



**Queensland Seafood Industry
Association response to the
Senate Standing Committee on
Rural and Regional Affairs and
Transport inquiry regarding the
Fisheries Quota System**

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Executive Summary

The implementation of quota managed fisheries in Queensland are an ongoing concern for the Queensland Seafood Industry Association (QSIA). The purpose of this submission is not to make comment on the use of quota managed fisheries in the Commonwealth fisheries or in any other State or Territory fishery.

The inquiry provides the Association with an opportunity to make a case against the use of quota management, its significant limitations and the cost to commercial fishers and community tend to be viewed through the lens of hindsight. Quota managed fisheries are simply not suitable for every fishery. This logic extends to smaller scale fisheries and multi species fisheries.

This submission provides a rationale for re-thinking the use of quota management and does so by arguing that:

- 1) Under current fisheries management arrangement, Queensland commercial fisheries are sustainable. The current, so-called Queensland fisheries reform process has indicated that with the introduction of quota management the community will inherit more sustainable fisheries, this is a public policy lie.
- 2) The incompetent fisheries management of the Queensland Spanner Crab fishery led to a 48% devaluation of the fishery quota.
- 3) Multi-endorsed commercial fishers will (a) lose parts of their businesses forcing a decision to seek finance and increase their debt or leave industry, and (b) government has not offered compensation for the resource reallocation that is the Queensland fisheries reform process.
- 4) The outcomes of introducing quota managed fisheries in Canada and Iceland provide a warning to policy makers that quota will lead to: (a) the consolidation of businesses in the catch sector, (b) a consolidation of quota owners leading to greater control over commercial fishers and (c) negative impacts on local communities through the loss of employment and employers.
- 5) Quota management is not the solution to the threats facing the marine ecology in Queensland.
- 6) Since 1990, active commercial fisher numbers have fallen by 51% to 1,364 operators working across the commercial crab, net, line and trawl fisheries. After the full implementation of the so-called Queensland fishing reforms, the Association estimates an overall reduction of 67% in active commercial fishers.
- 7) The introduction of quota management is a solution to a problem that does not exist.

Part 1. Good fishing practice that is ecologically sustainable with an economic dynamic that produces good community outcomes.

In the Queensland context, the introduction of quota is tool to unjustifiably limit catch when there is no existing ‘catastrophe’ with stocks.

Ecological impacts are ignored and only highlighted by non-government stakeholders (recreational and conservation groups) to create narratives that fewer commercial fishers will mean a better ecological outcome.

Commercial fishers

- There are 1,370 commercial fishing licences actively working across the crab, net, line and trawl fisheries in Queensland.
- Queensland commercial fishers:
 - are tracked using vessel monitoring systems (VMS);
 - must record catch using logbooks; and
 - must account for the weight of catch.
- Queensland fisheries have evolved over time and the development of gear types have evolved as a response to commercial fisher trial and error and response to changes in legislation and/or regulation.

Recreational fishers

- The Queensland Government estimate is 942,000 recreational fishers¹.
- Recreational fishers:
 - are not tracked;
 - do not have to record their catch;
 - have been managed using bag limits but those limits are not restricted to a single species; and
 - no limitations regarding latent effort.
- The Great Barrier Reef Marine Park Authority (GBRMPA)² and Productivity Commission³ have recommended the introduction of recreational marine licences which has not occurred in Queensland.

Part 1.1. Stock Status Policy Games

Queensland commercial fisheries have an ecological, social and economic value. The cavalier approach to the introduction of quota management by the Queensland Government has no foundation in ecological or economic terms. The economic and social importance of Queensland commercial fisheries are addressed in greater detail within this submission in response to Parts 2 and 6 of the Committee’s terms of reference.

A primary driver of introducing individual transferable quotas (ITQs) globally has been to assist stock recovery in overexploited fisheries (Pascoe et al, 2019; Chu 2009). According to Chu (2019, p.219), the collapse (over-exploitation) of the Atlantic cod and high-profile species such as Northern Bluefintuna were well publicised because their declines had both ecological and socioeconomic consequences. The same situation does not exist in Queensland fisheries and increases the suspicions amongst commercial fishers regarding the logic of introducing quota management arrangements.

¹ Queensland Government 2021.

² GBRMPA (2016, p. 4).

³ Productivity Commission (2016, p. 35).

As at 1 January 2021, there are no Queensland commercial fisheries that have collapsed or are anywhere near a catastrophic breaking point. It could be argued that the Queensland fisheries reform which holds the introduction of quota management as sacrosanct seems like a solution to a problem that does not exist.

Stock status evidence published by the Fisheries Research and Development Corporation (FRDC) and informed by Fisheries Queensland data does exist for crustaceans, finfish, molluscs, sharks and rays. Stock status is defined as sustainable⁴, undefined⁵ and depleting⁶.

Stock Status – Crustaceans

<u>Number of Species</u>	<u>Stock Status</u>
12	Sustainable
1	Undefined
1	Depleting

Stock Status – Finfish

<u>Number of Species</u>	<u>Stock Status</u>
32	Sustainable
18	Undefined
2	Depleting

Stock Status – Mollusc

<u>Number of Species</u>	<u>Stock Status</u>
1	Sustainable
1	Depleting

Stock Status – Sharks and Rays

<u>Number of Species</u>	<u>Stock Status</u>
1	Sustainable
2	Undefined

There is no catastrophic fisheries stock collapse requiring quota management interventions under the Queensland fisheries reform process. At no stage has the Association denied the need to discuss alternate management arrangements with the Queensland Government.

⁴ Sustainable – The agreed national reporting framework for the Status of key Australian fish stocks reports defines the term ‘sustainable stock’ as follows: Stock for which biomass (or biomass proxy) is at a level sufficient to ensure that, on average, future levels of recruitment are adequate (that is, not recruitment overfished) and for which fishing pressure is adequately controlled to avoid the stock becoming recruitment overfished, FRDC Glossary: <https://www.fish.gov.au/about/glossary>

⁵ Undefined – Not enough information exists to determine stock status, FRDC Glossary: <https://www.fish.gov.au/about/glossary>

⁶ Depleting – A measure of how close or far the biomass of a fish stock is from a reference condition, usually the average unfished spawning biomass; the smaller the number the more depleted a stock is said to be, FRDC Glossary: <https://www.fish.gov.au/about/glossary>

It remains unclear why quota has been pushed as the solution to a stock status problem that does not exist. The Queensland Sustainable Fisheries Strategy 2017-2027 has portrayed Queensland fisheries under threat and is best captured in the so-called vision underpinning it: 'A modern, responsive and consultative approach to fisheries management ensures fishing is a low risk to Queensland's aquatic resources, and these are used in a way that optimises benefits to the community'.

Risks to Queensland fisheries by commercial fishers have been overstated and options other than quota management have never been explored by Fisheries Queensland. The positive and adaptive changes to fishing practice and gear types undertaken by commercial fishers have been ignored.

Part 1.2. Ecological Impacts Ignored

In 2018, Spanner Crab fishers were impacted by a 48% devaluation of the fishery quota and reduction in total allowable commercial catch (TACC). What led to this situation in an existing quota managed fishery that has been managed for at least three decades? In a post shared on the Association's website, Richard Hamilton (former QSIA Director and immediate past President of the Gold Coast Fisherman's Cooperate) was asked two questions⁷:

Q.1. How did the situation get to this stage?

Response – Due to general fisheries permits being issued, the number of dillies per vessel has been allowed to increase to 120 dillies possibly more. General fishery permits should not be allowed to interfere with the gazetted government regulations governing the Queensland Spanner Crab fishery. These are temporary permits which do not have to be renewed.

Q.2. Where does the responsibility for the current situation lay?

Response – Fisheries Queensland has the power to allow general fisheries permits to operate adding pressure to the spanner crab fishery which was supposedly quota managed – so how are general permits justified? It is strange to think that the increased pressure from permits were not considered a risk.

Allowing an increase from 45 to 120 or more dillies seems like a poor management decision even if the fishery at times was considered robust enough to take additional fishing pressure.

It seems clear that Fisheries Queensland will allow changes to quota management rules that favour larger commercial fishing operations. The critical policy and fisheries management questions are simple – why is this allowed to occur and what damage might those decisions do to stocks?

⁷ QSIA News, 'Quota Managed Fisheries: Spanner Crab', February 22, 2018. Link: <https://qsia.com.au/2018/02/22/quota-managed-fisheries-spanner-crab/>

Part 2. How the current quota system affects community fishers.

Research evidence from commercial fisheries globally that suggest the long-term impacts of quota are (1) destruction of local jobs, (2) limit new entrants, (2) make the business viability of existing small-scale fishers extremely difficult and (4) leads to consolidation of quota amongst smaller number of commercial fishing business, investors and processors.

Part 2.1. Financial Performance of Queensland Commercial Fishers

There are hundreds of multi-endorsed commercial fishing businesses in Queensland. These businesses rely on two or more fisheries to maintain viable operations. The quota management approach taken by the Queensland Government will lead to business collapse, loss of employment and unknown economic flow on impacts across rural, regional and coastal Queensland (a domino effect).

Edwards and Pinkerton (2020, p. 7) provide a real-world outcome facing commercial fishers in Queensland based on the experiences of commercial fishers in the Pacific Halibut fishery in British Columbia, Canada:

There is no scenario in which the ITQ halibut fishery in BC is self-sustaining for owner-operators. It is not possible for new owner-operator entrants, or existing entrants with minimal quota ownership, to earn sufficient income from the halibut fishery to purchase quota and improve their ownership position. The only possible avenue for new entrants to become owners is through the infusion of external capital not tied to commercial repayment terms. Crews on majority lessee vessels cannot earn a living wage, contributing to difficulties attracting and retaining crew, consistent with well-documented negative impacts of ITQs on employment [11,56–58]. This raises serious questions about the success of the ITQ management system, given longstanding objectives for fisheries in Canada to support viable, independent inshore fleets.

The minimum quota level to participate in the Queensland Mud Crab fishery is 1.2 tonnes⁸. The number of active commercial fishers in this fishery in 2019 was 355 and once quota is introduced in 2021 the Association estimates that 30% or 107 commercial fishing businesses will be excluded from the fishery. This exclusion will mean the loss of income less costal / regional economic activity and sunk (devalued) assets. If this fishery follows the pathway of the Queensland Spanner Crab fishery, it will eventually lead to the slow phasing out and elimination of owner operators.

Part 2.2. Queensland Commercial Fisher Views on Quota Management Impacts

The Queensland Government drafted three quota allocation papers for industry feedback in late March 2019. The Association sought the views of industry between 3 and 26 April 2019 regarding the proposed allocation process as part of the broader reform process. The following sections provide a sense of the impending impacts of quota management.

Crab Fisher Feedback

As a younger generation fisherman, it has taken me 5 years to build and own my business and lose it overnight by people who know nothing about our industry you have taken the roof from over my head and the food out of my fridge.

⁸ Fisheries Legislation Amendment Regulation (2020, p. 307).

Net Fisher Feedback

This allocation system, won't help the industry. What will happen is a few fishermen will get large amounts of quota, and the rest won't get enough to survive.

Trawl Fisher Feedback

The process for the trawl fishery has deliberately avoided dealing with a long-term over-allocation of licences and effort units. This is because no resources were made available for excess effort removal. If excess effort had been dealt with in a fair manner, the rest of the reform process and transition could have been much more effective.

Part 2.3. Example Business Impact – Queensland Mud Crab Fishery

The following text and discussion were provided to the Association by commercial fishers to highlight the impacts on his business, a multi-endorsed business.

Table 1. Queensland Mud Crab fisher quota allocation and business implications

Regardless of what the price of quota ends up, whether it is \$30 or \$60/kg, without our correct allocation, we are financially unsustainable. The only people to profit from this will be investors. Remembering, we have already invested in a primary licence, \$20,000, then paid \$50,000 for a C1 to enter this fishery. My proposed allocation of crab quota is 3,995 kgs. My average catch of crab over the best six years out of seven, is 5,084 kg's so my proposed allocation represents a reduction of 1,089 kg's of catch per year.

Based on last year's average price of \$25/kg, this represents an annual shortfall to my business of \$27,225.00. For me to replace the reduction in my average catch of 1,089 kg's, based on recent broker's auction which achieve \$60/kg will cost me \$65,340.00. This represents a huge unsustainable devaluation in my current investment in the crab fishery.

This reduction is obviously not for sustainability reasons. Currently we do not harvest female mud crabs in Queensland which represents 50 per cent of the stock. We only harvest male mud crabs over 15 centimetres which represents 50 per cent of the male stock, so by only harvesting a possible 25 per cent of the overall biomass of this fishery, it makes it one of the best managed fisheries in Australia or the world for that matter. If managers thought there was a problem with stock, they would be taking a precautionary measure when it comes to the recreational take of mud crabs. This is currently 7 per person per trip and a boat limit of 14.

A simple illustration of this is, if a third of the recreational fishers in Queensland went out on any one day of the year and only caught 5 of their bag limit of 7 mud crabs, it would equate to removing approximately 1,570,000 kg's of crabs out of our Queensland waters. This is over double the 770-tonne cap allocated to the commercial sector on the east coast.

Why then is the commercial mud crab catch proposed to be capped at 770,000 kg's when recreational is virtually uncapped? Why do commercial businesses like mine, have to take a cut on our historical catch to fit into this proposed cap? How do I make up my annual loss of \$27,225.00? What small business can sustain this?

The mud crab fishery is like any other primary industry. We are governed by seasonal variations in harvest which is represented in our catch history. Yet Queensland Fisheries sees fit to cap any catch history at 6 tonne per year when working out a proposed allocation over a 6-year period (This is like limiting a wheat farmer. If it rains, he can only plant $\frac{3}{4}$ of his land but if its dry, he can plant the lot). This formula does not work for a business plan in the mud crab fishery. It just sends us broke.

Appendix A provides the proposed Mud Crab quota allocation provided to the commercial Mud Crab fisher's story detailed in Table 1 and was reproduced with permission.

Part 3. Whether the current system disempowers small fishers and benefits large interest groups.

Amongst many goals cited by the Queensland Government it aims by 2027 to have⁹, ‘*Improved satisfaction and maximise economic benefits*’. The introduction of quota, as defined by Fisheries Queensland will not improve but undermine the economic foundations of current small scale commercial fishers.

Part 3.1. International Experience regarding Quota Management

The international experience of quota management suggests that there are considerable issues facing Queensland commercial fishers.

Part 3.1.1. Canada

The Pacific Halibut fishery in British Columbia, Canada, has been managed as a quota fishery since 1993. The role of processors in the fishery has grown over time and they have exerted a more pronounced influence in the quota leasing market. Despite their hidden role in the fishery, directly owning less than 10% of Halibut quota, processors in the fishery have considerable influence through their role as quota lessees and lessors, controlling more than 50% of temporary quota transfers (Edwards and Pinkerton, 2019, p. 3).

Edwards and Pinkerton (2019) warned that the use of quota management could lead to monopolistic practices amongst the larger quota owners. The Canadian experience outlined by the authors suggested that the growth of oligopolies is an outcome of quota management. Although not a perfect market at present, the Queensland commercial fishing supply chain is represented by hundreds of micro and small businesses (typically family operated, multi-generational commercial fishers) at the harvest level. At the post-harvest level, there are hundreds of retail, wholesale, processing, restaurants and food service businesses.

The introduction of quota management in Queensland will certainly reduce and consolidate commercial fishing businesses at the harvest level.

In a fishery that was held as a quota management success, the following negative impacts have been identified by Edwards and Pinkerton (2020, p. 1):

- Under ITQs, the fishery is transitioning from predominantly owner-operated to absentee owners and lessee fishermen.
- Financial performance demonstrates the overwhelming impact of leasing on the viability of fishing enterprises.
- A representative owner-operator fishing enterprise leasing more than 80% of the quota that it fishes, which characterizes all of the owner-operators that have entered the fishery since 2001, cannot earn enough from the fishery to re-invest, including replacement of the vessel or purchasing of quota.
- The fishery, under current leasing and purchase price conditions, is not self-sustaining as an owner-operator fishery.

Part 3.1.2. Iceland

Kokorsch, Karlsdóttir and Benediktsson (2015, pp.12-13) stated that the introduction of quota management is the loss of employment and employers in small communities. There is historical precedent that suggests quota managed fisheries have inherent flaws. Eythórsson (1996, p. 281), commenting on quota management in Iceland:

⁹ Queensland Government (2017, p. 4).

The privatization of the fishing rights in Iceland is a social experiment involving high stakes. So far, it seems that the most significant result from the reform is a rather massive re-distribution of wealth and income. The winners are the big quota owners, who can calculate high annual return from their new capital, a capital which also can be depreciated by 20% annually. The losers are the fishermen, or the fishing crews, who have been thrown into a market where eventually, only the lowest bidder gets a chance to catch the fish (companies may even advertise for vessels for contract fishing, in order to take the lowest offer). Losers are also those fishing communities who are losing quota shares, and consequently losing their opportunity to earn income from fishing.

Eythórsson’s analysis presents some of the key concerns which fundamentally disempower commercial fishers:

- Massive redistribution of wealth and income;
- Consolidation of commercial fishing businesses;
- Introduction of contract fishing arrangements; and
- Impacts on the fishing communities in which commercial fishers operate.

Eythórsson (1996) observed that the introduction of quota management was as ‘social experiment’ is apt in the Queensland fisheries context. In the Queensland context, the social experiment is a more profound statement as the commercial fishing industry was not provided with the dignity of a regulatory impact assessment (RIA). According to the Queensland Government, an RIA¹⁰, ‘is a systematic approach to critically assessing the impacts of proposed regulatory policy options and is an integral part of good policy making processes. It is designed to improve the quality of regulatory policy by providing relevant and timely information to government decision makers about the expected impacts of different policy options for addressing a particular issue’.

With the State Government deciding that an RIA was not needed under its so-called fisheries reform process both industry and the public have no modelling to compare or contrast the introduction of quota management.

Part 3.2. Quota Benefits and Concerns

There have been multiple views expressed within the research literature regarding the benefits and concerns regarding the use of quota management. For the purposes of this submission, research work undertaken by Pascoe et al (2019) is used to compare and contrast benefits and concerns. Pascoe et al (2019) provide a list of quota benefits and concerns detailed in Table 2.

Table 2. Elements of Quota Managed Fisheries

<p>Quota Benefits</p> <ul style="list-style-type: none"> • Asset value increase. • Flexible and efficient trade in effort and quota units. • Investment certainty (spreading of risk). 	<p>Quota Concerns</p> <ul style="list-style-type: none"> • Concentration of quota and quota ownership. • Corporate or investor quota ownership • Foreign ownership of quota and fishery revenue. • Quota retention & limited (thin) market. • Quota trade limitations & restrictions. • High quota prices. • Lack of security on rights & difficulty accessing capita. • Low quota prices.
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Source: Pascoe et al (2019, p. 68).

¹⁰ Queensland Government (2019, p. 4).

The first so-called benefit as noted by Pascoe et al (2019) suggests quota is a valuable asset for commercial fishers. This assertion is contestable as the Association has been advised by members that seeking capital to invest within their businesses is extremely difficult. An inability to access capital is a significant road block in any move to either expand domestic sales capacity or consider the export seafood market. Simply stated, quota is not seen as an asset financial institutions will consider as collateral, an example of this situation is provided at Appendix B.

A recent Facebook post undermines the idea that quota management leads to flexible and efficient trade. At the time of drafting this submission the Queensland Government had not set quota allocations. How would an individual set the value of future mud crab quota unit before allocations have been issued?

Between 2000-2008, trawl effort units were valued at \$50/trawl effort unit. The value slowly rose to \$63/trawl effort unit, trading was rife and then consistently fell to \$3/trawl effort unit. This drop in value forced financial institutions to call in loans which led to loss of assets used as collateral. Trawl effort unit values have varied since 2008 and this fluctuation has made it difficult for trawl fishers to secure funds from financial institutions.

Part 3.3. Queensland Government Quota Allocation Process

The Association collected the views of commercial fishers regarding the proposed allocation process as part of the broader reform process. The following sections provide industry feedback which are clearly anti-quota management.

Part 3.3.1. Crab Fishery Quota Allocation Process

Questionnaire response data (n = 65)

- 51 percent of respondents indicated they believed the State government has not provided viable alternatives to a TACC and ITQ management framework. 11 percent were in favour and 37 percent did not provide a view.
- 46 percent of respondents indicated they did not support management units. 17 percent were in favour and 37 percent did not provide a view.
- 46 percent of respondents indicated they did not support licence requirements. 17 percent were in favour and 37 percent did not provide a view.
- 43 percent of respondents indicated they did not support logbook provisions. 20 percent were in favour and 37 percent did not provide a view.
- 45 percent of respondents indicated they did not support time periods and date requirements. 18 percent were in favour and 37 percent did not provide a view.
- 45 percent of respondents indicated they did not support the catch cap. 18 percent were in favour and 37 percent did not provide a view.
- 52 percent of respondents indicated they did not support the allocation approach adopted by the State Government. 11 percent were in favour and 37 percent did not provide a view.
- 49 percent of respondents did not believe that the State Government had considered the needs of small-scale commercial fishing businesses. 10 percent believed government had considered industry and 40 percent did not provide a view.
- 48 percent of respondents indicated they had considered leaving industry because of the allocation process. 14 percent had not considered leaving and 38 percent did not provide a view.

Crab fisher response themes

- At least 50 percent of respondents did not agree with the allocation process.
- On average, 17 percent of respondents were in favour of the allocation process.

- At least one-third of respondents did not provide a view. There are many factors that could speak to this including confusion around reform elements and/or a non-interest in the reform process more broadly.
- The feedback received by the Association does not suggest crab fishery-wide level of support for (1) the allocation process or (2) the use of quota management.
- Alarming, half the respondents did not feel the needs of small-scale fishers had been taken into consideration.
- Similarly, almost 50 percent of respondents had considered leaving industry.

Part 3.3.2. Net Fishery Quota Allocation Process

Questionnaire response data (n = 41)

- 78 percent of respondents noted that the State government has not provided viable alternatives to a TACC and ITQ management framework. 5 percent were in favour and 15 percent did not provide a view.
- 73 percent of respondents indicated they did not support management units. 12 percent were in favour and 15 percent did not provide a view.
- 66 percent of respondents indicated they did not support licence requirements. 19 percent were in favour and 15 percent did not provide a view.
- 56 percent of respondents indicated they did not support logbook provisions. 29 percent were in favour and 15 percent did not provide a view.
- 70 percent of respondents indicated they did not support time periods and date requirements. 15 percent were in favour and 15 percent did not provide a view.
- 68 percent of respondents indicated they did not support catch history eligibility requirements. 11 percent were in favour and 21 percent did not provide a view.
- 73 percent of respondents indicated they did not support the allocation approach adopted by the State Government. 12 percent were in favour and 15 percent did not provide a view.
- 73 percent of respondents indicated they believed the State government have not considered the needs of small-scale commercial fishing businesses. 8 percent had indicted that government had considered small-scale commercial fishing businesses.
- 61 percent of respondents indicated they had considered leaving industry because of the allocation process. 22 percent were in favour and 17 percent did not provide a view.

Net fisher response themes

- At least two-thirds of respondents did not support the quota allocation process.
- On average, 18 percent were in favour of the allocation process.
- In terms of non-responses at least 15 percent did not provide a view. The same issues noted in the Crab responses themes apply here.
- The feedback received by the Association does not suggest net fishery-wide level of support for (1) the allocation process or (2) the use of quota management.
- Two-thirds of the respondents did not feel the needs of small-scale fishers had been taken into consideration.
- Similarly, approximately two-thirds of respondents had considered leaving industry as a result of the allocation process.

Part 3.3.3. Trawl Fishery Quota Allocation Process

Questionnaire response data (n = 41)

- 54 percent of respondents noted that the State government has not provided viable alternatives to a TACC and ITQ management framework. 10 percent were in favour and 29 percent did not provide a view.
- 49 percent of respondents indicated they did not support management units. 17 percent were in favour and 34 percent did not provide a view.

- 54 percent of respondents indicated they did not support licence requirements. 17 percent were in favour and 29 percent did not provide a view.
- 47 percent of respondents indicated they did not support effort history. 24 percent were in favour and 29 percent did not provide a view.
- 51 percent of respondents indicated they did not support time periods and date requirements. 15 percent were in favour and 34 percent did not provide a view.
- 46 percent of respondents indicated they did not support catch history eligibility requirements. 25 percent were in favour and 29 percent did not provide a view.
- 54 percent of respondents indicated they did not support the allocation approach adopted by the State Government for T1 and T2. 17 percent were in favour and 29 percent did not provide a view.
- 54 percent of respondents indicated they did not support the allocation approach adopted by the State Government for M1 and M2. 17 percent were in favour and 29 percent did not provide a view.
- 51 percent of respondents indicated that the State Government has not considered the needs of large and small scale commercial fishing businesses. 18 percent had indicated that government had considered small-scale commercial fishing businesses and 29 percent did not provide a view.
- 39 percent of respondents have considered leaving industry. 32 percent had not considered leaving and 29 percent did not provide a view.

Trawl fisher response themes

- At least 50 percent of respondents did not agree with the allocation process.
- On average, 17 percent of respondents were in favour.
- At least one-third of respondents did not provide a view. There are many factors that could speak to this including confusion around reform elements and/or a non-interest in the reform process more broadly.
- Similar to the crab fishery responses, half the trawl respondents did not feel the needs of small-scale fishers had been taken into consideration. 18 percent felt their needs were considered and almost one third had no view.
- 40 percent of respondents had considered leaving industry. 30 percent had not and 30 percent did not have a view.

The survey demonstrates the fundamental failure of the State Government's fishery committee structure and ability of Fisheries Queensland to engage with industry.

Part 4. The enforceability of ecological value on the current system, and the current system's relationship to the health of the fisheries.

It remains unclear how harvest strategies across Queensland fisheries how the human footprint will be factored into the strategies. Moreover, the extent to which quota allocations take threats to estuarine and coastal marine environments.

Part 4.1. Threats to Estuarine and Coastal Marine Environments

The state of the environment as a result of the impact of the human footprint does not seem to be a concern for Queensland fisheries management.

Kearney and Farebrother (2014) provide some key environmental concerns.

Coastal development

- Construction of harbours and ports.
- Dredging and 'reclaiming' marine areas.
- Training-walls in rivers.
- Sea-walls in harbours.
- Increased aquatic recreation, including boating.
- Recreational services (such as boat-moorings and anti-fouling paints).

Modification of catchments

- Clearing of terrestrial habitats (forest and riparian).
- Infill of wetlands.
- Destruction of seagrasses.
- Water extraction and alteration of salinity.

Pollution

- Urban run-off.
- Acid-sulphate discharges following coastal modification.
- Agricultural chemicals.
- Industrial discharges.
- Litter and micro-plastics.

Introduced organisms

- Fish, invertebrates and aquatic plants.
- Pathogens (including viruses).

Modification of tributaries

- Barrages and weirs.
- Flood gates.

Poorly informed decision-making

- Inadequate identification of threats.
- Failure to align actions with effective conservation priorities.

While Kearney and Farebrother's research was focussed in New South Wales the environmental concerns are just as valid in the Queensland context. However, there are many Queensland-based examples of the implications of the human footprint on the coastal ecology.

Part 4.2. Port Development

In 2014, the Senate's Environment and Communications References Committee released a report titled, 'Management of the Great Barrier Reef'. The Committee was examining the adequacy of the Australian and Queensland Governments' efforts to stop the rapid decline of the Great Barrier Reef (Commonwealth 2014, p. 1).

The focus of the Committee was to understand the impacts of dredging on the Reef. It should be noted that the Gladstone Western Basin project approval allowed for a total maximum of 46 million cubic metres of dredge spoil to be removed and disposed of both offshore and within a constructed reclamation area behind a bund wall (Commonwealth 2014, p. 104).

The impacts on the environment and industry were varied and included:

- Reports of diseased fish and crabs;
- The GBRMPA reported significant increases in the number of dugong and turtle deaths in the southern Great Barrier Reef, including in the Gladstone area;
- Monitoring of seagrass between 2009 to 2012 indicated significant declines in seagrass abundance;
- More than 1,500 hectares of seagrass were destroyed and had not recovered;
- Charter fishing was negatively affected by the exclusion zones and shipping traffic in the port; and
- The impacts on commercial fisheries were significant, with Mr Ted Whittingham of Gladstone Fish Markets explaining that his company has lost 90 per cent of its business since 2011 as a result of the outbreak of fish disease and the loss of suppliers¹¹.

The rehabilitation of marine environments to address the loss of marine and fisheries habitats will do more for improving the marine ecology than the introduction of quota management.

¹¹ Commonwealth (2014, p. 104-5).

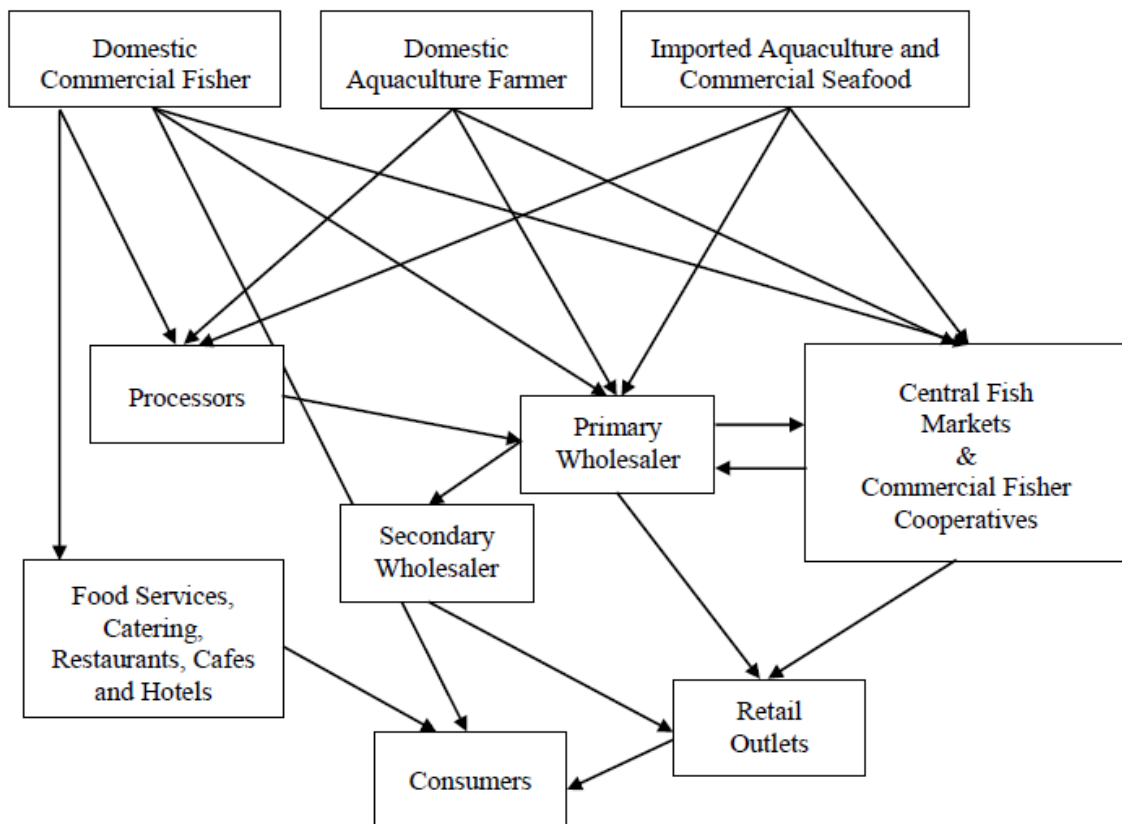
Part 5. Whether the current system results in good fishing practice that is ecologically sustainable and economically dynamic, and produces good community outcomes.

Good community outcomes should result from well managed fisheries resources. The discussion that seems to be avoided – the community outcome sought by the Queensland Government are political in nature. The Queensland Government’s key constituents are recreational fishing and environmental groups.

Part 5.1. Commercial Fishing Practice and Community Outcomes

Seafood reaches the Queensland, Australian and international community through a complex supply chain.

Figure 1. Conceptualisation of the Seafood Supply Chain



Source: Adapted from Ruello (2008) and Spencer and Kneebone (2007).

Queensland commercial fisheries are governed by (1) the apparatus that can be used, (2) where that apparatus can be used, (3) seasonal closures, (4) limitations generated from State and Federal marine park zones, (5) food safety rules, (6) the use of VMS, (7) commercial fishery areas banning commercial fishing (e.g. Pumicestone Passage) and (8) net free zones (Cairns, Mackay and Rockhampton).

Part 5.2. Assessing Recreational Fishing Impacts and Community Outcomes

This section is divided into catch sharing, upgrading of catch and monitoring proposed quota allocation.

Part 5.2.1. Catch Sharing

Fisheries resources are not evenly distributed amongst stakeholder groups. Recreational fishers have almost unfettered access to the Queensland coast and have access to more areas of marine parks than any commercial fisher. Additionally, recreational fishers have access to fresh water fisheries and dams again areas that commercial fishers have never been allowed access into and never will be allowed access.

It remains unclear how catch sharing figures could be compared between sectors when Fisheries Queensland have no idea, on a kilogram basis, the catch levels of recreational fishers as they are monitored by bag limits. Moreover, they have no limitations on how many fisheries they can access on a daily basis.

Part 5.2.2. Upgrading of Catch

Fisheries Queensland are fully aware of the problem of upgrading amongst recreational fishers. An example of the recreational take of line caught King Threadfin Salmon illustrates the concerns professional fishers have made known for years to fisheries managers.

Table 3. Upgrading and King Threadfin Salmon

No of Recreational Fishers	No of maximum allowable fish / recreational fisher	Average Weight/Fish	Total Weight
4	5 fish (4 recreational fishers * 5 King Threadfin = 20 fish)	2 kg (2 kg * 20 fish)	40 kg
Upgrading Potential			
4	5 fish (4 recreational fishers * 5 King Threadfin = 20 fish)	12 kg (12 kg * 20 fish)	240 kg

There is nothing stopping a recreational fisher discarding a small King Thread Salmon for a larger fish distorting the true level of impact of recreational fishing. This is a very real and concerning scenario that the commercial seafood industry has watched being practised for years. Industry concerns have been raised with Fisheries Queensland and the Minister with no action taken.

It should be noted that effort creep (i.e. improvements in recreational vessel and gear technology) is also a factor to consider. Interestingly, recreational fishing television programs are promoting effort creep thus increasing the likelihood of upgrading of catch.

Part 5.2.3. Monitoring Proposed Quota Allocation

The initial, TACC for all sectors and the TACC for the first year for the Queensland east coast and Gulf of Carpentaria Mud Crab fisheries were, according to Fisheries Queensland, informed by research work undertaken by Northrop et al (2019), and is outlined in Table 4.

Table 4. Proposed Mud Crab Fishery Quota Allocation

Fishery	TACC Year 1	Indicative Recreational Harvest Range	Overall Fishery TAC
East Coast Mud Crab	770 t	331 t (252 t – 410 t)	1101 t
Gulf of Carpentaria Mud Crab	108 t	15 t (11 t – 19 t)	123 t

Source: Queensland Government (2020, p. 8).

What approach will Fisheries Queensland use to monitor the 331 t take from recreational fishers? How likely is it that the Minister will shut down the fishery to recreational fishers if their TACC is hit?

Part 6. Any other related matters.

There are a number of factors that are not taken into consideration with the introduction of both quota and harvest strategies in the Queensland commercial fisheries.

Part 6.1. Regulatory Impact Assessment

The impact of the reform agenda is provided at Appendix C but in summary, Fisheries Queensland as an extension of the Queensland Government has failed the community and its best interests and the commercial fishing industry in particular on the following:

- There has been no RIA conducted on the reform process despite responses from government arguing that their consultation process amount to the same thing.
- There has been no RIA on the impacts of quota or zoning on any commercial fishery.
- There has been no analysis of the supply chain impacts regarding the introduction of quota and the post-harvest sector.
- Alternative management arrangement arrangements that could have achieved catch limits without the need for quota management have never been explored or costed.
- There has been no market analysis relating to the decrease in local product supply and potential increases in the importation of seafood into Queensland.
- The release of an economic and social indicators paper were 1/5 commercial fishers responds paints a picture, of what is not clear but it cannot be credibly used to make decisions about the future management of almost 1,400 commercial fishers.

Without rigorous analysis the Queensland Government is proceeding with a social and economic experiment that it did not have to undertake. It is well known Queensland fisheries are not on the brink of collapse. Reform was driven from the top down not with well-meaning intentions but driven to ensure radical environmental and recreational fishing group agendas are achieved (e.g. fewer commercial fishers and a reallocation of fisheries resources in favour of recreational fishers).

Recreational fishers will not be forced to adopt VMS and they are restricted to a bag not kilo limit of catch. Under the current reform process and again using the Mud Crab fishery as an example, recreational fishers will have their daily bag limits reduced from 10 to 7 crabs¹². A limit that in reality is arbitrary as Fisheries Queensland have no real way to enforce these limits across 942,000 recreational fishers in Queensland.

They will have no economic impacts as a result of so-called fisheries reform processes such as a loss of income or loss of property.

Part 6.2. Quota: Access or Property Right?

In the Queensland context, the introduction of quota management will create a new, more complicated access right and not a property. Under the Fisheries Act 1994 (Qld), quota is referred to under s49(1)(c) of the legislation as a 'quota authority'. Quota is one of many authorities that can be issued under s49 of the Act including: (1) a licence, (2) a permit, (3) a resource allocation authority and (4) another authority prescribed by regulation.

The Act allows Fisheries Queensland to refuse to issue or renew an authority under s59(1) which states, 'The chief executive may refuse to issue or renew an authority if the chief executive is satisfied the refusal is necessary or desirable for the best management, use, development or protection of fisheries resources or fish habitats'.

¹² Historically the number of crabs per recreational fisher was 5. It was increased to 10 crabs based on recreational lobby group pressure. The existing bag limit of 7 is still 40% above the original bag limit.

At the time of drafting this submission:

- There is no mechanism in the legislation to increase the quota ceiling in any quota managed fishery.
- There is no compensation mechanism if quota is devalued or if the TAC is reduced by Fisheries Queensland.

Part 6.3. Tipping Point

Date available through QFish suggests that between 1990 and 2019 the Queensland commercial has seen a steady decline in active commercial fishers across the net, line, crab and trawl fisheries and falling catch levels, see Appendix D and E respectively.

Between 1990 and 2019 the average loss of active commercial fishers in each fishery included: (1) Net fishery (East Coast and Gulf fisheries) – 52% reduction, (2) Line fishery (east Coast and Gulf fisheries) – 47% reduction, (3) Crab fishery (Mud, Blue Swimmer and Spanner Crab fisheries) – 27% reduction, (4) Trawl fishery (Otter, River and Beam Trawl fisheries) – 66% reduction, and (5) the reduction over a 30-year period is 51% fewer active commercial fishers.

Table 5. Number of Active Queensland Professional Fishing Licences – Post Fisheries Reform in 2021/22

Year	Number of Commercial Fisher Licences				All Qld Fisheries
	Net	Line	Crab	Trawl	
1990	666	656	484	993	2799
2019	323	349	355	337	1364
% (+) or (-)	- 52%	- 47%	- 27%	- 66%	- 51%
Potential impact of Quota Management and Zoning					
Year	Number of Commercial Fisher Licences				All Qld Fisheries
	Net	Line	Crab	Trawl	
2021	216	234	238	226	914
% (+) or (-)	- 68%	- 64%	- 51%	- 77%	- 67%

Source: QFish data set – see Appendix D.

The reduction in commercial fishers may look more like the figures in Table 5: (1) Net fishery (East Coast and Gulf fisheries) – 68% reduction, (2) Line fishery (east Coast and Gulf fisheries) – 64% reduction, (3) Crab fishery (Mud, Blue Swimmer and Spanner Crab fisheries) – 51% reduction, (4) Trawl fishery (Otter, River and Beam Trawl fisheries) – 77% reduction, and (5) The reduction over a 32-year period is over 67% fewer active commercial fishers.

The lie that Queensland commercial fisheries stocks are in trouble requiring a quota management intervention can also be disputed by declining active commercial fishers and catch over time, see Appendix F.

Part 6.4. Value of Commercial Fisheries

The FRDC commissioned a report breaking down the economic value of Queensland commercial fisheries beyond beach prices, see Appendix G for a breakdown of the economic contribution of Queensland commercial fisheries.

The data provided by the FRDC provides a critically important overview of the value of Queensland commercial fishing. The FRDC report presents estimates of Australia’s fisheries and aquaculture industries' economic contribution to the Australian community for 2017/18.

The Association estimates at least 30% of commercial fisheries may be forced out of business and to what extent will the move to quota management mean for the value of industry?

Part 6.5. Related Industry Impacts

The dolphin feeding program in Tin Can Bay only exists because of small fish species Biddies taken within the N1 (general purpose net with Whiting catch). The supply of Biddies would be lost or in restricted supply impacting on this world-famous Tin Can Bay dolphin feeding program. The program attracts approximately 40,000 tourists and visitors per annum.

The program brings millions in tourist and visitor expenditure in the Cooloola Coast and Gympie regions. The program may be at risk when fish supplies are restricted as a result of quota management.

Part 6.6. Productivity Commission

In mid-December 2016, the Productivity Commission released a report examining (1) fisheries regulation and (2) fisheries management and if they were impeding industry investment and productivity improvements. The report also examined whether resources are being used in a way that is maximising community welfare and is used sustainably.

The Commission examined which characteristics make a fishery more or less open to quota management (Productivity Commission 2016, p. 102) and are outlined in Table 6.

Table 6. Quota Fishery Characteristics

Quota Fishery Characteristics	Queensland Quota Arrangements
The fishery targets only one or a small number of target species.	Queensland net fishery are typically multi-species. Under proposed quota arrangements, if a commercial net fisher's catch includes a quota species that the operator does not have access to it must be discarded.
The potential worth of the fishery justifies any additional costs of stock assessment and monitoring.	This has not been assessed by the Queensland Government.
There is a predictable and reliable basis for setting the total allowable catch, including predictability of recruitment.	Under proposed quota and harvest strategies, catch will be determined by heavily regulated commercial fishers and recreational fishers regulated primarily through bag limits.
There is one regulator of stocks.	In addition to Fisheries Queensland the following agencies have an impact on the regulation of stocks: (1) GBRMPA, (2) Department of Environment and Heritage Protection (Qld) and (3) Department of Agriculture, Water and the Environment.
There is no significant access to the fishery by the non-commercial sectors.	This is not the case in Queensland. There are recreational components to the five, Tier 1 Fisheries including the Barramundi, King Threadfin, Grey Mackerel, School Mackerel and Whiting.

Note: Tier 1 Fisheries – in this tier will be subject to quota management and will be managed regionally.

Part 6.7. Industry Feedback regarding Quota

The Association members have provided feedback on quota through podcasts and video interviews which are provided for the Committee's information in Appendix H.

Part 6.8. QSIA Quota Questionnaire

During February and March 2021, the Association sought industry feedback regarding quota management and received a total of 101 responses with the results of the questionnaire are provided below.

Q.1. Will the introduction of quota management have economic impacts on your business? If 'Yes' – Please list what you believe are the economic impacts for your business?

The Association received 99 responses to this questionnaire item. A majority (96% of respondents) indicated that the introduction of quota will have a negative economic impact on their businesses.

Response Data for Question 1

Yes	No	No Response
96% (n = 95)	4% (n = 4)	- (n = 2)

The second element of the question requested feedback regarding the types of economic impacts that might arise from the introduction of quota management. Amongst the commercial fishers that responded, 89 of the 95 responded 'yes' provided feedback. That feedback was grouped into themes which are detailed below.

Dominant themes

- The loss of and/or insecure income;
- Increased business costs;
- Unknown impacts of quota management in the long-term;
- Shift of control from commercial fishers to 'quota barons';
- Sourcing quota to lease or buy; and
- Unfair quota allocation process.

Other themes

- Undermining of multi-endorsed commercial fishers;
- Unnecessary imitation of catch;
- Reduction of commercial fishers; and
- Higher seafood retail costs.

Commercial Fisher Quotes

Under a quota system, fishers will only be able to catch the quota they hold, there is no allowance for increased catch in a good season unless you buy in more quota or hold more quota, this comes with increased cost and levies. The fishery moves from a fishery that rewards good fishing practices and good fisherman to one where whoever owns the most quota has the best season.

The quota we have been given is far less then what we catch at the moment and will not be enough to make a living with our family.

With what they are proposing to allocate to our licence is about half of what we need to operate and which we have landed in recent years (the capping of the Mud Crab fishery at 770 tonnes is equivalent to the worst total catch in the last 20 years).

Q.2. Will the introduction of quota management have social impacts for you (e.g. on your family, on your relationships)?

Eight-six (95% of respondents) provided a response regarding the social impacts resulting from the introduction of quota management.

Response Data for Question 2

Yes	No	Unsure	No Response
95% (n = 86)	4% (n = 4)	1% (n = 1)	- (n = 10)

Commercial fishers were asked for feedback and their response were grouped below.

Dominant themes

- The most cited response from commercial fishers to this questionnaire item was stress;
- Specifically, commercial fishers noted the following:
 - General increase in stress and family relationships;
 - Additional stress as part of the reform process;
 - Stress on marriage and potential for divorce;
 - Impact on crew and their families;
 - Increasing stress as it relates to losing income; and
 - Increasing stress as it relates to leasing or buying quota.

Other themes

- Uncertainty regarding implications of quota management;
- Quota will lead to corporate or investor control over commercial fisheries; and
- Retirement insecurity as individual businesses come under threat from the introduction of quota management.

Commercial Fisher Quotes

As any small business operator about to lose their business which is what they've done all their life it puts a lot of strain on relationships and general health issues from stress.

I am a 3rd generation fisher. The reform process will take away an industry from my grandkids.

Stress of maintaining the business and the financial decisions relating to buying or leasing quota. Corporatisation of our fisheries will mean a loss of experienced commercial fishers.

Q.3(a). Do you fully understand the quota management system? If 'No' – What are the issues you are encountering?

Ninety-nine commercial fishers provided feedback regarding their understanding of the quota management system. Forty-one percent of commercial fishers indicated they understood the quota management system while 59% indicated that they did not understand the quota management system.

Response Data for Question 3(a)

Yes	No	No Response
41% (n = 41)	59% (n = 58)	- (n = 2)

Commercial fishers were asked for feedback. Forty-nine commercial fishers provided feedback and their response were grouped below.

Dominant themes

- An awareness that Fisheries Queensland has not fully explained the quota management system to industry;
- Port visits were evaded on purpose, to avoid an open backlash from the majority of industry regarding the reform process;
- Reporting obligations;
- Concerns about the operation of quota expressed amongst crab, net and trawl commercial fishers; and
- Concerns raised regarding discards under quota management arrangements.

Other themes

- Industry has not been offered compensation;
- Lack of quota to make a sustainable living;
- Role of department in quota leasing and cost; and
- Questions regarding how quota trading will operate.

Commercial Fisher Quotes

What is going to determine the amount of quota you are going to have every year?

There are still unknowns with this harvest strategy with regards to regulations until such time as Fisheries Queensland clarify their interpretation of the regulations it is impossible to have a clear understanding of the system.

Unsure where we are going to land our catches. At the moment, it is State registered boat ramps (don't know how this works when we aren't allowed to use them by law – recreational only). We work from mud landings in isolated creeks that are not accessible by normal four-wheel drives. Have done so for forty-six years. If this is not acceptable to continue, we will have to shut down. We do not have an option to use a public boat ramp. None of this has been explained to us. This alone causes a lot of mental health and anxiety issues.

Q.3(b). Do you fully understand the regulations that support the quota management system? If 'No' – What are the issues you are encountering?

The Association received 97 responses with 33 commercial fishers (34% of respondents) indicating they fully understood quota regulation. While 64 commercial fishers (66% of respondents) do not fully understand quota regulations.

Response Data for Question 3(b)

Yes	No	No Response
34% (n = 33)	66% (n = 64)	- (n = 4)

Commercial fishers were asked for feedback. Forty-two commercial fishers provided feedback and their response were grouped into themes below.

Dominant themes

- Lack of plain English explanations of regulations; and
- Lack of proper consultation.

Other themes

- The impacts of the regulations on quota lease price or purchase price are unknown;
- Limited ability to ask questions;
- Increased red tape; and
- Link between introducing quota management and protecting the fishery is unclear.

Commercial Fisher Quotes

No definitive, summarised, final rules provided.

Total lack of communication, no port meetings, limited written correspondence.

The amount of typos in this reform document are frightening, we were told that this reform will reduce red tape, well it has increased red tape tenfold; you nearly have to be a lawyer to try and understand it.

Q.4. Will zoning (regionalisation) affect your business?

The Association received 97 responses with 65 commercial fishers (67% of respondents) indicating zoning would affect their businesses. While 32 commercial fishers (33% of respondents) do not believe zoning would affect their business.

Response Data for Question 4

Yes	No	No Response
67% (n = 65)	33% (n = 32)	- (n = 4)

Commercial fishers were asked for feedback. Sixty commercial fishers provided feedback and their response were grouped below.

Dominant themes

- Loss of mobility between zones;
- Limited quota or access to quota on a zone-by-zone basis;
- Increase pressure on a zone-by-zone basis has not been explored; and
- Zoning will undermine multi-endorsed commercial fishers by limiting their mobility.

Other themes

- Affects the ability to sell licenses;
- Devaluation of current commercial fisher assets;
- Commercial fishing infrastructure and accessibility varies between zones;
- Quota will limit productivity of commercial fishers;
- Increased problem of pulse fishing; and
- Introduction of zones will do nothing to protect the marine environment.

Commercial Fisher Quotes

Loss of mobility between areas which will mean more pressure to secure quota in other zones.

If there is no quota left in one zone, I would be unable to fill my quota by moving to another zone. Will there be adequate resources provided by the government to monitor compliance with the zoning rules?

It encourages a race to fish (pulse fishing); it may also create unnecessary conflict within the industry and could create risk taking by fishers. Price will be impacted and lack of supply will lead to loss of customers.

Conclusions

The introduction of quota management is a solution to a problem that does not exist.

Queensland fisheries are in no danger of collapse yet the Queensland Government has insisted its quota management approach will ensure the longevity of the marine resource.

Alternatives to quota management were never fully explored by Fisheries Queensland. A decision by government has led to the bypassing of a RIA. The implications of reform for the catch sector may only be known through the use of a post-implementation assessment (PIA). This approach has minimal industry support and is viewed as a waste of time and resources given the damage to individual commercial fishers, their families and the undermining of the sector will not be addressed.

The impacts of quota management on the post-harvest sector have received no attention under the so-called fisheries reform process. Moreover, the impact on the community in terms of species availability and price impacts are also unknown.

This submission provides evidence that quota is not the panacea for fisheries management issues in Queensland. The introduction of quota management fits into the current fisheries management narrative, that is:

- Limiting catch for the commercial sector;
- Redistribute the remaining catch amongst an almost unaccountable and lightly regulated recreational fishing sector; and
- Fisheries policy-making that reflects the desires of groups like WWF Australia and the Australian Marine Conservation Society.

Nothing in the so-called Queensland fisheries reform process, particularly quota management, will address the impacts of coastal and port development, modification of catchments, pollution, the introduction of organisms from shipping, the modification of tributaries or the well documented ineffectiveness of fish migration ladders in barrages and weir walls that greatly hinder the natural migration of juvenile fish species back into fresh water (the natural process).

The introduction of quota management is a smokescreen for unimaginative fisheries policy making that, when filtered, is about the politics of fishing and not the availability of local seafood to the community, food security or the viability of micro and small commercial fishing operators.

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Appendix A: Quota Allocation

East Coast Mud Crab – Catch History and Quota Allocation Option

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	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
EC Mud Crab Reported Catch (kg)	6,394	6,812	7,440	4,068	3,228	2,562	2,563
No of C1 Symbols	1	1	1	1	1	1	1
EC Mud Crab Calculated Catch for Quota Allocation (kg)	6,000	6,000	6,000	4,068	3,228	2,562	2,563
Best 6 Years Average EC Mud Crab Catch (kg)	4,643 <i>(calculated best 6 years total catch/6)</i>						

Proposed Allocation	EC1 Units	Individual % of Total Available EC1 Units	Indicative EC1 Annual Quota (kg)
Unit allocation based on best 6 years of catch history	164.168	0.55%	3,995 (kg)
Total Allowable Commercial Catch = 730 tonnes Total Available Number of Units = 30,000 1 Quota Unit = 24.33 (kg)			



30505
 = 6 = 5084

Appendix B: Finance Advice



Re. Financing the purchase of Commercial Fishing Quota

I have approached a number of lenders (including large banks) regarding your request to finance the purchase of additional Commercial Fishing Quota. Despite your excellent credit history with a number of these lenders, we are not able to progress your request at this time.

The various lenders have indicated they are not willing to advance the funding you require with the Commercial Fishing Quota as security. The lenders have noted their past experience with taxi licenses as part reason for their reluctance to fund.

Please let me know if you have any questions.

Yours Sincerely



Appendix C: Queensland Government Reform Key Action

Queensland Government Reform Key Actions	QSI Response
Additional monitoring and research (including new technologies)	<ul style="list-style-type: none"> No industry wide support as additional monitoring will lead to more cost on commercial fishers, e.g. the introduction of VMS. Costs have included replacement of less than fist for purpose units and polling costs.
Setting clear sustainable limits for each of our fish stocks	<ul style="list-style-type: none"> There is no sustainability crisis but one has been fabricated by the State Government.
Working groups and a Sustainable Fisheries Expert Panel to engage stakeholders	<ul style="list-style-type: none"> At no stage was industry or industry bodies asked to identify experts that may have taken a balanced view of the reform process. No port meetings
Establishing harvest strategies for all fisheries which set clear targets for fishery performance, triggers for action	<ul style="list-style-type: none"> Little to no support for strategies reliant on quota management and zoning as key pillars of a flawed reform process.
Clear decision rules for the actions that will be taken	<ul style="list-style-type: none"> As above.
Piloting regionally based fisheries management	<ul style="list-style-type: none"> This approach has been tried through the piloting of regional management in north Queensland and failed.
Satellite tracking on all commercial fishing vessels	<ul style="list-style-type: none"> As above.
Helping facilitate industry led structural adjustment to reduce the number of fishing licences and improve sustainability and profitability	<ul style="list-style-type: none"> The reform was initiated by the Queensland Government. This is equivalent to industry cannibalising itself.

Notes: Queensland Government (2019, p. 3).

Appendix D: Number of Active Queensland Professional Fishing Licenses

Year	Net	Line	Crab	Trawl	All Qld Fisheries
1990	666	656	484	993	2,799
1991	668	606	504	1,007	2,785
1992	617	562	498	933	2,610
1993	669	609	643	923	2,844
1994	618	593	724	868	2,803
1995	628	625	677	847	2,777
1996	663	731	655	876	2,925
1997	675	860	691	867	3,093
1998	613	839	640	859	2,951
1999	610	825	624	840	2,899
2000	626	731	637	801	2,795
2001	637	740	659	683	2,719
2002	619	763	655	615	2,652
2003	645	713	682	608	2,648
2004	638	543	650	591	2,422
2005	548	448	566	544	2,106
2006	545	450	555	516	2,066
2007	547	473	540	458	2,018
2008	558	474	533	431	1,996
2009	520	475	516	433	1,944
2010	485	432	471	418	1,806
2011	493	425	465	399	1,782
2012	472	408	459	378	1,717
2013	462	392	458	359	1,671
2014	431	395	439	339	1,604
2015	390	399	413	345	1,547
2016	384	390	408	349	1,531
2017	360	379	392	356	1,487
2018	363	380	380	358	1,481
2019	323	349	355	337	1,364

Source: Fisheries Queensland data set¹³.

¹³ Fisheries Queensland data produced and checked on 26/08/2020. Every effort has been made to provide information that is current, accurate and complete. This also includes the N11 fishery.

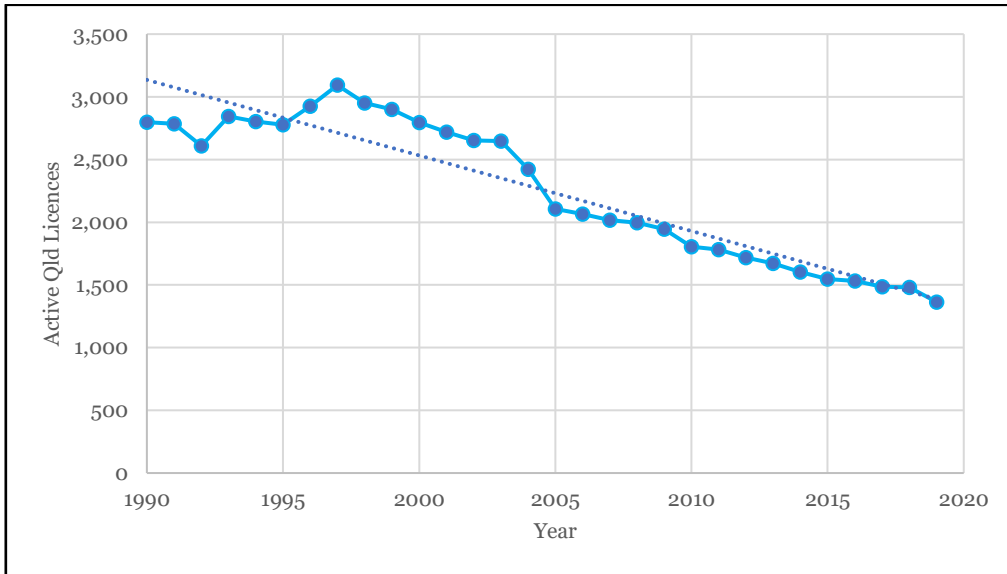
Appendix E: QFish Catch Data

Catch 1990 to 2019					
	Net (t)	Line (t)	Crab (t)	Trawl (t)	All Qld Fisheries
1990	5,577	3,613	1,217	11,421	21,828
1991	5,168	3,688	1,573	10,334	20,762
1992	6,447	3,801	1,950	9,842	22,039
1993	5,164	3,854	3,110	12,097	24,226
1994	5,252	3,749	4,370	11,717	25,087
1995	6,117	4,034	3,812	13,600	27,562
1996	6,226	4,561	3,669	13,743	28,199
1997	5,994	5,262	4,077	12,097	27,430
1998	6,895	5,639	3,144	12,977	28,655
1999	7,349	5,461	3,252	11,681	27,743
2000	7,335	5,255	3,729	8,716	25,034
2001	8,692	6,284	4,040	8,514	27,530
2002	7,372	6,060	3,631	8,946	26,009
2003	8,552	5,475	4,055	9,207	27,289
2004	8,966	3,309	4,055	9,633	25,963
2005	7,150	2,939	3,244	8,208	21,541
2006	7,606	2,989	3,152	7,452	21,199
2007	7,297	2,931	3,198	6,243	19,669
2008	8,013	3,117	3,276	6,616	21,022
2009	7,491	3,196	2,975	8,574	22,236
2010	7,141	2,680	2,884	7,666	20,370
2011	7,192	2,311	3,060	6,695	19,258
2012	6,863	2,188	2,875	6,715	18,641
2013	6,349	2,321	2,643	7,940	19,252
2014	5,439	2,328	2,615	6,929	17,311
2015	6,096	2,156	2,790	6,796	17,838
2016	5,537	2,315	2,400	6,396	16,648
2017	5,600	2,286	2,329	7,678	17,893
2018	4,994	2,094	2,064	6,495	15,647
2019	3,605	1,983	1,871	6,159	13,618

Source: QFish 2021: <https://qfish.fisheries.qld.gov.au/>

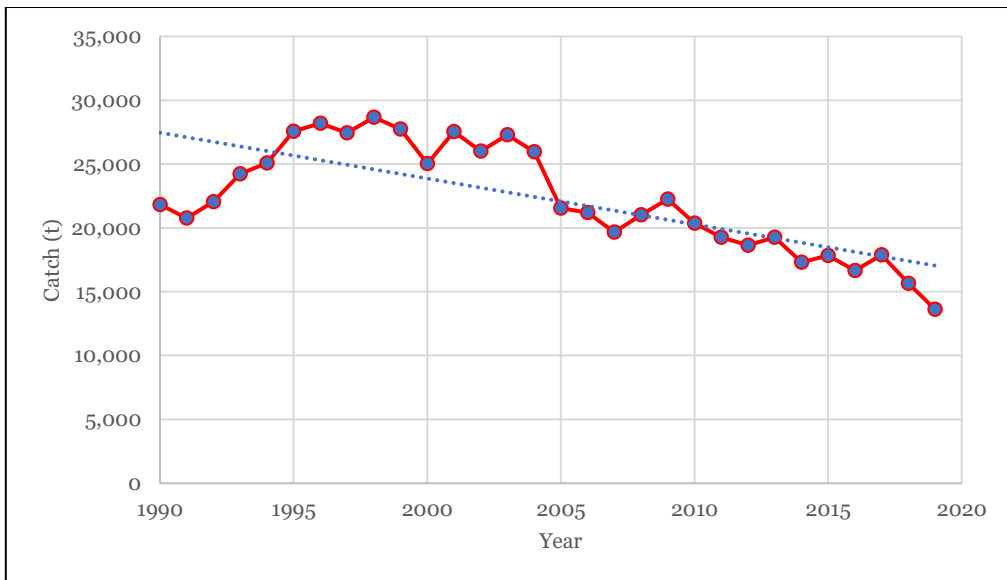
Appendix F: Decline in Active Fishing Licences and Catch

No of Active Queensland Commercial Fishing Licences



Source: QFish data.

Catch Data – Queensland Crab, Net, Line and Trawl Fisheries



Source: QFish data.

Appendix G: Queensland Commercial Fishing Economic Value Statistics

	GVA ¹⁴ (m\$)	Employment ¹⁵ (FTE jobs)	Household ¹⁶ Income (m\$)	GVP ¹⁷ (m\$)
State Managed Fisheries				
Direct Fishing	100	1,082	42	189
Processing	7	70	4	15
Indirect (all other sectors)				
Production	44	411	33	-
Consumption	58	443	31	-
Induced				
Total	102	854	64	204
Grand Total	210	2,007	110	204
Commonwealth Managed Fisheries				
Direct Fishing	74	380	27	135
Processing	5	50	3	11
Indirect (all other sectors)				
Production	32	297	24	-
Consumption	40	303	21	-
Induced				
Total	72	600	46	146
Grand Total	150	1,030	75	146
State & Cmlth Grand Total	360	3,037	185	350

Source: FRDC (2019, p.37).

¹⁴ Gross value added (GVA): GVA is calculated by subtracting non-wage business expenditure (EXP) such as fuel, trade services, professional services and transport services including taxes less subsidies (TLS and EXP) from GVP.

¹⁵ Full time equivalent (FTE): The ratio of the total number of paid hours during a period (part time, full time, contracted) by the number of working hours in that period Mondays through Fridays.

¹⁶ Household income is a measure of wages and salaries paid in cash and in kind, drawings by owner operators and other payments to labour including overtime payments, employer's superannuation contributions and income tax, but excluding payroll tax. This indicator provides a measure of the wages and salaries associated with the employment contribution of fishing and processing.

¹⁷ Gross Value of Production (GVP): GVP is calculated by multiplying the weight of production by the landed unit value. The landed unit value is defined as the beach price for fish species caught in wild-catch fisheries and the farmgate price for fishery and aquaculture products produced in aquaculture establishments.

Appendix H: Podcast and Video Feedback regarding Quota Management

QSIA Podcasts

1. Shane Snow (QSIA Vice President)

Discussion regarding quota.

<https://qsia.podbean.com/e/industry-views-shane-snow/>

Discussion with Shane continued.

<https://qsia.podbean.com/e/industry-views-shane-snow-part-3/>

2. Sienna Green (QSIA Member) and Neil Green (QSIA Member and former President)

Discussion regarding quota from a multi-generational fisher perspective.

<https://qsia.podbean.com/e/impacts-of-the-so-called-qld-fisheries-reform-process/>

QSIA Videos

1. Lionel Riesenweber (QSIA Member) discusses the Queensland fisheries reform process. Lionel sheds some light on the impacts of quota management and the reform process from a commercial crab fisher perspective. Posted to YouTube on 3 August 2019.



2. Richard Hamilton (QSIA Member) shared his experience with quota management in the Spanner Crab fishery. Parts 1 and 2 were posted to YouTube on 8 September 2019.

