TASMANIAN SEAFOOD INDUSTRY COUNCIL
ABN 61 009 555 604

20 November 2015

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Sir / Madam

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

Please find attached a submission from the Tasmanian Seafood Industry Council (TSIC) to the Senate Standing Committee on Environment and Communications inquiry into the use of 'supertrawlers' in Australia's marine jurisdictions.

TSIC is the peak body representing the Tasmanian seafood industry, inclusive of wild catch fishers, marine farmers and seafood processors. The Tasmanian seafood industry is the most valuable seafood industry in Australia, with the most recent official statistics showing a value of $696 million (ABARES 2012-13). The most valuable fishery in Tasmania (and Australia) is Tasmanian farmed salmon ($489 million,) with wild catch abalone ($97 million) and wild catch rock lobster ($65 million) also significant contributors.

The continued long-term ecological sustainability and economic viability of Australia's seafood industry is reliant on robust science and effective fisheries management. The overarching principle of the contemporary world's best fisheries management used in Australia is to control fishing effort and catch at sustainable levels; whilst also considering and minimising impacts on bycatch; threatened, endangered and protected species; and the broader marine environment.

It is TSICs view that all fisheries management decisions should be made using robust science and world's best contemporary fisheries management regimes. If catch is controlled to scientifically sustainable levels and ecological impacts considered, then improved economic efficiencies in fishing practices, such as vessel size and/or freezing capacity, will not impact the sustainability of Australia's marine resources.

Please do not hesitate to contact me directly if you require further information.

Kind regards

Julian Harrington
Chief Executive - TSIC

Submission to the Senate Standing Committee on Environment and Communications with respect to:

"The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'supertrawlers' operating in Australia's marine jurisdiction"

on behalf of the

Tasmanian Seafood Industry Council (TSIC)

November 2015

Senate Environment and Communications Committee

On the 7 September 2015, the Senate referred the following matter for inquiry and report by 30 April 2016:

'The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'supertrawlers' operating in Australia's marine jurisdiction', with particular reference to:

a. the effect of large fishing vessels on the marine ecosystem, including
    i. impacts on fish stocks and the marine food chain, and
    ii. bycatch and interactions with protected marine species;
b. current research and scientific knowledge;
c. social and economic impacts, including effects on other commercial fishing activities and recreational fishing;
d. the effectiveness of the current regulatory framework and compliance arrangements;
e. any other related matters.

Introduction

The Tasmanian Seafood Industry Council (TSIC) welcomes the opportunity to comment on the Terms of Reference from the Senate Standing Committee on Environment and Communications inquiry into "The environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'Supertrawlers' operating in Australia's Marine Jurisdiction".

TSIC is the peak body representing the interests of commercial fishers, marine farmers and seafood processors in Tasmania. The overarching role of TSIC is to be the unified voice that champions a sustainable, vibrant and profitable seafood industry in Tasmania.

Australia's wild-catch fisheries are today considered amongst the best managed and environmentally sustainable in the world. The foundation of sustainable fisheries management in Australia is robust science and sound fisheries management, which as a generalisation controls catch and effort at sustainable levels. Effective contemporary fisheries management doesn't stop there, with the impact of fishing operations on bycatch; threatened, endangered and protected species; and the broader marine environment also considered in the decision making process. Over the last 20 years, this formula of using science and management to control catch, effort and broader ecosystem impacts has led to significant recovery of many of Australia's and the worlds, fish stocks. Specific examples include the recovery of orange roughy stocks off Tasmania (see http://www.afma.gov.au/strict-fisheries-management-pays/) and recovery of north sea cod stocks, which is probably the most high profile example used by conservationists to highlight the impacts of overfishing (see http://www.theguardian.com/environment/2015/apr/08/north-sea-cod-stocks-bounce-back-analysis-shows).

There is no denying that the arrival of a large vessel wanting to fish in the Commonwealth Small Pelagic Fishery sparked significant division amongst the general public and the commercial fishing fleet alike. In the end, political intervention overrode Australia's world leading, science based approach to fisheries management. This set the dangerous precedent for both commercial and recreational fisheries to be managed by social media and public protest, rather than robust science and due process.

The reality is that large trawl vessels, which have catching, processing, packing and freezer capacity are used to sustainably harvest fish in regulated fisheries throughout the world. How? Scientists and management regimes control the catch, control the environmental impacts of the vessel and have strict policing and compliance regimes in place. As an example, Petuna Sealord Deepwater Fisheries fish the AFMA controlled winter blue grenadier fishery off Tasmania's West Coast. Petuna utilises the freezer trawler Rehua, to catch, process, fillet and freeze its catch. This ensures the highest quality seafood, all for human consumption. This operation has recently achieved the highest third-party sustainability accreditation in the form of Marine Stewardship Council (MSC) certification for sustainable practices. This certification evaluates all aspects of the fishing operation, including impacts on the marine environment, bycatch, and Threatened, Endangered and Protected Species (TEPS).

It is TSICs view that robust science and sound fisheries management, inclusive of effective policing and compliance, is what drives sustainable fisheries, and under such regulated regimes, the size and capacity of a vessel will have no impact on resource sustainability.

TSIC Responses to the Terms of Reference

The effect of large fishing vessels on the marine ecosystem, including

i. **impacts on fish stocks and the marine food chain, and**
ii. **bycatch and interactions with protected marine species.**

Under the principle of the contemporary fisheries management regime used in Australian fisheries, the impact of fishing operations on the target species and the broader marine ecosystem, including fish stocks; the marine food chain; bycatch; interactions with Threatened, Endangered and Protected Species (TEPS), and the broader marine environment, must be taken into account during the management process and any potential negative impacts minimised.

This is achieved through the diverse range of state and national rules, regulations and reporting requirements that control Australia's fisheries, which include but are not limited to:

- State based legislation such as Tasmania's *Living Marine Resources Management Act 1995.*
- State and national based fishery management plans, such as the *Small Pelagic Fishery Management Plan.*
- National *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), which provides the legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places.
- Fishery catch return reporting.
- Fishery bycatch and discarding plans

For fisheries with high interactions with TEPs, there are requirements for more detailed bycatch management plans, and in some instances, direct measures such as 'exclusion devices' must be used. Continued interactions with TEPS will trigger new management restrictions and/or new technologies in order to decrease interactions.

As is reasonable, fisheries managers take a pragmatic approach to interactions with bycatch, discards and TEPS, allowing a certain level of interaction, inclusive of fatal interactions. Such an approach maximises protection of non-target species, while still allowing the sustainable harvest of seafood. The majority of people would find this a reasonable approach to managing our marine resources.

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

Under the contemporary fisheries management regime utilised within Australia, the impact of a fishery on other commercial and recreational fishing activities must be considered.

Of greater relevance to this TOR is the broader social and economic impacts affecting our seafood industry.

Regional Scale
At a regional scale, the Australian commercial seafood industry provides significant benefits to the Australian economy, including employment. This benefit is particularly relevant to regional communities, where the majority of our seafood industry is located. Unfortunately commercial fishers are increasingly being locked out of traditional fishing areas. For example, recent bans on commercial net fishing in Queensland, NSW and Port Phillip Bay in Victoria, will see a significant number of fishers and their families out of work. Many of these bans are implemented as a consequence of resource sharing, not sustainability issues. Regardless, the flow-on effects of such bans for regional communities is loss of jobs, reduced ability for members of the public to access locally caught sustainable seafood, and in many instances, increased mental health and high rates of suicide among commercial fishers (see Deakin University media release at https://www.deakin.edu.au/news/latest-media-releases/2015-media-releases-archives/commercial-fishing-industry-reeling-from-mental-health-crisis).

There is no denying that the recreational sector, through sheer weight of numbers, has a very powerful political influence, however, there must be a balanced approach to resource access that allows the continued sustainable harvest by both commercial and recreational fisheries, especially when there is credible scientific research supporting a sustainable resource sharing approach.

Global Scale

At a global scale, seafood is an exceptionally important form of protein, and accounts for one quarter to one third of all protein eaten worldwide. When taking a diverse range of parameters into account, such as freshwater usage, petroleum used in fertilizer or to run fishing vessels, land degradation and soil erosion and greenhouse emissions amongst more, seafood gets classified as the most sustainable form of protein in the world. To further put the sustainability credentials of seafood into context, a recent publication by respected fisheries scientist Ray Hilborn has shown that to replace the fish harvested from the sea with equivalent amounts of animal protein from pigs, cattle and chickens would take land resources equivalent to 22 times the rainforest we currently have. If we just stop trawl fishing, it would still take five times more rainforest than we have to produce the equivalent protein (see http://www.washington.edu/news/2010/11/04/eat-a-fish-save-a-rainforest-professor-says-to-weigh-alternatives-before-we-curtail-fishing/).

The question is, 'does Australia have a moral obligation to help provide protein to the world's population'?

Current research and scientific knowledge

Scientific research and knowledge is fundamental to the sustainable management of Australia's marine resources. Science and research in Australia's seafood industry is supported through the Fisheries Research and Development Corporation and other state based funding arrangements. Investment in research and development improves our understanding of our marine ecosystems, and allows the long-term sustainable harvest of our marine resources.

Given the prevalence of the small pelagic fishery in the broader large freezer trawler debate, TSIC's submission will highlight the vast array of research and development conducted on this fishery.

Small pelagic fishery research

The key research areas for the small pelagic fishery are:

1. Application of fishery-independent stock assessment techniques such as the Daily Egg Production Method (DEPM) for blue mackerel, jack mackerel, redbait and sardine;
2. Establishment and use of formal harvest control rules or operational management procedures (i.e. Harvest Strategies);
3. Assessment of the ecosystem effects of fishing; ecosystem modelling;
4. Mitigation of operational interactions with wildlife. Bycatch reduction / marine mammal mitigation.

To gain information against these research priorities, a diverse and extensive range of key research projects have been conducted:

2014	Egg distribution, reproductive parameters and spawning biomass of Blue Mackerel, Australian Sardine and Tailor off the East Coast during late winter and early spring.
2014	Improving the precision of estimates of egg production and spawning biomass obtained using the Daily Egg Production Method.
2013	Simulation analysis of jack mackerel stock sizes: Ecosystem model based plausibility study.
2013	Summer spawning patterns and preliminary Daily Egg Production Method survey of Jack Mackerel and Sardine off the East Coast.
2013	Review and update harvest strategy settings for the Commonwealth small pelagic fishery.
2012	The Commonwealth Small Pelagic Fishery: General background to the scientific issues
2009	Movement patterns and stock structure of Australian sardine (*Sardinops sagax*) off South Australia and the East Coast: implications for future stock assessment and management.
2008	Management Strategy Evaluation (MSE) of the harvest strategy for the Small Pelagic Fishery.
2008	The trophodynamics of small pelagic fishes in the southern Australian ecosystem and the implications for ecosystem modelling of southern temperate fisheries.
2006	Management zones from small pelagic fish species stock structure in southern Australian waters.
2005	Establishing ecosystem-based management for the South Australian sardine fishery: developing ecological performance indicators and reference points to assess the need for ecological allocations.
2004	Evaluation of egg production as a method of estimating spawning biomass of redbait off the east coast of Tasmania.
2003	Trophodynamics of the GAB: assessing the need for an ecological allocation in the SA pilchard fishery.
2002	Development and evaluation of egg-based stock assessment methods for blue mackerel (*Scomber australasicus*) in southern Australia.

Over recent years, the science behind the small pelagic fishery has received intense scrutiny from opponents of the fishery, politicians and the media. Allegations varied from incorrect statistical approaches to unscientific bias, with all arguments set forth publically and on the national stage.

Throughout the intense period of public and political debate, the small pelagic research was extensively and repetitively reviewed by expert panels and international specialists, and benchmarked against world's best practice. Time and time again the research proved to be of the highest caliber and world-class and highly relevant for the sustainable management of the small pelagic fishery.

The effectiveness of the current regulatory framework and compliance arrangements

The management arranges for fisheries in Australia are amongst the best in the world. The regulatory framework for management and compliance includes strict rules and regulations and clearly identified penalties and sanctions, which support fisheries compliance and policing. Penalties for breaching fisheries rules and regulations can range from on the spot fines to the forfeiture of fishing licences and quota, while catches and vessels can also be seized.

With respect to large trawl boats with freezing capacity operating within Commonwealth waters under the jurisdiction of AFMA, there are a range of rules, regulations and compliance measures in place to ensure catches and bycatch fall within the fisheries management requirements, including:

- *Vessel 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. Furthermore, all foreign fishing boats that come into Australian ports can be inspected by AFMA and they can also refuse entry of any foreign fishing boat that has been known to be fishing illegally.
- *Satellite tracking the boats:* All Commonwealth fishing boats are tracked via satellite – to vessel monitoring systems (VMS). 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:* It is important that operators provide AFMA with the correct amount of fish caught. Catch within Australia's fisheries is monitored in several ways; this includes electronic logbooks, a Catch Documentation Scheme, electronic monitoring, logbooks, observers, audits and inspections.
- *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.

All these measures allow the effective, scientifically based sustainable management of Australia's marine resources.