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To whom it may concern

## **RE SENATE INQUIRY – THE FISHERIES QUOTA SYSTEM**

### **Introduction**

Shark Bay Prawn Managed Fishery (prawn fishery) It is the most valuable trawl fishery in Western Australia, contributing approximately \$25 million annually in terms of prawn catch.

The prawn fishery was established in the 1960's and since that time has been managed under input controls, mainly in the form of a limited number of fishing days with a suite of area openings and closures throughout the season. There are also a number of large permanent nursery areas within the fishery. The fishery first gained certification under the Marine Stewardship Council (MSC) Standard in 2015. MSC certification for a second five year period was achieved in late 2020. The fishery operates in part in Shark Bay's World Heritage Area, an area of high ecological significance.

Its licence holders also hold allocations to take scallops and blue swimmer crabs in the quota managed Shark Bay Scallop (scallop fishery) and the Shark Bay Crab Managed Fisheries (crab fishery), formally managed in 1991 and 2015 respectively. These fisheries are also economically important, particularly to WA's Gascoyne region, contributing approximately \$6m and \$4m respectively.

The overlapping nature of the three fisheries, all of which have their own management plans and harvest strategies, creates a highly complex set of management arrangements. As operators in an input control fishery and two quota managed fisheries, we wish to highlight how these two quota management systems work and don't work in terms of ecological sustainability and community benefit.

## **TERMS OF REFERENCE**

The comments primarily relate to Terms of Reference (e) "*...Whether the current system results in good fishing practice that is ecologically sustainable and economically dynamic and produces good community outcomes*".

We wish to refer specifically to the quota management in the scallop and crab fisheries and how these two fisheries operate in the same geographical area, include mostly the same licence holders, but vary greatly in terms of their success.

## **SHARK BAY CRAB MANAGED FISHERY**

The crab fishery has been quota managed since 2015 providing a framework for the commercial take of crabs by the trap and two trawl sectors (scallop fishery included). Some input controls also apply such as gear restrictions and a minimum size. There are no explicit allocations determined between the commercial and recreational sectors at this time. A key driver for introducing quota management was to allow for explicit catch share allocations to be taken by the different fleets.

Crab stocks were heavily impacted by a 2010/11 heatwave and flooding event, resulting in the fishery being voluntarily closed for a couple of seasons. The application of a Total Allowable Commercial Catch (TACC) as part of the quota system has allowed for the incremental increase in catch over time from effectively a closed fishery in 2013 to 650t in 2020, resembling catches similar to pre-heatwave conditions. This has been underpinned by a collaborative process between WA's State Government and commercial and recreational fishing representatives on a Working Group, which makes recommendations on the TACC on an annual basis. The quota is renewed on each licence in line with the annual setting of the TACC. The catch shares are formalized under the fishery's management plan and are fully transferable between licences.

While quota management in short lived species has not been traditionally used in WA fisheries due to large variability in recruitment and difficulties predicting the catch, the SBPTOA consider the quota management system to be largely successful for this fishery. While crabs are relatively short lived and dynamic in nature, the fishery is for the most part well researched with both fishery dependent and independent surveys conducted each year. This has contributed to a fairly reliable catch prediction, notwithstanding more conservative TACC's being set while the fishery was undergoing recovery. Having a clear annual review process in place has also provided confidence to industry that the TACC can be appropriately adjusted (up or down) in accordance with stock status.

## SHARK BAY SCALLOP MANAGED FISHERY

Quota management was applied in the scallop fishery in 2015, initially as a trial. The fishery was previously managed under an input-controlled management regime, using limited entry, gear controls and season closures, linking strength of recruitment and residual scallops to determine an appropriate opening date. The licensing in the fishery is split between the existing prawn fleet ("B Class") and the dedicated scallop fleet ("A Class").

The input control management regime and the nature of licensee types lead to a number of conflicts with resource sharing and potential effects of A Class licence holders targeting scallops over sensitive prawn grounds and B class licence holders damaging scallop grounds while targeting prawns.

The move to a quota managed fishery was more focused on a management solution rather than a system that would result in improved sustainable fishing practices achieving greater economic and social outcomes.

Like crab, fishery dependent and independent surveys are conducted annually. A working group of Government and industry members meet to provide advice on the annual setting of the TACC. Unlike crab, the highly variable recruitment of scallops makes it extremely difficult to set an appropriate TACC. Catches have fluctuated widely due to environmental conditions, from 120t to 4400t. The TACC is set primarily using survey data from fishery independent surveys, which provide indices of abundance before and after the key fishing period. This has not always been reliable, with both the TACC overestimated and underestimated in recent years.

Having a set quota management arrangement with an annual TACC setting process in place has not allowed for flexibility to make adjustments as new survey or industry information has become available. This has caused considerable angst for industry. When the TACC was overestimated, this resulted in individual quota allocations having to be adjusted downwards mid-season. This created equity issues between those who had and hadn't caught their allocation prior to the reduction. Similarly, the TACC underestimation was equally frustrating in that it resulted in the remaining scallop on the ground ageing and deteriorating in quality the following year. Not surprisingly, these disruptions have ultimately resulted in the setting of more conservative TACC's with the maximum economic return and community benefit at times not fully realized.

A further and significant complication is the overlapping nature of the prawn and scallop fisheries. Historically, the prawn fishery could maximise its take of prawn, scallop and crab within a pre-determined set of season dates, under an input control regime. It is interesting that the introduction of quota for the crab fishery has had no negative effect on the economics of the prawn fishery, yet the same can't be said for quota in the scallop fishery. Maybe this because the TACC is sufficient in the crab fishery without the need for further input controls (except a minimum size). Whereas the scallop fishery's quota regime, combined with start and finish dates that don't align with prawn season dates and a suite of spatial and temporal closures restricting the take of scallops during the prawn season creates very restrictive arrangements. The only way prawn fishers can effectively take their quota allocation of scallops is to fish outside the prawn season, which comes at

additional cost. There has been an expectation by Government that industry will consolidate its quota to minimize these costs of fishing outside the prawn season. This approach has been more favourable to larger companies operating multiple vessels than it has been to smaller companies with a single vessel in operation.

To summarise, the impact of the move to a quota system on a short lived, unpredictable species has been considerable, resulting in:

1. B Class licence holders having to effectively double trawl effort in order to catch quota allocation outside of traditional prawn season arrangements;
2. A quota setting regime that lacks the ability to accurately assess stock abundance, resulting in significant under fishing in certain areas and overfishing in others;
3. Season arrangements which favour larger operators over the smaller operators who have smaller vessel numbers and an inability to efficiently harvest quota outside of traditional fishing seasons; and
4. Significant over grading and wastage as operators only move to harvest premium scallop.

## **CONCLUSION**

Quota management regimes are often seen as the panacea in terms of fisheries being able to achieve maximum economic return and providing a mechanism to rationalize over time. Where the stock is well understood and a reliable estimate can be predicted, quota management can be very successful as we've experienced in Shark Bay's crab fishery. It has largely been a "set and forget" exercise without any need for intervention outside of the annual TACC setting process.

However, the inability to reliably estimate the catch in the scallop fishery has been highly problematic. While the introduction of quota in both fisheries has allowed intra-sector explicit allocations to be managed, the crab fishery has thrived, while the scallop fishery has underperformed, with a flow on detrimental effect on the prawn fishery. On this basis, our view is that unless the catch can be reliably predicted, quota management should be avoided. This is particularly relevant where fisheries overlap with entitlement held to access both resources.

Your sincerely

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