

THE THREATS TO OUR MARINE ENVIRONMENT

Professional fishers, environmentalists and Australian governments all agree; our estuaries and oceans deserve to be managed to protect their incredible natural beauty and so they can continue to provide nutritious food for many generations to come.

But not everyone agrees on what the major threats to the marine environment are, or the best ways of providing protection against these threats.

Previous Australian governments have favoured creating marine parks giving disproportionate priority to fishing restrictions. However, the greatest threats, such as pollution, receive inadequate attention.

A new, landmark scientific report¹ by Emeritus Professor Robert Kearney and Senior Research Fellow Dr Graham Farebrother demonstrates that the threats to our estuaries and oceans needing urgent attention are much broader than professional or recreational fishing.

Australians love to live near the coast. As our population grows, the pressure on coastal ecosystems accelerates. Prominent causes of that pressure include; new housing estates, roads, industrial and professional buildings, ports, increased shipping and various forms of pollution.

THE MAJOR THREATS TO THE ESTUARINE AND COASTAL MARINE ENVIRONMENTS IN NSW



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 FROM SHIPPING AND THE AQUARIUM TRADE

- 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

Professional fishing is not one of the most irreversible or difficult threats to manage.

¹ Kearney, R. and Farebrother, G, 2015. The comparative performance of the management of the individual threats to marine environments and fisheries resources (FRDC Project No: 2013/029). Canberra: FRDC.

PROFESSIONAL FISHING IN AUSTRALIA IS SUSTAINABLE

Fisheries management in Australia has improved greatly in the past 20 years. State and Commonwealth fisheries authorities set quotas, gear restrictions and seasonal limits to ensure that the seafood taken by professional fishers is replenished. In 2014, the Australian Government declared that there is no fishery under Commonwealth management which is now subject to overfishing.

Tightly managed fishing is the most sustainable way of feeding people. Fishing does not use herbicides, fertilisers, insecticides or hormones and the impacts from fishing are reversible. If fishing is effectively managed, its impact on the environment can be much less than that from the production of alternative foods with similar nutritional value.

To give some context to the size of the Australian professional fishing sector, Professor Kearney estimates that marine mammals and birds eat much more seafood than the total Australian fish catch. Seals alone consume more than 500,000 tonnes of seafood per year in Australian waters, which is approximately three times the total allowable professional catch of all seafood in Australia.

ARE MARINE PARKS THE ANSWER?

Creating no-take zones in a marine park locks out sustainable professional fishing but it does not effectively address the primary causes of marine environmental degradation, such as polluted run-off and coastal habitat destruction.

When governments and the community believe that the problem has been solved by creating no-take zones in marine parks there is reduced attention given to stopping the real dangers, such as habitat destruction and water quality impacts from industrial, agricultural and domestic activities.

Even at existing population levels we require more Australian seafood for both health and lifestyle reasons. We must have healthy and sustainable fisheries that are supported by effective marine and coastal conservation.

WHAT CAN CONSUMERS DO?

If you want to support the long-term availability of sustainable seafood and help protect our marine environment...

- Get in touch with groups such as **OceanWatch Australia**: Ensuring Australia's marine ecosystems are healthy, productive, valued; and used in a responsible way - www.oceanwatch.org.au
- Look for a volunteer **Coastcare** group near you - www.coastcare.com.au
- Ask about where your seafood has come from and support locally produced, Australian seafood

The complete report, 'The comparative performance of the individual threats to the marine environments and fisheries resources', by Kearney, R. and Farebrother, G. can be accessed here: http://frdc.com.au/research/Final_Reports/2013-029-DLD.pdf