



Australian Government

Australian Fisheries Management Authority

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Submission to the Senate Inquiry into large capacity fishing vessels (with particular reference to the Small Pelagic Fishery)

Introduction

The Australian Fisheries Management Authority (AFMA) is responsible for the management of domestic Commonwealth fisheries (through the AFMA Commission), Australian boats fishing on the High Seas and deterring illegal foreign fishing in the Australian fishing zone, consistent with the *Fisheries Management Act 1991* (FM Act) and the *Fisheries Administration Act 1991* (FA Act).

Please note that AFMA's submission does not reflect fisheries management arrangements administered under the *Torres Strait Fisheries Act 1985*.

AFMA has approached this submission by responding to the Terms of Reference (ToRs) of the Inquiry (**Attachment 1**) in both general terms and specifically to do with the Small Pelagic Fishery (SPF). Additional information is enclosed with this submission on a number of key matters that relate to the ToRs.

Key Points

AFMA's management of Commonwealth fisheries:

- AFMA's fisheries are generally managed via Total Allowable Catch allocated as catch quota meaning that the size of boat used to take the catch does not matter;
- AFMA's monitoring of the Commonwealth fishing fleet is more rigorous than any other jurisdiction in Australia; and
- AFMA's science-based fisheries management is independently recognised as being of a high standard when compared nationally and internationally.

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The impact of the FV Geelong Star in the SPF:

- The vessel utilises a natural resource that is sustainably harvested and provides economic benefits to Australia;
- The mid-water trawl fishing method results in a low bycatch rate and has limited impact on the sea floor;
- There has been a steady reduction in marine mammal interactions over the 6 to 7 months with no dolphin mortalities for the last 5 months; and
- There has been no substantiated evidence of a negative impact from the vessel's fishing activity on other commercial fisheries or the recreational fishing sector.

Effect of large fishing vessels on the marine ecosystem

Boats over 60 metres are used by the fishing industry for a range of reasons including safety in certain sea conditions (eg the Southern Ocean) and on-board factories enabling processing and freezing of catch at sea to gain maximum product value.

For Commonwealth fisheries the evidence is that larger boats (> 60m length) have lower protected species interaction rates/mortalities and have a higher level of monitoring (usually 100%) than smaller boats (< 60m length). Attachment 2 provides further information on the relationship between protected species interaction rates and boat length.

Seafish Tasmania, a company that owns SPF statutory fishing rights (SFRs) which enable it to harvest a proportion of the SPF total allowable catches (TACs) using an Australian boat, has chosen to use *the FV Geelong Star*. This vessel is Australian flagged and subject to the relevant Australian laws.

- **impacts on fish stocks and the marine food chain**

Commercially fished species are managed primarily by TACs and individual transferable quotas (ITQs). For these catch-limited species the size/capacity of the boat used to catch the fish is not relevant. TACs are set consistent with the Commonwealth Harvest Strategy Policy (HSP) under fisheries-specific harvest strategies that utilize the best available science. **Attachment 3** provides the current information on TACs and fish stock sizes for the SPF.

In the case of the SPF, the TACs leave more than 90% of fish in the water, even if all the TACs are caught. Recent peer reviewed science suggests that unlike some other regions of the world the food web in southern and eastern Australia does not appear to be highly dependent on SPF target species. Further, predatory species such as seals, penguins and tunas do not have a high dietary dependence on these species.

The FV Geelong Star uses mid-water trawling gear that has limited benthic impact, its bycatch (all non-retained catch including protected species) is about 2% by weight of total retained catch. This is low compared with other fisheries and fishing methods, and means there is very limited impact on non-target fish stocks and the sea floor.

- **bycatch interactions with protected marine species**

Bycatch interactions with protected species occur in many fisheries domestically and internationally. Commonwealth fisheries interact with a wide variety of protected species and hold the relevant approvals under *the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* to enable fishing operators to legally do so. Australia decided to protect all its native marine reptiles, birds and mammals under the EPBC Act, so that many species are listed as 'protected' even though they are not of conservation concern, for example Australian fur seals and common dolphins.

AFMA works with the fishing industry to minimise protected species interactions, while enabling sustainable commercial fishing to take place. However, there are some species that are in higher conservation categories (vulnerable, endangered, or critically endangered). Commonwealth commercial fisheries interact with a number of these (e.g. Australian sea lions, sea turtles and shy albatross). AFMA has made species in higher conservation categories a priority over other protected species, noting the public's interest in the latter.

Across all Commonwealth fisheries, about 40% of protected species interactions result in mortalities. However, this varies greatly between each protected species and the fishery/fishing gear concerned. The mortalities of many protected species have been progressively reduced in Commonwealth fisheries over many years, for example turtles and Australian sea lions. For some species, in some years, there are now no mortalities at all.

AFMA, the fishing industry, the CSIRO and the Fisheries Research & Development Corporation (FRDC) have all made significant investments in reducing protected species mortalities in Commonwealth fisheries and continue to do so. Most recently, this has included a technical workshop to explore mitigation options for protected species in mid-water trawl fisheries and a project on eliciting expert knowledge to inform the establishment of trigger limits for key marine mammal species in fisheries. Like other Commonwealth fisheries, the SPF has a fishery-level Bycatch and Discard Work plan (**Attachment 4**) that explains the actions being taken in the fishery to pursue lower interaction rates.

In relation to the FV Geelong Star, it has some of the most up to date and innovative protected species mitigation equipment, and strict mitigation requirements of any fishing boat operating in the Australian fishing zone. These include the use of a seal excluder device or barrier net, marine mammal observation and move-on measures, bird scaring devices, offal management measures, marine mammal and seabird handling practices and a comprehensive network of spatial closures to reduce the likelihood of interactions with Australian sea lions. A full explanation of these requirements is at **Attachment 5** in the FV Geelong Star's Vessel Management Plan. In addition, there are trigger limits that will result in large spatial closures if Australian sea lion or dolphin mortalities occur.

Current research & scientific knowledge

AFMA administers an annual research program of about \$4 million. All major commercial fisheries have a five year research plan to assist in prioritising research; minimising overfishing risks for commercial target species and setting TACs at levels which pursue maximum net economic returns to the Australian community. Also, ecological risk assessment and management are significant and growing components of AFMA's research program. Further, the Commonwealth government and fishing industry have either directly, or through the FRDC, funded a wide range of fisheries research including, reducing uncertainty in stock status, determining stock boundaries and the habitat impacts of commercial fisheries. **Attachment 6** provides a summary of the relevant research.

As a result of this on-going investment in science, there is a comparatively high level of information about Commonwealth fish stocks and ecosystems than for other jurisdictions in Australia and overseas. AFMA's Resource Assessment Groups and related bodies provide advice to the AFMA Commission regarding recommended biological catches, which form the basis of setting around 50 TACs across Commonwealth fisheries. The scientific and economic information collected also enables bodies such as the Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) to independently assess AFMA's performance through regular, public 'Fishery Status Reports'. The latest report (for 2014-15) states for a second year in succession that no solely AFMA-managed fish stock is subject to overfishing.

SPF commercial fish stocks are assessed by ABARES as not subject to overfishing and not overfished, with the exception of redbait (western stock) whose uncertain biomass status is due to insufficient data. Where information is lacking AFMA sets more conservative TACs. An extract of the most recent ABARES Fisheries status report (2014-15) and the current SPF Harvest Strategy are at **Attachment 7** and **Attachment 8** respectively.

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

AFMA has a legislative objective to maximise the net economic returns to the Australian community from the management of fisheries. Fisheries legislation and government policy are also framed around a preference for management via 'output controls', that is, TACs allocated as ITQs, rather than 'input controls' such as boat size, boat numbers and fishing gear configuration. In fisheries managed under *the FM Act*, AFMA does not regulate for boat length less than 130m. This enables fishing operators to decide what boat can most efficiently and effectively take the quota they hold. As a result, the Commonwealth fishing fleet has a wide variety of vessel types so length, hold capacity, freezer storage, chilling space and processing capability vary considerably.

In the case of the SPF, the use of a factory freezer mid-water trawler enables the industry to substantially increase the value of the catch through processing and/or freezing on board at sea. This retains its use for human consumption rather than lower value uses such as fishmeal.

Australia benefits from the operation of larger freezer-trawlers in its fishing zone with employment, provisions, fuel, repairs, maintenance and transport, and potentially wholesale and retail. This is a positive contribution to Australia's rural and regional exports, and is consistent with the government's economic policy. AFMA is aware that SPF sourced product has already been sold in West African countries for human consumption.

Consistent with the conservative TACs in the SPF and the limited dependence by predators on commercially harvested species, AFMA is of the view that economic and social impacts of the SPF on other commercial fishing and recreational fishing are low.

Localised depletion is often raised as a negative impact of commercial fishing for SPF species by some stakeholders. Most commercial and recreational fishing can cause some form of localised depletion but the risk is lower for mobile species with conservative catch limits and spatial management as in the SPF. AFMA has in place both fine-scale and broader spatial catch limits to further reduce any risk of localised depletion occurring.

The South Australian Sardine Fishery demonstrates that large amounts of small pelagic fishes can be taken year after year from the same area, with no significant negative impacts on the environment or other users. Catches are usually between 30,000 and 40,000 tonnes from one fish stock in a relatively small area off South Australia. This is the same as all the TACs for the Commonwealth for the SPF combined which must be taken from a much broader area.

From an economic perspective, there is no evidence that the harvesting of SPF species at current levels negatively impacts on other commercial or recreational fisheries. However, there remains scope for the relevant recreational and commercial fishing sectors to have further dialogue on areas of particular socio-economic interest to one or both parties. AFMA has facilitated similar discussions in a number of fisheries and remains ready to support such a dialogue in the SPF.

Effectiveness of the current regulatory framework and compliance arrangements

The current regulatory framework is comprehensive and comprises the key elements of: legislative objectives, general fisheries regulations, fishery specific management plans, fishery closed areas, fishing gear restrictions, fishery harvest strategies, fishery bycatch and discard work plans and statutory fishing rights conditions. Some fisheries have vessel-level management plans to deal with protected species interactions and related matters. The regulatory framework has proven very effective with generally low levels of non-compliance detected. Further explanation of the framework is at **Attachment 9**.

Commonwealth fishing vessels are subject to a higher level of monitoring than fishing vessels in any other Australian jurisdictions. GPS-based vessel monitoring systems are compulsory for all Commonwealth vessels and observer coverage is required in all fisheries with the level dependent on the data required from each fishery. Electronic monitoring (cameras etc.) is compulsory on vessels in the Eastern and Western Tuna and Billfish Fisheries and the Gillnet, Hook and Trap Fishery, and *the FV Geelong Star*, as a cost-effective means of verifying logbooks. All Commonwealth fishing vessels must complete daily logbooks. Combined, this information enables AFMA to know where every fishing boat is, what they have caught and where they have caught it. No other Australian jurisdiction has such a comprehensive monitoring regime.

AFMA has a highly regarded risk-based compliance framework based on intelligence that enables efficient and effective deployment of compliance resources, including targeted operations aimed at reducing or eliminating key risks and general deterrence through monitoring/boarding vessels at sea and in port.

The management system AFMA employs is adaptive and responsive to changing circumstances in its fisheries. These can sometimes be rapid such as introducing a fishery closure system to the SPF in response to marine mammal mortalities as a result of fishing by the FV Geelong Star. Similarly AFMA responded quickly to new scientific and expert advice about the use of mitigation equipment aboard the Geelong Star and adjusted the Vessel Management Plan accordingly. The FV Geelong Star's conditions of operation meet or exceed those of other Commonwealth fishing vessels.

AFMA's regulatory system also enables industry to innovate by taking an outcomes-based approach, that is, there is scope for industry to find the best solution to a problem within sustainability limits. Solutions to reduce protected species interactions in many Commonwealth fisheries have often resulted from industry working collaboratively with fishing gear technologists and researchers, in designing, testing and implementing various bycatch systems at sea, over several years. The highly successful turtle excluder devices in the Northern Prawn Fishery are an example of this.

Any other related matters

Crewing on fishing vessels has been a concern for some members of the public. Australian flagged vessels like *the FV Geelong Star* that fish in the Australian fishing zone are subject to all applicable Australian laws administered by the relevant authorities. The Department of Agriculture and Water Resources is currently undertaking a review of the policy on the use of foreign fishing vessels which is relevant to this matter.

Some fishery stakeholders have made claims regarding a lack of transparency and conflicts of interest in the SPF Resource Assessment Group that previously provided scientific advice on SPF fish stocks to the South East Management Advisory Committee and the AFMA Commission. AFMA has considered those claims and decided to trial, for a two year period, a scientific panel with stakeholder forums instead. This enables a wider range of stakeholders to participate in the advisory process and lessens the possibility of negative perceptions about conflict of interest.

AFMA's domestic fisheries are subject to cost recovery in accordance with government policy. In effect, this means that over half of AFMA's domestic fishery budget is funded by Commonwealth fishing concession holders. This sits alongside a participatory management approach in which the fishing industry plays a key role along with scientists, recreational fishers and conservation groups, as reflected in Commonwealth fisheries legislation.

AFMA would welcome the opportunity to appear before the Senate Committee and/or clarify for it, any matters raised in this submission or the Authority's management of Commonwealth fisheries more generally.

Yours sincerely

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Attachments

1. Senate Inquiry Terms of Reference
2. Protected species interactions and boat length
3. Small Pelagic Fishery TACs and stock sizes
4. Small Pelagic Fishery Bycatch & Discard Work Plan
5. FV Geelong Star Vessel Management Plan
6. Small Pelagic Research Summary
7. SPF ABARES Fishery Status Report
8. Small Pelagic Fishery Harvest Strategy
9. AFMA's regulatory framework
- 9.a SPF Management Booklet

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