Communications acknowledges that Australia has now banned ‘super trawlers’ in Australian waters. There are no ‘super trawlers’ operating in Australia’s marine jurisdiction.

The CFA also requests the Senate Standing Committee on Environment and Communications to be mindful of the long history of our members and Australian fisheries using various sizes of fishing vessels (under the 130m length) that have the ability to store, freeze and process fish.

Fisheries are major contributors to the Australian domestic and export economies. Due to the geographical and operational challenges that many of these fisheries face, freezer boats are the only viable option in many fisheries to produce sustainable, premium quality seafood for domestic and international markets.

Yours Sincerely,

Anthony Ciconte
Chair, Commonwealth Fisheries Association

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