

September 10th 2017

managementplanning.marine@environment.gov.au

**Submission of comments on the
Draft Coral Sea Commonwealth Marine Reserve - Management Plan 2017**

Submitted on behalf of the members of CHARROA (Cod Hole & Ribbon Reef Operators Association including Coral Sea)

(Note: Any individual person or organisation/business may make a comment via written submission or via email. Comments must be received by close of business 20 September 2017).

CHARROA is supportive of a comprehensive management plan incorporating robust strategies and objectives backed by new and sufficient funding to enact the management plan.

We welcome the 'whole of reef' IUCN II protection, which recognises both the intent of IUCN principles and scientific research, of Bougainville, Coringa Islets, Lihou and Kenn Reefs and the partial IUCN II protection of Osprey and Marion Reefs.

We acknowledge and thank the Director for the opportunity for further discussion during the 'round table' meeting regarding Osprey Reef. We are pleased to have reached agreement with the Director and other users to extend IUCN II to south of 'False Entrance' mooring. It is with chagrin that the Director and the extractive commercial aquarium fish fishers pushed for a Zone of extractive fishing within an IUCN II zone, in response to agreeing to extend the IUCN II zone. CHARROA must agree to this extractive Zone with the following provisions:

- A 50m protection zone, disallowing extractive practices, around CHARROA permitted moorings. The 50m zone to extend three dimensionally above and below the surface. Similar to GBRMPA practices.
- Specific limits within the extractive Zone to include species type, quantity, size and frequency of allowed use.
- Assurance that the Director acts as stated in DMP 1.10 Zones – National Park Zone (IUCN II) *"The zone only allows non-extractive activities unless authorised for research and monitoring"*.
- Declaration of Shark Protection from extractive practices on whole of Osprey Reef.

We regret this government and the Director has not taken this opportunity to retain the recommendations given in the extensive Bioregional Advisory Panel (BAP) report and the Expert Scientific Panel (ESP) report, by offering split IUCN II and IV zoning over separate sections of Holmes and Flinders Reefs. We feel this is a critical missed opportunity to provide those reefs with the future ability to offer regeneration of nearby corals and reef species which are isolated from other reef communities. These reefs remain subject to both extractive practices and climate change pressures.

The federal Environment Department describes the Coral Sea as "an important national asset in near pristine condition". We question how this Draft Management Plan (DMP) will be successful in maintaining this state into the future. Historically, increases in zoning and protected areas are introduced retroactively due to stresses and pressures which are threatening environmental levels. By not taking the initiative to introduce those protections before adverse pressures are brought to bear is looking backwards and not forwards. There is a plethora of science, research, proven

outcomes and knowledge having had the GBR managed since 1975. Included in this science are the outcomes on the benefits and percentages of protected areas:

➤ ***PLUGGING A HOLE IN THE OCEAN: THE EMERGING SCIENCE OF MARINE RESERVES***

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The answer to the question, “how much is enough” is the holy grail of conservation in both marine and terrestrial ecosystems. The goal of marine reserves is to ensure the persistence of the full range of marine biodiversity—from gene pools to populations, to species and whole ecosystems—and the full functioning of the ecosystem in providing goods and services for present and future generations.

ANALYSES OF THE BEST AVAILABLE EVIDENCE LEADS US TO CONCLUDE THAT:

x Reserves conserve both fisheries and biodiversity.

x **Reserves must encompass the diversity of marine habitats to meet goals for fisheries and biodiversity conservation.**

x Reserves are the best way to protect resident species and provide heritage protection to important habitats.

x Reserves must be established and operated in the context of other management tools.

x **Reserves need a dedicated program to monitor and evaluate their impacts both within and outside their boundaries.**

x Reserves provide a critical benchmark for the evaluation of threats to ocean communities.

x Networks of reserves will be necessary for long-term fishery and conservation benefits.

x **Existing scientific information justifies the immediate application of fully protected marine reserves as a central management tool.**

➤ ***Expectations and Outcomes of Reserve Network Performance following Re-zoning of the Great Barrier Reef Marine Park***

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NTMRs (No Take Marine Reserve) established during the 2004 re-zoning of the GBRMP have yielded significant benefits for populations of targeted coral reef fishes on both inshore and offshore reefs within the first decade of protection. Substantial increases in the mean density, body size, and biomass of exploited species were consistently recorded on NTMR reefs, whereas there were few discernible changes on reefs that remained open to fishing.

The expansion of NTMRs within the GBRMP coupled with effective direct fishery management actions have ensured adequate protection for stocks of key targeted coral reef fish species of the commercial and recreational fisheries and have lowered overall fishery catch to what currently appears to be sustainable levels. Time will tell whether such levels prove to be sustainable, but if global temperatures and disturbance frequency increase in the future, we will face the prospect of having to reduce fishing pressure as target populations, both inside and outside NTMRs, suffer increasingly from non-fishery impacts.

➤ ***The effects of no-take zoning, region and year on reproductive output of the common coral trout, *Plectropomus leopardus*.***

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The results highlight the need to consider regional variation in reproductive output of exploited species when designing marine protected areas as a fisheries management tool.

We are of the view that the zoning and the DMP has been ‘cute’ (clever, cunning) in the application of IUCN principals and to advocate for loop holes in the EPBC Regulations Part 12 to be used to allow for extractive zoning within a higher protection zone. The released maps within

this Draft Management Plan (DMP) are remarkably like those submitted by the Seafood Industry in 2012 and appear to be biased heavily towards one user of the CSCMR – commercial fishing including Hand Collection fishing.

In the Media Release in July 2017 the Director states that the increased economic benefit to commercial fishers has increased by 0.3% or \$4.1million per year by this 'intelligent zoning'. Just 2 marine tourism vessels, operating from Cairns, have direct sales of +\$4million per year for their non-extractive scuba diving tours. Surely 'intelligent zoning' by retention of IUCN II on reefs with increased focus and investment into non-extractive marine tourism, is easily more beneficial to socio-economic outcomes and conservation principles?

We are disappointed that the Director, after considering the recommendations from the independent review released in 2016 and best available science, has formed a DMP that does not seem to include or has disregarded and ignored many recommendations given in the extensive Bioregional Advisory Panel (BAP) report and the Expert Scientific Panel (ESP) report.

CHARROA strongly agree that the biodiversity, environmental issues and all users of a Marine Park be considered equally, without overtly biased political or socio-economic persuasion.

Comments: Draft Coral Sea Commonwealth Marine Reserve - Management Plan 2017

1.3 Australian Marine Parks Vision and Objectives

The objectives of this plan are to provide for:

- a) the protection and conservation of biodiversity and other natural, cultural and heritage values of the Coral Sea Marine Park; and
- b) ecologically sustainable use and enjoyment of the natural resources within the Marine Park, where this is consistent with objective (a).

We find this statement a contradiction with the allocated zoning given the small percentage of no take zones accorded to all the reefs, cays and islets of the Coral Sea.

2.1 The Coral Sea Marine Park; 2.2 Values of the Coral Sea Marine Park

East Marine Bioregional Plan: bioregional profile (2009):
Table 3.1 Key Ecological Features of the Region

3. The assemblage of scattered and diverse reefs and cays of the Coral Sea (34 reefs and 56 cays/islets)

'The isolated, relatively pristine reefs support resident, or at least narrow home-range species that are often site attached.'

7. Large pelagic predators (sharks, tuna, billfish)

"Aggregations of pelagic predators are often found around seamounts"; "These species are often at the end of long food chains, where they have a crucial role in maintaining and determining the health of ecosystems".

9. Herbivorous fish of coral reefs

"Maintaining the diversity and abundance of herbivorous fish on coral reefs is also important for the recovery of coral reefs from disturbances such as coral bleaching events, fertiliser run-off, cyclones and crown-of-thorn outbreaks."

We question whether this DMP allows sufficient protection of the above key ecological features.

2.3 Pressures in the Coral Sea Marine Park

"Australia's 2016 *State of the Environment Report*...pressures on the marine environment are likely to increase".

2.4 Management Programs and Actions in the Coral Sea Marine Park

Table 2.2

CHARROA considers the Marine Science Program to be of primary importance and ask the Director to ensure sufficient funding for these Actions and Outcomes listed. Specifically, the monitoring of coral reefs, protected species and effects of fishing on marine parks. In particular, over those reefs that are split zoned i.e. is it successful AND those reefs left with no species sanctuary which are exposed to increased human activity i.e. Flinders Reef and Holmes Reef; these isolated yet 'accessible' reefs are particularly vulnerable to extractive practices yet have little or no means of repopulation.

3.1 Zone Categories, Names and Objectives

3.1.4 The objective of the Habitat Protection Zone (IV)

3.1.4 The objective of the National Park Zone (II)

The description and application for the above zones in the Coral Sea Marine Park are in contradiction to the description of those categories by Parks Australia and those described by IUCN.

Specifically:

Category II differs from other categories in the following ways:

Category IV Category II is aimed at maintaining ecological integrity at ecosystem scale. In practice, Category IV protected areas will seldom be large enough to protect an entire ecosystem....category IV sites are likely to be quite small, while category II are likely to be much larger and at least fairly self-sustaining.

We feel that this principle has not been applied to the zoning of the Coral Sea Marine Park. The percentage of Category IV (Yellow Zone) against percentage of Category II (Green Zone) does not reflect the above description.

4.2 Rules for Activities

4.2.1.1 The Director may make, amend and revoke prohibitions, restrictions and determinations....of the EPBC Regulations where it is considered necessary....and the Director may issue a permit for an activity that would otherwise be prohibited by such an instrument.

CHARROA considers this prescription a direct contravention to the intent and principles of the EPBC. This is where the Director has been 'cute' in the interpretation of this DMP, IUCN principles and conservation outcomes. It prescribes allowing the Director to disregard zoning principles by allowing actions that contravene the Zone categories and objectives listed in 3.1 of the DMP. I.e. it gives the Director the ability to allow extractive activities in a no-take zone.

Schedule 1 – Summary of Legislative and Policy Contents

Part 1 of Schedule 8 of the EPBC Regulations

3. the precautionary principle – a lack of full scientific certainty should not be used as a reason for postponing measures to prevent degradation of the natural or cultural heritage of a reserve or zone.

5. ecologically sustainable use

(b) the benefit of use to the present generation should not diminish the potential of the reserve or zone to meet the needs and aspirations of future generations.

6. transparency of decision-making....The reason for making decisions should be publicly available...

We are not confident that the current DMP and zoning comply with the above points from the EPBC Regulations.

Principles for each IUCN category represented in the Coral Sea Marine Park

Part 2 of Schedule 8 of the EPBC Regulations

See earlier comments on IUCN zoning descriptions and applications

Schedule 2 – Coral Sea Marine Park Overview and Values

Statement of Significance - ...It includes three key ecological features: reefs, cays and herbivorous fish of the Marion Plateau; reefs, cays and herbivorous fish of the Queensland Plateau; and the Tasmanid Seamount Chain.

Natural Values – Reefs, cays and herbivorous fish of the Queensland plateau - ..Other significant reefs include Coringa-Herald, Moore, Flinders, Holmes, Shark and Osprey Reefs.

Of those listed above for the Queensland Plateau the DMP only allows for IUCN II protection of Coringa-Herald, Bougainville and partial protection of Osprey. CHARROA urges the Director to consider re-instating the split zoning IUCN II and IUCN IV of Holmes and Flinders as recommended by the BAP and ESP findings of 2016.

Figure S2.2 – Osprey, Shark and Vema reefs

Comments on zoning as per introduction comments made at the beginning of this submission

CHARROA requests that the Director assign protection from fishing to site specific sharks and rays of Osprey Reef. There is existing science to show the site-specific shark population of Osprey and the socio-economic benefit of the value of shark diving at Osprey Reef.

Residency and Spatial Use by Reef Sharks of an Isolated Seamount and Its Implications for Conservation

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Currently, the Coral Sea area and its seamounts (north-east Australia) are under review to determine if MPAs are warranted. The protection of sharks at these seamounts should be an integral component of conservation plans.

The high residency and limited spatial use of Osprey Reef suggests that reef sharks would be highly vulnerable to targeted fishing pressure and **that MPAs incorporating no-take of sharks would be effective in protecting reef shark populations at Osprey and Shark Reef.**

The economic benefits of shark-diving tourism in Australia

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Shark-diving is part of a rapidly growing industry focused on marine wildlife tourism

A socio-economic survey targeted tourist divers between January 2013 and July 2014 and collected information on expenditures related to diving, accommodation, transport, living costs, and other related activities during divers' trips. Tourist surveys were completed across the four industries, with the total **annual direct expenditure by shark divers in Australia estimated conservatively at \$25.5 M.**

This highlights the need to ensure a sustainable dive-tourism industry through adequate management of both shark-diver interactions and biological management of the species on which it is based. Our study also provides standardised estimates which allow for future comparison of the scale of different industries within or among countries.

Dedicated shark divers represented 25% of all divers participating in the live aboard operations in far North Queensland. Shark diving occurs within trips that include a combination of reef dives at the Great Barrier Reef and oceanic dives at Osprey Reef, where sharks and other large pelagic fish are the main attractions. Sharks and rays have been listed as the main animals divers want to see during these trips with tourists willing to pay nearly twice as much to see these animals than they would to dive with other marine life (Farr et al. 2014).

Figure S2.3 – Bougainville Reef

CHARROA is very satisfied to see the IUCN II protection of the very small and isolated Bougainville Reef and its surrounding waters. Bougainville is also home to an iconic family of Potato Cod.

Figure S2.5 – Holmes Reef

Figure S2.6 – Flinders Reef

CHARROA welcome the overall protection of Habitat Protection Zone (Reefs) IUCN IV, however, we are disappointed that the Director has disregarded the Split Zoning of the BAP and ESP findings.

As per earlier comments, we feel this is a critical missed opportunity in order to provide those reefs with the future ability to offer regeneration of nearby corals and reef species which are isolated from other reef communities. These reefs remain subject to both extractive practices and climate change pressures.

We urge the Director to reconsider National Park Zone (IUCN II) be applied to South Flinders and either East or West Holmes.



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On behalf of the Members for CHARROA