

Brad Warren

To: The Rural and Regional Affairs and Transport References Committee

Re: The fisheries quota system

Thank you for the opportunity to make a submission to the inquiry into fisheries quota systems.

This is indeed a topic of consequence to every Australian citizen, as the allocation of quotas to individual fishers and/or investors results in community owned resources, stewarded by the Commonwealth and its states, being transferred into private ownership on the whim of a small cohort of fisheries managers.

My Background

I started work in the fishing industry in NSW in 1989, working alongside my father. I became a licensed fisher in my own right in 1991.

I have been an owner operator in the NSW Ocean Trap and Line, Lobster and Estuary General fisheries at various times over the past 30 years.

Past affiliations with seafood industry organisations include:

- director / executive chair OceanWatch Australia 2003/2017
- director NSW Seafood Industry Council
- director Commercial Fisherman's Co-op
- president Seafood Quality Assurance Association

Related formal learning processes include:

- graduate Australian Rural Leadership Program
- graduate Australian Institute Company Directors
- graduate National Seafood Industry Leadership Program

A very brief synopsis of some of my work with OceanWatch Australia relevant to this inquiry:

- Secured funding for the SeaNet Environmental Extension Program 2007/2013.
 - Chaired the national steering committee and NSW reference group

SeaNet was responsible for the provision of fisheries extension officers in all states of Australia, and was responsible with the development and extension of approximately 80 fishery Codes of Practice as well as the extension of bycatch mitigation techniques, threatened species risk mitigation and biosecurity training for fishers nationally.

Influenced Commonwealth Natural Resource Management policy (2013) and gained recognition for Australia's marine environment and seafood industry within the Australian Government National Landcare Program, and associated NRM programs leading to:

- Unlocking access to Commonwealth Dept Agriculture and Environment Dept. funding through the \$2b Landcare program for seafood industry and marine environment NRM initiatives
- recurrent funding for and my Chairing(2014/17) Australia's first and only Marine Natural Resource Management organisation
- lead authoring of Australia's first Marine Natural Resource Management Plan for Commonwealth Dept of Environment and Dept of Agriculture

Member – NSW Fisheries Research Advisory Committee

- Providing advice to Fisheries Research and Development Corporation on research priorities and individual applications

I am also responsible for the development, securing of funding, trialling and initial roll out of the OceanWatch Master Fisherman training program, currently funded by the Commonwealth and NSW governments.

In recognition of my long term service to the seafood industry I was awarded the Star of the Sea at the 2015 Seafood Excellence Awards and was nominated as one of three finalists in the National Seafood Industry Ambassador Award at the 2015 National Seafood Industry Awards Gala Dinner.

Submission addressing Terms Of Reference

a. good fishing practice that is ecologically sustainable with an economic dynamic that produces good community outcomes;

It is my experience that the management of fisheries through quota systems has an adverse impact on best practice and ecological sustainability.

In multi species trawl fisheries discarding and high grading becomes an imperative to maximise returns from a limited quota. Discards have a limited chance of survival resulting in wasted fish, reduced economic return for the fishing activity and a reduction in the availability of lesser value size gradings for consumers.

As an example, tiger flathead is a common target fish for fish trawlers. There is often a discrepancy of some 30/40% in the price received for medium tiger flathead and XL tiger flathead on the Sydney Fish Market auction floor. In this case the management mechanism (limited catch quota) and market preferences (for larger fish) combine to encourage the retention of XL flathead and the dumping of small and medium flathead. To highlight an even worse scenario, when a fishers flathead quota has been filled all flathead landed would need to be dumped to allow the fisher to continue to fish for other species for which he may have available quota.

b. how the current quota system affects community fishers;

To impose a quota management regime, fisheries managers must first make decisions on the allocation of quota shares. The allocation process is often based on catch or activity within a defined period of time forming an allocation criteria, which advantages some fishers over others. Through a process of this type there must necessarily be winners and losers.

In the recent NSW fishing reforms, which included a once only allocation of quota shares, fishers and representative organisations were splintered into two factions; those that could see a windfall for themselves as individuals, and those that could see the potential destruction of their business.

The personal animosity between these factions, fostered by NSW DPI's divide and conquer approach, has lead to an industry totally disunited and disillusioned.

c. whether the current system disempowers small fishers and benefits large interest groups;

One of the drivers of the introduction of quota management is a desire from regulators to minimise the number of entities they need to interact with. I would suggest that disempowerment of small fishers is one of the intended design features of quota management.

The current economic climate of negligible interest rates has created a perfect storm where it is increasingly difficult for small fishers to compete with speculators buying up fish quotas and looking for a return on their capital better than the 0.25% on offer at the bank.

I would expect that local and international research would show an aggregation of fisheries entitlements after the imposition of quotas.

d. the enforceability of ecological value on the current system, and the current system's relationship to the health of the fisheries;

In all quota management regimes quota settings lag stock assessments. For species that have a high natural variability in population dynamics over time, imposing an annual quota has undeniable potential to negatively impact on the sustainability of the target stock, the economic return from the fishery, and desired community outcomes of healthy marine ecosystems and availability of local seafood for consumers.

As an example scenario (see fig 1 below), in year one a target species population is assessed as being 400t. A Total Allowable Catch (TAC) is developed based on 30% of the assessed year one population and applied in year two (130t).

The target species population between year one and year two has a large natural decline unable to be predicted within the TAC setting process to 100t. This could be due to any number of intersecting influences including weather conditions, water temperatures, changing population dynamics of competing and predating species. The year two TAC (130t) developed using the previous year's assessment would be 130% of the year two population (100t), leading to obvious threats to sustainability.

Between year two and year three the species population recovers to 300t. A Total Allowable Catch (TAC) of 30t has been developed based on 30% of the assessed year two population (100t) and applied in year three. The year three TAC of 30t is 10% of the year three population, leading to obvious loss of economic opportunity in the fishery.

Between year three and year four the species population further recovers to 400t. A Total Allowable Catch (TAC) of 100t has been developed based on 30% of the assessed year three population (300t) and applied in year four. The year four TAC of 100t is 25% of the year four population, leading to further loss of economic opportunity in the fishery.

Between year four and year five the species population once again naturally declines to 50t. A Total Allowable Catch (TAC) of 130t has been developed based on 30% of the assessed year four population and applied in year five. The year five TAC of 130t is 260% of the year five population, leading to extreme risks of overfishing and resultant threats to long term sustainability.

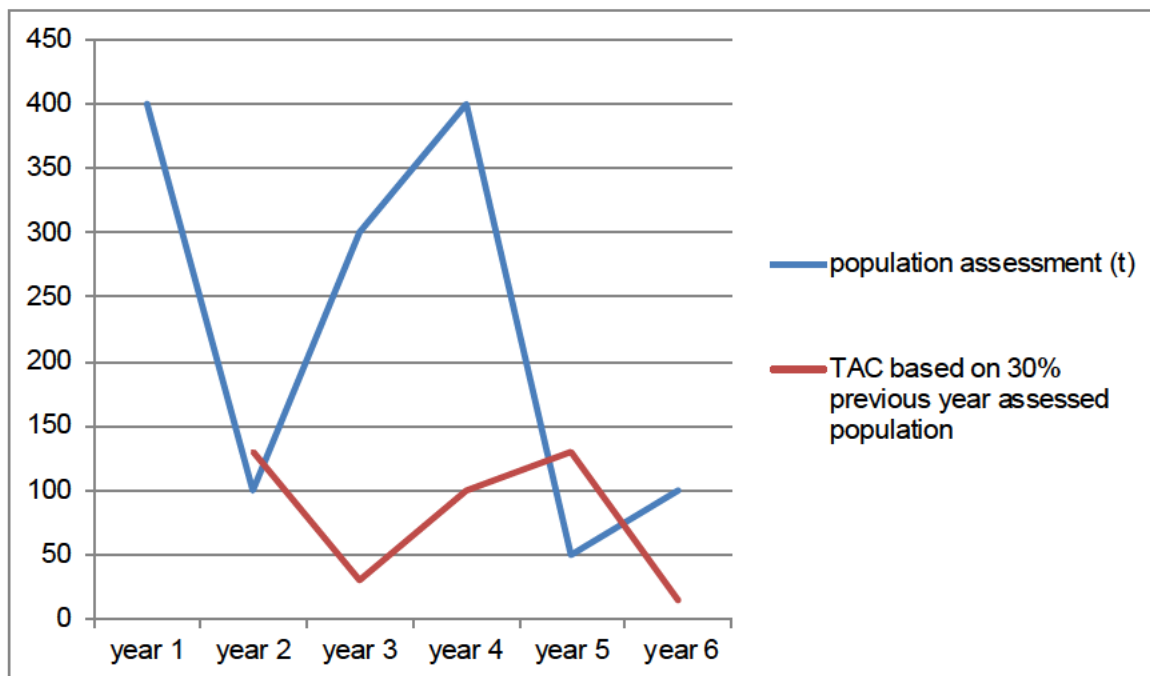


Figure 1- Example Population vs lagging TAC scenario

Some submissions to this inquiry will undoubtedly point to quotas being used to rebuild diminished stocks of high value species, but I would suggest that further investigation of this point is warranted.

The NSW Lobster fishery is one example of a fishery using quota management being rebuilt. As a former quota holding fisher I would put forward that it was the imposition of a maximum size limit which outlawed the take of the larger breeding lobsters in the deep water component of the fishery that has been a major driver in the recovery of the fishery, as opposed to the imposition of a catch quota.

e. whether the current system results in good fishing practice that is ecologically sustainable and economically dynamic, and produces good community outcomes; and

see responses to point a

f. any other related matters.

Most states have some form of quota management ambitions, either currently or under consideration.

To enable the development of a quota management system you must first allocate quota shares to those that will be allowed to fish under the new management regime. This is often calculated using previous catch within a defined period as a component of an allocation criteria.

The recent allocation of catch quotas on some species in NSW is an illustration of this type of allocation process.

In my personal case, an allocation of pipi quota shares in the NSW Estuary General fishery made by NSW DPI in 2018 saw my business allocated with a quota equating to 11% of my previous entitlement or 109% of an individual recreational bag limit.

What is most concerning about the entire NSW quota allocation process is that the publically owned resources of the state of NSW have been allocated to private individuals based on data that NSW DPI have themselves described as a likely high prevalence of inaccurate or fraudulent data.

As a member of the NSW Research Advisory Committee, in 2017 I was asked for advice regarding application 2017-085 submitted by NSW DPI seeking funding from Fisheries Research Development Corporation¹ titled Developing Automated Data Cleansing and Validation Processes for Fisheries Catch and Effort Data.

Principal Investigator of the project is Dr Karina Hall, Resource Assessment Scientist, NSW DPI.

The value of the project, including in kind from NSW DPI and others is \$814k, a significant amount. It must be a significant project with no less than 5 Drs and a Professor listed as Principal or Co- Investigator

Within the application the Dept rightly states that:

*Catch and effort data supplied by fishers are used globally to document fishing pressure on ecosystems, assess stock biomasses and inform fisheries management. In many cases these are the only data available.*²

The fisheries management decisions utilising the catch and effort data referred to by the Dept is the allocation of the correct number of quota shares and the setting of TACs.

The project application on behalf of the Dept states further

During a recent national Fisheries Statistics Working Group meeting, data managers from all Australian states highlighted and discussed the likely high prevalence of inaccurate or fraudulent data supplied by fishers and accrued through data entry errors.

Among the cash contributions on page 3 – The Executive Management of Fisheries NSW strongly support this application, and will provide a cash contribution of \$100,000 from the NSW Commercial Fishing Trust in the final year of this project to support integration of automated data cleaning processes into NSW Fisheries catch and effort databases.

Further support for the project is contained in a letter from David McPherson, Group Director Commercial Fisheries and Aquaculture to FRDC dated 1/6/17.

The letter states:

The project aims to address an issue of serious concern for NSW fisheries management and resource assessment – improving the quality of our commercial catch and effort

¹ Fisheries Research and Development Corporation (FRDC) is a statutory corporation under the provisions of the Primary Industries Research and Development Act 1989 (the PIRD Act 1989) and is responsible to the Minister of Agriculture & Water Resources.

² FRDC application 2017-085 page 4

data.....The quality of these data has been repeatedly questioned, which undermines confidence in our stock assessments and the sustainable management of NSW fisheries resources. Robust and accurate data will become even more essential as we continue to proceed with current structural reforms that will introduce an increased number of quota managed species and require shareholders to increase investment in their industry.

These statements made by the Dept are formal documents lodged within a formal application process for Commonwealth funding and must be accepted at face value. This is not here say, conjecture or rumour. It is certainly incomprehensible to think that the Principal Investigator conspired with the 7 Co-investigators from four different states to misrepresent the situation to a Commonwealth statutory Authority in order to obtain grant funding.

The problems with fisheries data nationally, highlighted in this grant application, are unexpectedly candid because the documents were never expected to enter the public domain.

The final result of this gross mismanagement of fisheries in NSW is the allocation of public resources into private ownership with the NSW DPI acknowledging the data that was used in the allocation process as likely high prevalence of inaccurate or fraudulent data.

Further, the health of our marine ecosystems, the economic return and community benefits associated with their use is all in question as the information being used in decision making processes around quota allocations and TAC setting is not fit for purpose.

Finally, in the interests of keeping this submission as brief as possible, I have only outlined a number of key points.

I would be happy to serve as a witness to the inquiry if committee members would like further clarification or information.



Department of Primary Industries

Fisheries Research and Development Corporation

Dear Sir/Madam,

Support for FRCD project – Developing automated data cleansing and validation processes for fisheries catch and effort data

The Commercial Fisheries & Aquaculture Group of Fisheries NSW strongly supports the FRDC funding application for the above project being submitted by Dr Hall.

The project aims to address an issue of serious concern for NSW fisheries management and resource assessment—improving the quality of our commercial catch and effort data. Fisheries NSW depend heavily on the use of catch and effort data supplied by fishers to assess the exploitation status of our stocks. The quality of these data has been repeatedly questioned, which undermines confidence in our stock assessments and the sustainable management of NSW fisheries resources.

Robust and accurate data will become even more essential as we continue to proceed with current structural reforms that will introduce an increased number of quota managed species and require shareholders to increase investment in their industry. The proposed project will help improve the quality of these data that are used widely to inform fisheries and marine estate management in NSW and in so doing provide greater confidence and security for our stakeholders into the future.

To underpin our support for this important project, the NSW Commercial Fishing Trust will commit a cash contribution as described below towards implementing the data cleansing and validation processes into NSW catch and effort data systems.

Contribution	Date due	Amount (\$AUD)	Total (\$AUD)
Cash	20-12-2019	\$100,000	\$100,000

NSW DPI is proud to support projects like this that directly contribute towards the sustainable management and use of NSW aquatic resources.

Yours sincerely,

David McPherson
Group Director Commercial Fisheries & Aquaculture
1/6/17