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Australian Marine Parks Management Planning Comments
Department of the Environment and Energy
Reply Paid 787
Canberra ACT 2601

To Whom It May Concern,

I am writing this submission in response to the proposed changes to the current marine park scheme within Australia. Responses in this letter will be regarding all proposed marine park changes. This letter will follow a conservation and research focus. Through-out this submission I will discuss the negative impacts of some of the major draft changes. These negative impacts will be supported with the use of peer-reviewed scientific literature.

Reduction in protection and number of MPAs

Degradation of the marine environment has prompted conservation measures to protect our global oceans (Lubchenco et al. 2003). Fully protected marine parks are the finest way in which this can be achieved (Lubchenco et al. 2003). Marine protected areas (MPAs) are recognized to help safeguard and conserve biodiversity (Edgar et al. 2007). They enable species that may have been depleted by human activities the chance to recover (Edgar et al. 2007). They can't, however, solve pressures that may come from outside of the reserve (Lubchenco et al. 2003). Other pressures such as run-off, climate change and pollution need to be also managed (Lubchenco et al. 2003). Removal of MPAs will re-introduce the pressures that were once degrading that habitat. As the ocean is highly connective, removal of protections on one MPA could counter-balance the benefits of surrounding MPAs (Kelleher and Kenchington 1991). Free swimming species have massive dispersal distances and this genetic material is important in repopulation (Kelleher and Kenchington 1991). It could then be argued that removal of MPA protections would defeat the purpose of repopulating a degraded species.

The draft claims that Habitat Protection Zones are equivalent to IUCN category 2 zones; this is simply untrue. The zoning matrix for Habitat Protection for the Great Barrier Reef (GBR) has only two conservative measures 1) no trawling 2) no shipping (Day 2002). The

IUCN states that a category 2 zone should encompass a protection of the large-scale ecological processes (IUCN 2017); habitat protection zones do not do an adequate job of this. Of the submissions to the Australian Marine Parks in (2016), 47,708 (88.16%) were in support of a conservation focus (Barnes 2016). Despite these numbers, the conservation focus in this draft seems to be largely ignored.

Increased fishing access to MPAs

Henry and Lyle (2003) carried out a survey on recreational and traditional fishers in Australia. It was found that during that survey year, recreational fishers harvested 136 million marine organisms (Henry and Lyle 2003). It was estimated that 3.36 million people in the 12 months prior to 2003, participated in recreational fishing (Henry and Lyle 2003); at the time that was nearly 17% of the population. This is an extremely significant pressure that the draft plans to put on our marine parks. Opening 97% of ocean within 100km of the coastline to recreational fishers shows a disregard of the impact this will have. Fishing can completely alter the 3-dimensional structure of a habitat (Turner et al. 1999).

Allowing destructive commercial fishing practices such as longlining and trawling to 38 of the 44 marines is incomprehensible. Removal of key species within these zones may potentially cause trophic cascades and push species below population threshold (Frank et al. 2005). Commercial fisheries have been recognized has having the greatest impact to our global fish stocks for many years (Cooke and Cowx 2006). Commercial fisheries may have quotas placed upon them but there are no quotas for recreational fishers (McPhee et al. 2002). In some fish species, recreational fishers have been estimated to take more than commercial fisheries (McPhee et al. 2002). In Western Australia, unregulated recreational fishing resulted in a decline in the population of snapper (*Pagrus auralus)* (McPhee et al. 2002). This species is only one of a few in which their decline is linked to recreational fisheries. There is a lack of information on how much is being depleted by the recreational division (Cooke and Cowx 2006). It does not seem to be a good management strategy to allow recreational fishers free range to our marine parks.

Blue zoning for mining exploration into the future

An introduction of mining exploration to the GBR could put at risk the conditions that were set by the United Nations for world heritage listing (G.B.R.M.P 1981). Not only would it risk world heritage listing, it would place these areas under risk of damage and degradation. Oil and gas exploration can alter the benthos and create plumes of sediments that could harm organisms (Clark and Attrill 1989). If mining were to occur, these habitats could potentially be destroyed (Clark and Attrill 1989). Coral reefs require high water clarity so that their symbionts can

photosynthesize (Berkelmans and Van Oppen 2006). These symbionts are important to coral survival (Berkelmans and Van Oppen 2006). There is also the risk of oil spillage and release of toxic sulphides into the surrounding waters (Clark and Attrill 1989).

With mining exploration and exploitation comes with it the need to transport these resources. Shipping poses a huge risk to our marine parks in the form of running aground and introducing invasive species (Ottesen et al 1994; Hulme 2009). Assuming shipping accidents are the only way these waters can be polluted with oil is an incorrect assumption. It isn't oil spills from shipping accidents that cause the most environmental danger (Kostianoy et al. 2015). Oily residue from platforms, terminals and ships also creates a risk to these habitats (Kostianoy et al. 2015). The wastewater discharge containing oils from ships is comparable by pollutant volume to offshore oil rigs (Kostianoy et al. 2015). Pollution can occur in the exploration stage and will be worsened by extraction activities. It is therefore not ideal to be placing our most protected marine reserves at risk of this.

Summary

In summary, a proposed reduction in the zoning of marine protected areas is a clear step in the wrong direction. We need to be increasing protection to marine environments. Allowing more fishing will defeat the purpose of having an MPA in the first place. They can only prevent pressures from occurring within the park and by allowing fishing, we will re-introduce a major threat. The prospect of future oil and gas exploration cannot be carried out. For the GBR, it puts at risk the world heritage listing that it currently has. The act of exploration and mining has risks for the benthos and puts reefs at risk of sediment plumes and oil spills. This could destroy or degrade habitats that need to have the best protections possible. Keeping the existing zoning in place is crucial if we want to take the impacts our oceans face seriously. There could be methods to allow stakeholders, such as recreational fishers, access to some areas. But this needs more research to understand the impacts and management measures that would need to be set in place.

Kind Regards,

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