Australia’s faunal extinction crisis
Submission 93

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Committee Secretary
Senate Standing Committees on Environment and Communications
Parliament House
Canberra ACT 2600

Dear Committee Secretary,

Australia’s Faunal Extinction Crisis

I teach and research at the Sydney Law School at the University of Sydney, with a particular focus of my research being national and international regulatory frameworks for protecting the marine environment.

I write to provide a submission to the Committee in its inquiry on Australia’s faunal extinction crisis. This submission focusses on the adequacy of Commonwealth environmental laws in providing sufficient protections for threatened marine fauna and against key threatening processes, and draws upon my published research.¹

On paper, the level of protection for marine species in Australia is high, and the suite of legislation contains sophisticated systems for identifying threatened species and implementing recovery plans. In practice, however, the operation of these systems is very far from perfect. The legislative complexity alone presents challenges for effective management of marine species at risk with the arguments for streamlining the system of marine species protection nationally compelling. This is part of a broader concern with the fragmentation of marine law and policy in Australia, which lack overarching coherence and focus.

In 1998 the Australian government released a detailed oceans policy; however, Australia’s Oceans Policy has proven to be an archetypal paper promise, as it has not flowed through to truly integrated oceans and coastal management in Australia. In particular there has been a complete failure by the Commonwealth to address climate change, the most serious driver of species decline in Australia, including in the marine environment.

Environment Protection and Biodiversity Conservation Act

The Environment Protection and Biodiversity Conservation (EPBC) Act is the primary national Australian environmental statute. It serves a number of
objectives, including the conservation of biodiversity, and has in place several mechanisms for protecting Australian native species, including marine species, particularly migratory species and those at risk of extinction. The act imposes approval and assessment requirements for actions impacting on the "Commonwealth marine area," protects whales and other cetaceans, protects listed marine species, enables the preparation and implementation of wildlife conservation plans, and requires Commonwealth fisheries to undergo strategic assessment.

The assessment and approval process under the EPBC Act applies to activities likely to have a significant impact on a "matter of national environmental significance," and this is defined to include the Commonwealth marine environment. Such activities are to be referred to the Environment Minister, who will decide whether the project needs approval under the EPBC Act, and if so, such "controlled actions" may be subject to assessment before the Environment Minister decides to grant or withhold approval for the proposed action.

Listing of species

Central to the EPBC Act's mechanisms for marine species protection is a complex listing process involving multiple, and often overlapping, species lists. The Environment Minister may decide to add marine species, including fish, that occur naturally in a Commonwealth marine area to a national list of threatened species divided into six categories: extinct, extinct in the wild, critically endangered, endangered, vulnerable, or conservation dependent. In deciding whether to add or remove a species from the list the Environment Minister is required to obtain and consider advice from the Threatened Species Scientific Committee (TSSC). The TSSC is an independent body of conservation scientists appointed by the Environment Minister and provides advice on matters including the amending of the lists for threatened species, threatened ecological communities and key threatening processes, and the formulation of recovery plans and threat abatement plans. Nominations are assessed against guidelines established by the TSSC.

In addition, there is a specific marine species list under the EPBC Act under which marine species may be listed if the Environment Minister is satisfied that such listing is necessary to ensure "the long-term conservation of the species." In making a decision to add a marine species to this list, the Environment Minister must obtain and consider advice from the TSSC, and consult with those Ministers (such as the Agriculture and Fisheries Minister) who have an interest in the Commonwealth marine area where the species occurs.

Once a marine species is listed under the marine species list, a permit is required to do in a Commonwealth marine area anything that results in the death or injury of a member of the listed marine species, or to take, trade, keep, or move a member of a listed marine species. There are equivalent protections and permitting provisions for listed migratory species and cetaceans. Cetaceans are
subject to a dedicated regime that includes the establishment of the “Australian Whale Sanctuary” throughout Australia’s exclusive economic zone (EEZ). A specific consequence of threatened species listing is that the Environment Minister may adopt a recovery plan containing research and management actions necessary to reverse the decline and to enable the recovery of listed threatened species and threatened ecological communities so that their chances of long-term survival in nature are maximized.

In addition to threatened species listing, certain marine species listed under international agreements are protected under the EPBC Act. These include cetaceans, dugongs, marine turtles, migratory sea birds, and sharks. The listing of migratory species generally follows automatically from Australia’s acceptance of their listing under the Bonn Convention and other treaties to which Australia is a party. There is a significant degree of overlap between threatened species, marine species, and migratory species listing, and this can lead to confusion as to the conservation status of individual species.

*Fisheries assessments*

The EPBC Act requires the independent assessment of all fisheries managed by the Australian Government and also all export fisheries. This is separate from and in addition to the management of the fishery by the relevant fisheries authority, which in the case of Commonwealth fisheries is the Australian Fisheries Management Authority (AFMA).

*Challenges in listing marine species and ecological communities*

There is evidence that the current lists under the EPBC Act provide inadequate marine species coverage. Walsh et al. report “that plant, fish, reptile and invertebrate species are under-represented, consistent with the biases composition of other national threatened species lists.” The Australian Fisheries Management Authority (AFMA) has expressed concern that the threatened species listing process under the act does not properly account for the biological characteristics of marine species. Moreover, there are no specific assessment criteria for marine species, despite the capacity for these to be adopted under the EPBC Act. In lieu of criteria there is reliance on the Commonwealth Fisheries Harvest Strategy Policy, which sets biomass limits rather than detailed biological criteria for listing.

There have been a number of unsuccessful efforts to add marine species to the threatened species list, with the TSSC finding several species ineligible for listing despite being in significant decline. Species refused listing include the Flesh-footed Shearwater (Ardenna carneipes), the Endeavour Dogfish (Centrophorus moluccensis), the Patagonian Toothfish (Dissostichus eleginoides), the Giant Australian Cuttlefish (Sepia apama), the Little Tern (Sternula albifrons), and the Coastal Stingaree (Urolophus orarius). Some species that have not been listed are commercially fished, and while the TSSC has noted that fishing is the main
reason for substantial population declines, as long as these declines are managed within the context of commercial fishing operations then the TSSC considers the species ineligible for listing. In addition, there are only a handful of marine ecological communities included on the list of threatened ecological communities, such as the Giant Kelp Marine Forests of South East Australia, which are being progressively lost due to climate change.

Ad hoc exemptions from listing

Not only is the listing of marine species underrepresentative, but there have been some instances of ad hoc exemptions from listing. For instance, under pressure from the fishing industry, Australia has lodged reservations with respect to the listing under the Bonn Convention of five shark species (three species of thresher shark and two species of hammerhead shark). This was to “avoid unintended consequences in domestic law that arise automatically upon listing,” that is, the automatic criminal offense provisions under the EPBC Act triggered by taking listed species. Instead, Australia has pursued the conservation of these sharks through the nonbinding Memorandum of Understanding on the Conservation of Migratory Sharks.

Ad hoc exemptions from assessment and approval

The EPBC Act allows the Environment Minister to exempt controlled actions from assessment and approval if satisfied that it is in the national interest to do so. In response to an increase in shark attacks in Western Australia, this provision was used to exempt the setting of baited drum lines to cull sharks. The seasonal culling policy was subsequently abandoned, although the special use of drum lines continues in some places in Australia where there is an imminent threat to public safety.

Fisheries assessments and wildlife trade operations

The EPBC Act requires the independent assessment of all export and fisheries managed by the Australian government. There are approximately 25 Commonwealth-managed fisheries and these have been subject to assessments. Fisheries destined for export, as many of these Commonwealth-managed fisheries are, must also be approved as a wildlife trade operation pursuant to the EPBC Act, and the targeted species must be included on a list of exempt native specimens. Marine species make up the vast bulk of exempt native specimens.

It is in this context that the tension between conservation and commercial exploitation has been most pronounced, as illustrated particularly by the treatment of Southern Bluefin Tuna (Thunnus maccoyii). Southern Bluefin Tuna is listed on the International Union for Conservation of Nature (IUCN) Red List as critically endangered, yet has been declared an exempt native specimen in Australia and an approved wildlife trade operation. Attempts to
challenge the Ministerial decisions in relation to the species in the courts have been unsuccessful.

The Australian government maintains that the best prospect for safeguarding this highly migratory species is through continued exploitation by Australian fishers, as this gives Australia a seat at the table at the Commission for the Conservation of Southern Bluefin Tuna (CCBST). However, the CCBST has a very mixed record in providing adequate conservation outcomes for Southern Bluefin Tuna.

**Recovery plans**

There are a large number of recovery plans that have been adopted under the EPBC Act, but relatively few for marine species. Notable inclusions are the Blue Whale (Balaenoptera musculus), Southern Right Whale (Eubalaena australis), and four species of handfish (small, colorful, mostly sedentary benthic fish endemic to Tasmania that move by walking on their “hands,” i.e., their pectoral fins). A persistent weakness of the threatened species listing process in Australia is the significant delay often encountered between nomination and listing.

There are also major delays in the development of recovery plans, sometimes extending to more than 10 years, with the consequence that there is a hiatus in the management of threatened species for lengthy periods. Recovery plans are directed to maximizing the survival prospects of listed threatened species or listed threatened ecological communities. But the EPBC Act also allows the Environment Minister to implement wildlife conservation plans for protecting, conserving, and managing listed migratory species, listed marine species, cetaceans, and conservation-dependent species. To date there is only one, the Wildlife Conservation Plan for Migratory Shorebirds, which initially came into effect in 2006 and was revised in late 2015.

**Incomplete recognition of key threatening processes**

The EPBC Act requires the Environment Minister to establish a list of threatening processes that are “key” threatening processes. More than 20 threatening processes are now listed, a number of which are specific to marine environments, such as incidental catches of sea turtles and of seabirds, and injury and fatality to vertebrate marine life caused by harmful marine debris, for example, discarded fishing gear. Climate change is recognized (“loss of climatic habitat caused by anthropogenic emissions of greenhouse gases”), but significantly, there is no express recognition of ocean acidification as a threatening process.

Moreover, not all key threatening processes have been matched with approved threat abatement plans. Such plans are to set out a national framework to guide and coordinate Australia’s response to key threatening processes under the EPBC Act. The Environment Minister must have a threat abatement plan if he or she believes that having and implementing such a plan is a feasible, effective,
and efficient way to abate the process. The TSSC provides advice on this
decision. While there are some threat abatement plans for certain key
threatening processes affecting marine species (e.g., in respect of marine
debris), the larger threatening processes such as climate change have not been
the subject of threat abatement plans and instead have been left to other
responses. In the case of climate change, Australia currently has no national
legislative scheme imposing any limits on greenhouse gas emissions, following
the repeal in 2013 of the Australian emissions trading scheme.

**Marine Protected Areas**

The main Australian approach for protecting marine critical habitats has been
through the establishment of marine protected areas (MPAs). Australia has a
long tradition of MPAs, with the first established offshore Queensland in 1937,
and in 1975 the Great Barrier Reef Marine Park established, which was rezoned
in 2003 to substantially restrict commercial fishing.162 It was in Australia’s
Oceans Policy, adopted in 1998,163 that called for integrated and ecosystem­
based oceans planning and development to maintain ecological processes,
preserve marine biological diversity, and maintain viable populations of all native
marine species.

But it was not until 2012 that the Commonwealth developed and declared a
Nationally Representative System of Marine Protected Areas (NRSMPAs).164
These were established and administered under the EPBC Act and cover 2.3
million square kilometers. They would have been the world’s largest system of
marine parks; however, the Abbott government in 2013 set aside the MPA
management plans and referred the matter to the Commonwealth Marine
Reserves Review. The Turnbull government finally adopted new management
plans for Australia’s marine park system in July 2018. This substantial delay and
then ultimate weakening in the protection of marine critical habitats will mean that
over time more work will need to be done at an individual species level.

Yours faithfully,

Tim Stephens

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1 Jeffrey A. Hutchings, Tim Stephens & David L. VanderZwaag, Marine
Species at Risk Protection in Australia and Canada: Paper Promises, Paltry
2 J. C. Walsh et al., “Trends and Biases in the Listing and Recovery Planning for