The Western Australian Fishing Industry Council (WAFIC) Submission to the Standing Committees on Rural and Regional Affairs and Transport

On 7 December 2020, the Senate moved that the following matter be referred to the Rural and Regional Affairs and Transport References Committee for inquiry and report by **24 June 2021.**

The fisheries quota system and examining whether the current 'managed microeconomic system' established around a set of individual transferable quotas results in good fishing practice, with particular reference to:

a. good fishing practice that is ecologically sustainable with an economic dynamic that produces good community outcomes;
b. how the current quota system affects community fishers;
c. whether the current system disempowers small fishers and benefits large interest groups;
d. the enforceability of ecological value on the current system, and the current system's relationship to the health of the fisheries;
e. whether the current system results in good fishing practice that is ecologically sustainable and economically dynamic, and produces good community outcomes; and
f. any other related matters.

Submissions close on **12 March 2021.**

Committee Secretariat contact:

Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

Phone: +61 2 6277 3511
Fax: +61 2 6277 5811
rrat.sen@aph.gov.au

Elements of Submission

1. Introduce WAFIC.

1.1. WAFIC is the peak industry body representing professional fishing, pearling and aquaculture enterprises, processors and exporters in Western Australia.

1.2. WAFIC works to secure a responsible and sustainable industry that is confident of resource sustainability and security of access to a fair share of the resource; cost-effective fisheries' management; that businesses can be operated in a safe, environmentally responsible and profitable way; and that investment in industry research and development is valued and promoted. Further details can be found in the organisation's Strategic Plan (Strategic Vision and Mission - WAFIC.).

2. WAFIC's Views[1] on Fisheries Quota as a Management System

2.1. The Western Australian commercial fisheries sector comprises of more than 45 managed fisheries under the Fisheries Resource Management Act (FRMA). The single most important is the Western Rock Lobster Fishery which represents approximately 70% of the total state gross value of fisheries production. Apart from a handful of fisheries, the remainder are small, valued at less than 10 million dollars annually in production and often limited in geographic scope. Individually these fisheries are either managed by limitations on access, some under various types of input controls as appropriate, and others under output or quota management.

2.2. The anticipated introduction later in 2022 of the Aquatic Resources Management Act (ARMA) will bring a capacity to manage the total allowable catch of a resource, explicitly allocated to various sector interests including commercial, recreational and customary purposes with an allocation to the environment. How each of these allocations will evolve and be managed under Part 3 of ARMA as Aquatic Resource Management Strategies (ARMS) and Aquatic Resource Use Plans (ARUPS) is yet to be determined. Similarly, how resource security for fisheries access rights and compensation will be administered in the face of evolving principles for resource allocation and re-allocation is not expected to be clear until 2023, but must still be addressed.

2.3. Against this background of significant change, is a growing realisation that the fisheries resources most at risk from over-exploitation are those exposed to significant exploitation to both commercial and recreational fishing without having specific total catch limits placed on the management of both these sectors.[2] Broadly the class of aquatic resources most at risk from this set of circumstances are the demersal fin fish stocks.

2.4. In summary form, the following observations can be made concerning quota management within commercial fisheries:

i. Quota management systems have been most successfully applied in single species fisheries comprising longer living single species such as abalone, rock lobster, tuna, pearl oysters and pilchards. These are all examples of fisheries where quota prediction and science can support reliable assessments.

ii. Whilst quotas have been applied in multi-species fisheries such as the South East Trawl Fishery and almost universally applied in New Zealand, their application often presents other management difficulties.

[1] This submission to the Standing Committees on Rural and Regional Affairs and Transport has been supported by Western Rock Lobster, the peak industry body for the western rock lobster fishery.

[2] To be effective, each sector catch allocations must be accurately measured, enforced and managed within harvest strategies developed within the management system applied. Demersal fin fish resources with the acknowledged growth in boat based recreational fishing fleets and fishing technologies represent an increasing risk for the sustainability of these resources if not addressed by fisheries management agencies.

iii. Quota management in short-living species within Western Australia - such as crab, prawn or scallop fisheries - have not traditionally been used due to their large variability in recruitment and the inability to reliably predict catch without short term, expensive real-time within-season surveys to better predict catch to accurately determine quota setting. Quotas are only being applied to deal with intra-fishery resource sharing management allocation requirements. Economic adjustment is usually being achieved through licence reduction schemes and unitised input controls or licence buy back.

iv. Any attempt to manage a fishery or aquatic resource by setting a Total Allowable Commercial Catch (TACC) (as proposed by part 3 of ARMA) can only succeed if science supports a reliable estimate - or a conservative TACC is applied adaptively to the management of the fishery with a conservative degree of risk-taking.

v. By necessity, especially where fisheries are small, it may not be practical to manage by quota or detailed effort controls other than by limiting participant numbers, gear and access by spatial and temporal controls (e.g. estuaries and beach access). Inadequacy of science to support management is also problematic for small fisheries.

vi. For too long the management focus by industry and resource managers has been on resource sustainability rather than economic sustainability, increasing economic efficiency and adoption of maximum economic yield as a longer-term aspirational goal.[3]

vii. Input controls by themselves do not easily promote or facilitate the most economically efficient outcomes within a commercial fishery and inhibit structural adjustment that in the longer term can prevent use of most efficient technologies. This in turn under most circumstances restricts the ability of commercial fisheries to fully adjust to the pressures of long-term cost-price squeeze. Government intervention through structural adjustment programs is normally required to offset longer term impacts of fishing effort creep and cost-price economic pressures.

viii. Unitised input-based management systems do allow for structural changes in fisheries without government intervention but tend to be less responsive than quota-based management system in addressing market and economic efficiency objectives.

ix. Quota management offers the best prospects for economic management of fisheries with numerous examples throughout Australia and is generally seen as the standard for national management rather than input-based managed fisheries, but it is clear that each case should be examined on its merits.

x. The Finance Sector in practice will accept quota as a form of loan security more easily and generally at greater value relative to equivalence in input control measures in catch terms.

[3] Maximum economic yield cannot easily be achieved in a multispecies fishery; it is more about optimizing the value of the catch in some dynamic stock and economic modelling approach.

xi. History shows by far the greatest challenge in management of fisheries are issues of resource access allocation, both in terms of initial allocation to either input access or quota-based access rights - or in conversion from one form of access rights to another (FMP 8 published by AFMA provides useful insights on the issues arising from allocation).

xii. History also shows that quota-based management systems which allow unconstrained movement of quota without aggregation limits on ownership or constraints on technologies, will generate rapid economic adjustments with often significant social impacts and costs.

2.5. WAFIC does not support unconstrained use of quota management systems as a universal methodology for the management of commercial fisheries. It favours a more measured approach that takes into account the peculiarities of the resource, the identified perspectives of the affected industry, the science available and capacity to manage including ensuring compliance. In other words, the adoption of the management approach that best fits the management of the resource from an industry perspective that may involve and use a variety of input and output based management approaches.

3. Key Issues that must be addressed within Fisheries Management.

3.1. WAFIC and its member fishery sector bodies, during the last 2 years were involved in the preparation of submissions concerning resource sharing and the security of fishing access rights to the Western Australian Legislative Council Public Administration Committee's Inquiry into Private Property Rights (2019). Any system of fisheries management whether quota-based or otherwise, must be able to address all sources of exploitation (commercial, recreational and indigenous) as well as adjust levels of resource access and exploitation to changes in access to the marine domain by non-exploitive activity altering fisheries resource sustainability over time. This includes loss of resources and resource access that alter fishery yields. This includes areas setting aside marine areas for conservation, coastal development, shipping, ports, and loss in productivity due to mining, seismic activity, petroleum development and so on over the efflux of time, post implementation of formal fisheries management.

3.2. Those changes in resource use directly attributable to changes by decisions of Government resulting in loss of aquatic resource access to parts of the marine domain or reallocation of fishing access rights to other sectors, requires an effective compensatory policy framework for the commercial fishing sector as well as a clear policy basis for allocation across sectors and re-allocation over time. The reference material below provides a more detailed statement on each of these issues which need further development in the future by all fisheries jurisdictions under rights-based management principles. Market-based adjustment processes are considered more desirable than administrative intervention by governments, to allow longer term pressures of change, population pressure and changes in community resource use priorities to be accommodated across generations.

Attachment B "Special Characteristics of the Marine Domain: Property and Compensation" WAFIC submission to the Inquiry into Property Rights, Public Administration Committee, Legislative Council, Parliament of Western Australia.,

"Secure fishery resource access rights in Western Australia" Policy Position Paper, September 2020. WAFIC and WRL joint submission to the Inquiry into Property Rights, Public Administration Committee, Legislative Council, Parliament of Western Australia.,

"Integrated Fisheries Management Proposed Amended Policy 2020 Resource Allocation and Resource Reallocation." WAFIC submission to the Inquiry into Property Rights, Public Administration Committee, Legislative Council, Parliament of Western Australia.

4. External Environmental Drivers Impacting on Fisheries and Sustainability

4.1. Marine ecosystems are not stable and continue to fluctuate and be influenced by longer term changes in oceanography, climate, water temperature and physical conditions of changing acidity, oxygen, nutrients and pollutants. Some being short term effects such as so named heat waves of ocean currents, cyclonic and other frontal weather events, pollution or disease events, modifying and impacting on fisheries resource recruitment, reproduction, growth and productivity and species diversity within a marine ecosystem context, influenced by the effects of fishing itself.

4.2. For most of these pressures, fisheries managers and management processes can only respond to the science tied to fisheries resource assessment without an ability to alter external drivers of changing ocean conditions.

4.3. WAFIC cautiously recognises the significance and importance of environmental accreditation such as under the EPBC Act and Marine Stewardship Council Certification towards providing the best management systems practical and the ability to achieve continuous improvement in fisheries management outcomes within an ecosystem risk management framework, backed up by sufficient quality science and where possible fishery independent population indicators on the status of exploited stocks. Whilst science may be lacking in many of the small fisheries, as the costs of collection can be excessive relative to value, risk-based judgements ensuing adaptive fisheries management approaches involving industry-based knowledge and involvement in decision making is supported.

4.4. These fishery certification tools implemented in the early 2000's have facilitated the creation of accountability pressures being placed on fisheries management agencies to achieve adjustments to overcapacity existing in some fisheries as well as in responding to changes in resource productivity for various reasons, underpinning sustainability within a broader ecosystem management framework.

4.5. Australia's rights-based management processes were fundamental to gaining industry support towards effective fisheries management action.

5. Fishing Industry Competitiveness in the context of Intergenerational Economic Pressures and Fisheries Management

5.1. The fishing industry, like most primary industries, are subject to longer term cost price pressures of primary industry, fluctuating resource productivity and variability in trading conditions in a competitive world market.

5.2. The development of aquaculture sourced supplies has added significantly to world edible food supply particularly in finfish, mollusc and prawn production, placing an even greater cost price margin squeeze for many of these species' fisheries. There is little world production of rock lobster through aquaculture.

5.3. Over the last 50 years there has been significant resource driven and associated economic pressure to rationalise fishing over-capacity within fisheries across Australia. This is true for most Commonwealth and State based fisheries. Much of this change went hand-in-hand with ongoing sophistication in management, increasing occupational and vessel safety requirements in industry, increasing management costs and since 2000 a stronger focus on environmental regulation, fisheries management certification and ecosystem-based impact assessment supported by science and risk-based assessments, formal harvest strategies and within some cases, resource sharing strategies.

5.4. Improvements in vessel design, technical efficiencies, data and related fishing technology have improved across decades, fishing efficiency to a point management system had to facilitate reductions in fishing fleets to underpin fishery resource sustainability. Much of this was achieved through quota management of fisheries, unitising units of fishing input capacity and/or voluntary reduction of license numbers of fishing units.

5.5. Economic survival, competitiveness and cost pressures has resulted in structural changes in the ownership of fishing licences, fewer operators in the fishery, lesser number of family-owned and operated businesses, increased aggregation of ownership and with larger sized businesses, greater corporate ownership. Similarly, there has been increased vertical and horizontal fishing business investment and for those fisheries that are more capital intensive, third-party ownership of fishing access rights. In some circumstances this has led to increasing foreign investment and ownership, and facilitation of economies of scale across costs and marketing - and in some cases improving access to markets through various foreign investment strategies. The same trend issues have also been observed within input-based managed fisheries as well as quota-managed fisheries, with perhaps the rate of change observed to be more rapid under quota management systems.

5.6. The observed structural changes in ownership and investment within fisheries occurring in Australia are little different to that experienced overseas within right based fisheries management systems and objectives and outcomes linked to economic efficiency and performance[4]. The primary policy choices for governments must focus on both resource and economic sustainability. Other issues such as investment, beneficial ownership and ultimately any arising social outcomes and objectives can be addressed by other instruments but when applied are expected to have economic consequences.

[4] See the report "Quota management of Fisheries" prepared by G Morgan. *https://www.wafic.org.au/wp-content/uploads/2021/02/Quota-Management-for-Fisheries.pdf*

5.7. These economic trends within the fishing sector and drivers are no different to those observed in the farming and agri-business sector of Australia and the arising negative economic and social impact on small regional communities. In the case of the fishing sector, the indirect negative impacts are usually limited to and more obvious in small coastal communities.

5.8. These observed trends in rights-based management fisheries under a paradigm of free market economics covering ownership and investment rules, occur across all Australian fisheries and jurisdictions. The present Commonwealth rules covering foreign ownership and investment are generally not sufficient to prevent foreign investment in fisheries if proving desirable.

5.9. The area of greatest perceived risk relevant to the foreign ownership of Australia's fish resources is the potential for ownership of resource access rights and transfer pricing within a vertically integrated foreign processing business having the potential for transfer of profits and benefits offshore, within the uniquely high valued fisheries of rock lobster, tuna and abalone. This is not seen as particularly significant currently but could become an arising issue. More independent evidence needs to be sought on whether it is a significant policy issue to be addressed. This could include the establishment of unit owner registers for all fishing access rights that mandate the declaration of foreign interest holdings for particular fisheries.

5.10. For most other fisheries, the gross margins are not sufficient to support or attract retention and redirection of super profits but bears further analysis.

5.11. One of the key requirements for successful longer term fisheries resource management is having sufficient flexibility in the utilisation of market-based resource access rights and science supporting fishery independent measurement of resource status. This needs to be supported by objectives that facilitate retaining surplus stock capacity for the industry to cope with stock and economic sustainability issues, arising from unexpected environmental or economic shocks over time, within an ongoing iterative annual management review system.

5.12. Aquaculture of lobster species has not increased significantly world-wide with uniquely almost all of Australian and New Zealand wild caught rock lobster product until recently (approximately 12,000 tonnes) sold live into China at world premium prices. This situation changed in February 2020 through trading restrictions, creating significant market uncertainty and downward price pressure (halving of beach prices) in the Australian rock lobster fisheries.

5.13. The prominence of Tasmanian Rock lobster fishery issues in the setting of this Senate Inquiry has caused WAFIC to focus on the example of the Western Rock Lobster Fishery as a quota-input based management system in commenting on each of the terms of reference drawing on available evidence. It is anticipated AFMA and other jurisdictions will provide other example-based fishery relevant evidence to the Inquiry.

6. Addressing Each of the Terms of Reference to this Inquiry

The fisheries quota system and examining whether the current 'managed microeconomic system' established around a set of individual transferable quotas results in good fishing practice, with particular reference to:

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

Comments

There is a broad acceptance by members of WAFIC that ecological sustainability of fisheries resources can be achieved under a number of management systems involving either quota or unitised form of fisheries gear based on input controls.

Western Australian experience suggests quota-based management systems once implemented under pressures of removing surplus fishing capacity, do so with a greater degree of rapidity in response to an unleashing of market forces through aggregation of access rights as each operator seeks to maximise their commercial position.

WAFIC draws to the Committees attention the following publications which in substantial detail outlines the following matters relevant to management of the Western Rock Lobster Fishery as a useful case study.[5] [6]

The key messages coming from these papers was that this fishery was uniquely data rich, much predicted to happen by the implementation of quota occurred, the fishing fleet and number of participants exited the fishery rapidly - and inputs in bait, fuel and other economic factor resources were substantially reduced. Almost two-thirds of the fishing fleet exited the fishery with absentee owners of quota (mostly ex-fishermen) leasing quota annually in a dynamic quota transfer market under a range of arrangements.

Today the fleet has stabilised at around 230 units, rock lobster stocks have substantially increased with catch rates at historically higher levels within the fishery. Ownership aggregation into fewer hands is understood to be happening mainly through fishing family companies as will third-party owners especially with ongoing intergenerational shifts in

[5] 2008 Occasional Paper by the Rock Lobster Advisory Committee. *The Benefits of a Quota Management System to Business*.
2008 Occasional Paper by the Rock Lobster Advisory Committee. *Proposed quota settings for the Western Rock lobster Managed Fishery*
2015 N.Caputi et al. *Maximum Economic Yield of the Western Rock Lobster Fishery after moving from effort to quota controls.* Marine Policy 51,pp 452-464.
2015 Penn, J. W., Caputi, N., and de Lestang, S. *A review of lobster fishery management: the Western Australian fishery for Panulirus cygnus, a case study in the development and implementation of input and output-based management systems.* – ICESJournal of Marine Science, doi: 10.1093/icesjms/fsv057.

[6] The management of the Western Rock Lobster Fishery whilst quota based, also combines with a number of biological input control measures and gear limitations to underpin resource sustainability, protecting breeding stock, assisting to optimise yields and facilitating spatial distribution of fishing effort as well as input measures to reduce impacts on protected species. This system of joint quota- input approach to management that addresses a range of biological and environmental risks is considered advantageous over a purely quota based management system.

family ownership. This aspect needs further documentation noting at its peak, the total capital market value for the TAC fishery quota was approximately a $4 billion but now expected to fall under the current overseas trading situation which is yet to fully play out given changing geopolitical circumstances.

From an economic and resource management perspective the overall change program has produced good outcomes for the Australian community. Fishermen leaving the industry have been compensated by the market through either sale or ongoing lease of quota. The industry today is much more resilient to deal with crisis issues as they will arise.

Change at this scale has its consequences with little social research undertaken. Many who left the industry entered new industries and relocated, entered the fly-in fly-out (FIFO) workforce of the offshore petroleum and mining industries or retired. Small coastal towns and businesses dependent on the rock lobster fishery were obviously impacted, fewer vessels, less services required, lower profits and in the extreme business closures. The impacts most evident being in some smaller coastal towns identified by the abundance of real estate on the market as fishers and crews vacated the region.

Subjectively, when compared with the social and economic consequences of quota introduction in the Southern Bluefin fishery on Western Australian fisheries, the costs and consequences for fishermen and the community within the rock lobster fishery appeared to be far less significant.

b) how the current quota system affects community fishers;

Comments

The papers referenced previously on the rock lobster fishery provide some insights as to how quota impact on commercial fishing businesses. Community fishers are no different other than their interdependence between the community they live in and services they receive - and the advantage of local sales depending on the product and local demand. This relationship is quite different for export-based product relative to finfish where local sales and direct market engagement with local fish retailers and the community is often prevalent.

Obviously, every circumstance is different depending on the community, its size and location, the fishery and level of community interdependence between the industry and the community in which they live.

WAFIC is of the view the current quota management system and any other management approach which allows rationalisation of excess fishing capacity to guarantee resource sustainability having the appropriate environment protections in place must take precedence over measures to support community fishers within particular communities.

Should the case be made on the need to support particular communities, WAFIC is not opposed to other public policy instruments being applied by governments to facilitate

certain community outcomes for isolated small communities, when evidence supports such proposals. More often than not this has to be a political judgement of governments.

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

Comment

It is difficult to generalise and separate between fishers on the basis of good business capability, the level of commercial risk and indebtedness individuals are prepared to take, and the levels of commercially acceptable bankable assets held. Apriori logic would suggest those generally holding and operating larger businesses are likely to be advantaged over those that do not. Normal competitive forces whether on input controls or under quota management systems seem to result in the better fishers and business operators gaining a greater share of the fishery and associated benefits over time under either system of management. Little research has been undertaken in the fishing industry on such issues, but observations based on individual successes in the Western Australian fishing industry support this contention.

Counter-intuitively, small fishers within most fishing industry management forums, also appear to represent on average greater influence primarily by their greater number.

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

Comment

WAFIC fully supports the Commonwealth current enforceability of ecological value on the management of all fisheries whether they be managed by quota or other systems of management. The Western Australian rock lobster fishery was the first commercial fishery in the world to be certified by the Marine Stewardship Council for its sustainable fisheries management approach. This has been maintained through ongoing reviews for nearly 20 years through responsible management influencing the science behind the shift from effort to quota controls and ongoing management. This accreditation reflects much that is in the EPBC Act export permit approval process across all fisheries.

The views expressed on pages 4 and 5 of this submission are fundamental to ensuring the health of all fisheries and have been significant in assisting Australia to gain international credibility in effective fisheries resource management.

In the absence of adequate science funding and fishery independent data to underpin knowledge on the health of the current resource status of smaller fisheries in particular, whether quota management systems represent the best approach in fisheries management remains open to further consideration.

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

Comment

The broad view held by WAFIC is that rights-based management supported with processes of ongoing reviews of fisheries management performance under the EPBC Act can provide ecologically sustainable fisheries. This approach within Western Australia has been assisted by the more detailed independent scrutiny of international scientists for 10 separate fisheries through Marine Stewardship Certification processes to further underpin fisheries resource sustainability within an ecosystem-based assessment methodology covering a multiple of different fisheries management systems.

Quota based management systems are not essential for achieving economically dynamic or good community outcomes and under the right parameters and circumstances as demonstrated by case example for the Western Rock Lobster Fishery, are capable of producing all of that which reference (e) above seeks.

Restructuring of fisheries as with any industry, brings with its own challenges and consequence for communities depending on geographic location, the size and level of interdependence between the industry, the services, markets and levels of overall social and economic engagement with that community. Fisheries management in a data poor science-based environment is risky irrespective of the management approach applied whether quota based or otherwise.

As expressed earlier in this submission, WAFIC does not support unconstrained use of quota management systems as a universal approach to the management of commercial fisheries. It favours a more measured approach that takes into account the peculiarities of the resource, the identified perspectives of the affected industry, the science available and capacity to manage. In other words, the adoption of the management approach best fits the management of the resource from an industry perspective that may involve and use a variety of input and output based management approaches.

f) *any other related matters*.

Comment

This submission has provided substantial comment on the challenges for fisheries resource management into the future as the priority of the community continue to evolve and change in the marine domain and utilisation of Australia's aquatic resources. For the sake of brevity, they are not repeated here but represent significant new challenges which are to be met and variously being actively considered within different Australian jurisdictions.

Given the opportunity, WAFIC would like to address these issues during public hearings, noting the linkages to publications provided in this document allows the Senate Standing Committees on Rural and Regional Affairs and Transport to further explore their overall relevance to the future sustainability of fisheries resource management and future community expectations.