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Australian Marine Fisheries and Aquaculture  
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Dear Secretary,

**Re:Marine Fisheries and Aquaculture**

RecFish SA welcomes the opportunity to comment on the Productivity Commission Issues Paper for Marine Fisheries and Aquaculture.

RecFish SA is the peak body for recreational fishing in South Australia. Our membership comprises fishing clubs and associations, community groups, recreational fisheries committees and individual fishers. We strive to represent the interests of South Australia's 277,000 recreational fishers.

**Are controls such as licences, bag limits and size limits effective?**

In South Australia, size, bag and boat limits apply to the most commonly harvested and targeted fish species. Generally, these limits are sufficient to regulate recreational harvest within the set allocations and share the resource between individual fishers. Recreational fishers are concerned that the information used to set and evaluate these controls should be as accurate and reliable as possible; being supported by relevant scientific research. There is further concern that without the regular collection of social and economic data for recreational fishing, determining allocations with respect to the optimum use of the resource, is unlikely to be sufficiently well informed.

In practice, licences for recreational fishers in South Australia only apply to two fisheries, these are the Lobster Pot fishery and a limited Mesh Net fishery in the Lakes and Coorong area. Although not officially called a licence, individual lobster pots must be registered (with a maximum of 2 pots per person), registrations are sold and must be renewed each year. While there is currently no cap on the number of registrations issued, such a limit has been employed as an effort control in the past.

The use of mesh (gill) nets by recreational fishers is not permitted in marine waters of South Australia. However, a limited number of registrations/licences exist for fishers in

the Lakes and Coorong Fishery in the South East of the state. These endorsements are non-transferable and new registrations are not being issued. This can be seen as an effective limiting factor controlling recreational net fishing effort.

### **Is there scope to reduce the burden (time or monetary costs) of fishing rules on recreational fishers while achieving the same regulatory objectives?**

Due to the diverse nature of recreational fishing activities with respect to target species and to a lesser extent, the equipment used, there are a suite of regulations which recreational fishers are expected to comply with. While acknowledging, the many challenges and limitations in applying statewide rules to recreational fishing activity, clear and simple rules are favoured, in order to reduce the burden of compliance.

Except for major centres, South Australia is a sparsely populated state. It has an exceptionally long coastline, owing to the St Vincent and Spencer gulfs. The coastline length to population/fisher ratio, may be seen as contributing to proportionately higher compliance costs. RecFish SA believe that the majority of recreational fishers actively play their part in ensuring sustainably managed fisheries by following the rules. Even so, given the reliance on largely voluntarily compliance with fishing regulations (due to limited resourcing for enforcement), further investment in education may be one way to ensure regulatory objectives are achieved more efficiently.

Mobile phone app technology has been adopted by the Primary Industries and Regions South Australia (PIRSA), Fisheries department to place fishing rules and regulations at the fingertips of recreational fishers. This is a step in the right direction and has the ability to be regularly updated at low cost. The app is available free of charge to recreational fishers. Ongoing publicity of this product is essential to encourage wider uptake.

There is some concern to ensure that printed fisheries materials are still available, free-of-charge to fishers. This is important because while increasing, smart phone app use is not taken up by all fishers. Additionally, while written materials such as a guide book may be read cover to cover, with a phone application, people may be less likely to discover information unless actively seeking it. This could lead to less general knowledge of fishing rules and regulations and should be monitored over time.

### **How well is recreational fishing recognised in current fisheries management and regulatory arrangements?**

RecFish SA is of the view that changes to Commonwealth fisheries legislation are required, so as to explicitly recognise recreational fishers as stakeholders. A process to achieve this recognition is currently being pursued through the national peak body the Australian Recreational Fishing Foundation (ARFF). At the State level, the poor availability of social and economic data for recreational fisheries, continues to preclude a strong case being made for the appropriate level of recognition for recreational fishing.

It is perceived that there is a failure to explicitly recognise the significant financial contribution made by recreational fishing to the national economy. This in effect, prevents Commonwealth fisheries from being managed to provide optimum benefit to the Australian community. The Australian Fisheries Management Act 1991, prescribes the areas of focus for the Australian Fisheries Management Authority (AFMA). There appears to be insufficient scope to consider the value of recreational fisheries, the potential impacts of decisions on recreational fishing communities, or other relevant socioeconomic factors. The result is a somewhat narrow charter, limited towards maximising the economic value of commercial fisheries.

With regard to the State jurisdiction, RecFish SA do not believe that the value of recreational fishing is appropriately reflected in fisheries management/ regulatory arrangements. This may stem from a lack of long-term investment and, more clearly, insufficient data collection on the social and economic value of recreational fishing to the South Australian community.

### **How does the regulation of commercial fisheries affect recreational fishers?**

RecFish SA is of the view that management of commercial fisheries should take into account the potential impacts on important recreational fishing species and locations, especially where these impacts can be reasonably avoided. Commercial fishers can often use efficient methods for harvesting fish, which may have the potential to cause localised depletion or a noticeable reduction in the abundance of key species in certain locations, at times. It goes without saying that commercial and recreational fisheries should be managed sustainably, with a view to optimising environmental, social and economic benefits to the community.

Recreational fishers are not the only stakeholders affected by the impacts of poor fishing results which may follow depletion of a stock. In fact, in response to declining catches, recreational fishers may chose to visit elsewhere, or fish for an alternative species. The local communities and the economies supported by recreational fishing tourism however, can be directly impacted if visitation declines. The significance of recreational tourism expenditure in South Australian regional economies is not ideally well understood due to a lack of data, however the National Recreational and Indigenous Fishing Survey (NRIFS) attributed 43% of 2000/1 statewide recreational fishing expenditure as having occurred in regional areas of the state (Henry & Lyle, 2003).

Recently, the PIRSA managed blue-swimmer crab fishery in Gulf St Vincent has been an example where commercial fishers have agreed to avoid fishing in key recreational areas (both metropolitan and regional), at socially important times of the year. The aim has been to avoid conflict and to better share the fishery across sectors. The arrangement was supported by the Yorke Peninsula District council in recognition of the significance of recreational fishing tourism to its east coast towns and was also encouraged by fisheries managers. This serves as an example of how the impacts of commercial fishing upon recreational fishing experiences, can potentially be reduced without unduly compromising the commercial viability of the fishery.

Another way that commercial fisheries may affect recreational fishers is by impacting on perceptions so that fisheries are viewed to be unsustainable or in poor condition. This may be especially economically important with respect to international recreational fishing tourism. The NRIFS estimated that in 2000/1 191,000 international visitors engaged in recreational fishing in Australia. The study suggests that a perception that Australia has a “pristine environment, relatively healthy fish stocks, diversity of fish species and fishing opportunities may be seen by some overseas visiting fishers as contributing to their traveling experience”(Henry & Lyle, 2003: p124).

The report also suggests that the economic contribution of overseas anglers may be substantial. Therefore, it is important to maintain perceptions that Australian fisheries are healthy and offer genuinely unique fishing opportunities. Such perceptions are likely to also affect local and interstate participation in recreational fishing activities and consequently, the potential value of associated economic and social benefits.

### **What are the main sources of tension between recreational fishers and other fishery users?**

Tension between recreational fishers and commercial fishing operations primarily exist around key fishing locations, desirable target species, sector allocations and declining abundance in key fish stocks. Sources of tension exist in both Commonwealth and State managed fisheries, though it is sometimes possible for these tensions to be eased through sound management approaches and the development of well considered strategies by the respective sectors.

For Commonwealth managed species, tension exists around two key fisheries, the Small Pelagic Fishery and the Southern Bluefin Tuna fishery. With regard to the former, there is significant concern in the recreational fishing community that the harvest of baitfish such as redbait and mackerel by large freezer vessels may not be the best, most appropriate use of the resource. This tension is exacerbated by the fact that most of these fish will be exported frozen, fetching a low financial value for harvest weight, when compared with other fisheries.

Recreational fishers, place a value on the abundance of bait-fish in the water, with the view that these fish make up an important part of the food-web, including for highly valued predator fish such as Southern Bluefin Tuna. At a time when the Australian government is supporting the development of new fisheries for small pelagic fish, many South Australian recreational fishers point towards a recent decision taken in a similar area of fisheries management in the United States.

This year, the US National Marine Fisheries Service has introduced a West-Coast prohibition on the development of fisheries for what it calls “ecosystem component species”. These are essentially baitfish/forage fish for which an existing fishery has not been established. Fisheries will not be developed unless scientists can in advance, satisfy key concerns around “potential impacts to existing fisheries, fishing communities, and the greater marine ecosystem” (US Federal Register, 2016).

As mentioned previously, in Australia the recreational fishing community is not expressly recognised in Commonwealth legislation and the Fisheries Management Act. There is a common view that impacts on recreational fishing communities are not always sufficiently taken into account in official processes of managing Commonwealth fisheries. Current management considerations may not be sufficient to capture the scope of recreational fishing communities affected by decisions.

In the Southern Bluefin Tuna (SBT) fishery, tension has arisen periodically, as changes in spatial distribution over recent seasons has brought the South Australian commercial fleet increasingly in contact with recreational fishers. SBT are a high value commercial species which is subject to an international quota agreement. RecFish SA are keen to ensure ongoing, recognised access for South Australian recreational fishers to this important and iconic fishery.

In recognition of the high value and recovering populations, recreational fishing groups have worked with the University of Tasmania to develop a national Recreational Fishing Code of Practice for Southern Bluefin Tuna. This document aims to educate recreational fishers and promote the adoption of practices to optimise the eating qualities of retained fish and maximise the survival of released fish. The study puts post release survival of SBT at 83%, when the correct types of fishing gear are used (Tracey *et al.*, 2016). This indicates significant potential for a high value fishery, even when the fish is not extracted and remain in the fishery.

Data on the economic value of the South Australian recreational SBT fishery is not available. Of relevance however, is a study commissioned by the Victorian Department of Primary Industries into the recreational tuna fishery off of the town of Portland in 2012. This study estimated the retained value per kilogram of recreationally caught SBT to be closely comparable to that of the commercial sector value per kilogram (Deloitte Access Economics, 2013). RecFish SA would encourage a similar study be undertaken to better understand the recreational SBT fishery in South Australia.

### **Given the services provided by state and territory governments to support recreational fishing, do recreational fishers get good value from licence fees?**

Unlike, a number of other Australian states, recreational fishers are generally not required to purchase a licence to fish in South Australia. Similarly, the revenue raised from sales of recreational Southern Rock Lobster pot registrations, is not held in a trust-fund or similar arrangement. Current arrangements do not appear transparent enough for recreational fishers to accurately assess if they are getting good value from the revenue raised. Despite current arrangements, the potential value of a recreational fishing licence in South Australia remains a relevant topic.

It is generally accepted that recreational fishers would not support a general recreational licence unless revenue went directly back into recreational fishing. RecFish SA received FRDC funding for an attitudinal survey in 2014, this included questions about recreational fishers attitudes towards a Recreational Fishing Licence (RFL). The study was conducted by the University of Canberra and the results are not yet published, however it is expected to show that community opinions regarding

support for an RFL are divided.

While overwhelming support for a licence does not seem apparent, as the peak body for recreational fishing in South Australia, issues of importance are frequently raised with us by the recreational fishing community. Many of the issues raised relate to insufficient resourcing for the sector. This includes a perceived lack of compliance enforcement and a need for specific social, economic and fishery/biological research. Other issues often raised, include a common perception of low-level investment in fisheries enhancement and fishing opportunities through stocking, infrastructure and reef building programs, when compared with other states. It is noted that in NSW, Vic, and WA; the states regarded as leaders in the aforementioned areas, licence revenue funds many of these activities.

Although not directly related to marine fisheries, it may be of interest to the Commission that RecFish SA manages a permit system for reservoir fishing in South Australia. Annual permits cost \$33 and funds are invested in administering, maintaining and enhancing the fishery. Currently only one reservoir is open to fishing under this permit scheme, however RecFish SA have secured a commitment from the South Australian Government, to provide access to a further four reservoirs, with up to two of these expected to open later this year. Stocking of the reservoirs is taking place after RecFish SA became the first successful recipients of Permit(s) to Release Fish, through a new PIRSA Fisheries Translocation of Aquatic Organisms policy and application process. Community attitudes towards opening reservoirs through permit fishing has been positive, with requests for further information or to obtain permits ranking as one of the top reasons people contact RecFish SA.

### **Are arrangements for funding ongoing research in the fisheries area satisfactory?**

The funding of research and development to support recreational fishing would benefit from increased investment at State and Commonwealth levels. While PIRSA Fisheries have repeated (commissioned) regular recreational catch and effort surveys in line with the 2000/01 National Recreational and Indigenous Fishing Survey (NRIFS) methodology, important data about expenditure, social values and motivations have not been repeated. RecFish SA see this as a top priority for research to inform future sector development.

Between the year 2000 and 2001, the Federal government funded the NRIFS. This collected data on catch and effort, as well as expenditure and fisher attitudes (social data). The South Australian Government has repeated the survey using similar methodology in 2007/8 and 2013/14. While these subsequent surveys have similarly collected catch and effort data from a randomly selected sample, the economic and social questions have not been replicated since 2001.

An agreed upon methodology of expenditure data collection, taking place at regular intervals, is required in order to appropriately recognise the economic contribution made by recreational fishing. This is highlighted by significant inconsistency across

studies. For example, the surveyed expenditure by recreational fishers in South Australia in 2000/01 was estimated to be \$148.4M (Henry & Lyle, 2003: p92). However, an Ernst & Young report (2011) estimated the 2010/11 expenditure by recreational fishers in South Australia's Murray Darling Basin alone, to be at \$114M. Given freshwater fishing has accounted for 13-16% of recreational fishing effort in South Australia (Henry & Lyle, 2003, Jones, 2009), the inconsistency between the figures makes comparison difficult. The development of a consistent survey regime would facilitate the assessment of the economic effects of management inputs and could appropriately inform regulatory arrangements and sector development into the future.

RecFish SA has previously suggested that PIRSA collect expenditure data in its five-yearly South Australian Recreational Fishing Survey; to date, this has not taken place. Recently, RecFish SA, along with our interstate counterparts and the ARFF, have been keenly supporting and awaiting the results of the Australian Government commitment to develop a national recreational fishing survey. It is envisaged that this survey will be designed to collect data on catch and effort, as well as economic expenditure and social attitudes. RecFish SA believe it is essential that a national framework for survey design be introduced to coincide with the next South Australian survey period and that State and Federal governments work cooperatively in order to appropriately resource its implementation.

### **Are fish stocks allocated and managed in a way so as to ensure a viable and sustainable fishing sector both now and into the future?**

Considerable effort goes into the management of fish stocks at both the State and Commonwealth level. Yet it often appears to recreational fishers that restrictions continue to tighten in response to decreasing fishery productivity. In a recent stock status snapshot, stocks of a number of important South Australian recreational fish species were classified as 'transitional depleting', thus requiring management inputs in order to avoid becoming classified as 'overfished'. RecFish SA urges future management to consider the role of long term declining fishery productivity and links to the ecosystems that support them.

The PIRSA *Status of South Australian Fisheries 2012-13* report, listed fisheries for iconic recreational fishing species including King George Whiting, Snapper and Garfish as being below sustainable or 'transitional-depleting' (PIRSA, 2015). This mandates management interventions in order to return these stocks to sustainability. While the application of these statuses may reflect the management system identifying and responding to key performance indicators appropriately, it is still the case that despite long term management inputs, some fisheries appear to be a struggle to manage sustainably.

The steady decline of certain fisheries is not new and one increasingly popular interpretation suggests that through generational change, we are becoming accustomed to lower levels of fish abundance. This process has been called shifting baselines (Pauly, 1995). While it may be taken for granted that South Australian fish

markets are today stocked mostly with marine fishery and aquaculture produce, it has been long forgotten that between 1900-1946, freshwater fish made up between 23-57% of fish by weight in the Adelaide fish markets. This figure now stands at 2% (Alleway *et al.*, 2016).

RecFish SA understands the often important role of input and output controls in managing fisheries, and sees further scope for these controls to have meaningful impact, especially by socially optimising the management of certain stocks. However, we also contend that addressing sliding ecosystem productivity should be considered as an important part of fisheries management into the future.

The need to consider the impact of significantly altered ecosystems on fishery productivity appears particularly important in South Australia's gulfs. While it has become common knowledge that valuable seagrass habitat has been recently lost and is difficult to recover, it came as news to many involved in fisheries when Alleway and Connell (2014) announced that their research had uncovered SA fisheries records indicating that now entirely absent native oyster reefs, extended along 1500km of gulf coastline, only 100 years ago.

International research suggests that structured habitat including seagrass and oyster reefs, support greater abundances of juvenile fish and invertebrates. It has also been measured that, while the specific species impacted are location dependent, oyster reefs can increase fish recruitment, when placed into otherwise unstructured substrate (Ermgassen *et al.*, 2015). The specific potential of shellfish habitat restoration to improve fish production, can be seen in studies from the United States, which found that along the Atlantic coast and Gulf of Mexico, 10m<sup>2</sup> of restored oyster reef produced an additional 2.6 kilograms of fish and mobile crustaceans annually (Grabowski *et al.*, 2012).

RecFish SA welcomes recent moves from PIRSA Fisheries to recognise the important role that habitat plays in fishery productivity. Despite international successes, and the beginning of some local trials, the ability to replicate this success in Australian waters, remains to be seen. Given the potential benefits of various forms of habitat restoration, it would appear reasonable to increase investment into research and development in this area to further investigate options and support local applications.

## **Conclusion**

RecFish SA supports the management of ecologically sustainable fisheries, which aim to optimise the economic and social benefits to the Australian community. We contend that there is much work to be done in order to appropriately measure and recognise the social and economic value and contributions of recreational fishing. Understanding this value and the impacts that management decisions have on it, are essential in planning for the development of a vibrant and viable sector into the future. Current management approaches and investment regimes should be regularly assessed and updated, in order to achieve the best possible future for recreational fishers and the broader Australian community.



We would welcome further engagement with the Commission's enquiries. Should there be any questions or requests for further information, please do not hesitate to contact us.

Yours Sincerely,



David Ciaravolo

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