



WWF-New Zealand
Level 6 Davis Langdon House
49 Boulcott Street
Wellington 6011

Tel: 04 499 2930

WWF-New Zealand submission on the proposed Marine Protected Area Act

Amanda Leathers, Research and Policy Officer, WWF-New Zealand

aleathers@wwf.org.nz

Contents

Executive summary and key recommendations	4
1 Key issues with the Government’s proposal for the new MPA Act	6
1.1 Exclusion of the EEZ	6
1.2 A lack of clarity and detail about the purpose and objectives of the Act and how these will be achieved	6
1.3 The absence of essential components required to achieve the development of a representative network	6
1.4 Decision-making is fragmented and will not facilitate the development of a network	7
1.5 The provisions aimed at balancing economic considerations need improving	7
1.6 More clarity of thought is needed about how the proposed Act will complement and/or replace existing legislation	7
2 WWF-New Zealand recommendations	7
2.1 Purpose of the Act	7
2.2 Coverage of the Act	8
2.3 Specific objectives	8
2.3.1 Recreational Fishing Parks – do not fit with the purpose of the Act	9
2.4 Design of the MPA Network – what should be included	10
2.4.1 Criteria for identifying MPAs and network design	10
2.4.2 Principles to guide policy and decision making	11
2.4.3 Treaty clause	12
2.5 Strong leadership and political will for MPA network	12
2.6 Process for establishing MPA network	13
2.6.1 Scientific scoping and identification of MPA sites, and establishment of a marine science advisory group to support the development of the MPA network	13
2.6.2 Systematic network planning and development of proposals	14
2.7 Decision-making	16
2.8 Links between Acts for management decisions	16
2.9 Monitoring and reporting	17
2.10 MPA information base	17
2.11 Balancing social and economic considerations	18
2.12 Further development of the Act and Consultation	20
References	21
Appendix 1: Reasons to include the EEZ in the new MPA Legislation	24

1. A representative network of MPAs must include a full-range of habitat types – including deep sea habitats	24
2. Our EEZ contains biodiversity of global importance.....	25
3. Meeting New Zealand’s international obligations and commitments to contribute to global marine biodiversity conservation	26
4. Achieving national goals for marine biodiversity protection and honouring promises made to the New Zealand public	28
5. Improving resilience against climate change and helping sustain a productive fishing industry	29
6. Providing more comprehensive governance of the marine environment and more certainty for New Zealand marine resource industries	29
7. Future-proofing the Act and avoiding costly amendment/review at a later date	30

Executive summary and key recommendations

WWF-New Zealand thanks the Ministry for the Environment for the opportunity to make a submission on the proposed Marine Protected Areas (MPA) legislation.

We support the development of a new Marine Protected Areas Act (the Act) to better enable New Zealand to protect the incredible biodiversity in our vast oceans. We consider this new legislation to be an important opportunity to join the global movement to better protect marine biodiversity and meet our international legal obligations under the United Nations Convention on the Law of the Sea (UNCLOS) and the Convention on Biological Diversity (CBD).

WWF-New Zealand wants to see legislation that enables the establishment of a well-connected representative network of MPAs with the primary purpose of protecting areas that best represent the full range of species, habitats and ecological processes throughout the New Zealand EEZ and Territorial Sea.

Developing a representative network of MPAs – where each type of habitat is represented, requires the legislative ability to protect a full range of marine habitats, and a planned and systematic approach based on good scientific understanding. The proposed approach outlined in the Consultation Document (the proposal) will not achieve a representative network for two key reasons:

1. It does not enable protection of marine habitats in the Exclusive Economic Zone (EEZ), which means the MPA network set up under the Act will not include the full range of habitat types.
2. The approach to marine protection is ad-hoc and lacks New Zealand Government leadership and therefore does not effectively facilitate a representative network.

The new legislation must address these two key issues.

Structure of this submission

This submission is in two parts. First we outline the key issues with the Government's proposal, and then we present WWF-New Zealand's view of what the new MPA Act should look like and identify how the key issues should be addressed.

A summary of recommendations

- Include the EEZ in the new MPA Act.
- The purpose of the Act should be to protect biodiversity in New Zealand's marine environment by establishing a representative network of MPAs with connectivity where appropriate.
- The network should be designed to protect a full-range of habitats in no-take marine reserves as a priority, and allow for a flexible range of other marine protection tools to complement the core network of marine reserves.
- Remove Recreational Fishing Parks from the Act unless their purpose is amended so that they are primarily managed for conservation and biodiversity protection objectives.
- Fund and lead a marine science-scoping process aimed to achieve the marine biodiversity protection objectives of the Act, and establish a science panel/group to support the

processes of developing the MPA network. This should include identifying the most ecologically-important habitats and species in the Territorial Sea and EEZ and identifying existing and potential future risks to species and to habitat/ecosystem integrity.

- Fund and lead a systematic planning process to design the representative network and facilitate the development of MPA proposals.
- For the inshore (Territorial Sea) – network design and proposal development should occur through a collaborative process along the lines of the existing MPA Policy and Implementation Plan (Department of Conservation/DOC and Ministry for the Environment/MfE., 2005). The inshore MPAs should be developed sequentially, using the established coastal biographic regions.
- For the offshore (EEZ) – planning for protected areas should occur at a national level by an expert panel that has specific expertise and representation of offshore interests.
- Both the inshore collaborative process and the offshore (EEZ) national level process should be guided by clear set of principles, criteria and terms of reference to ensure they achieve the purpose of the Act.
- Enable balanced and informed decision-making by funding independent cultural impact assessments, providing the support of an independent marine science panel, as well as independent economic impact assessment for the network design and development of proposals.
- Empower a single Minister and Ministry to be responsible for achieving the development of the network. The lead Minister should consult with other relevant Ministers before making final decisions on the proposals.
- Enable robust monitoring to be built into the MPA network from the outset and that a monitoring advisory group including tangata whenua, marine science experts, and other interested stakeholders to set monitoring requirements.
- Include triggers for action to mitigate external impacts on MPAs.
- Link the Fisheries Act and MPA Act appropriately to enable monitoring and management of fishing effort displacement, to improve fisheries research and science and to provide assistance for fishers in cases where MPA establishment impacts existing fishing activity and where no alternatives are available.
- The Act should be driven by the understanding that MPAs make good economic sense, rather than fear that marine protection is an economic barrier.
- WWF recommends that the Government provide further opportunity for consultation on the legislative development.

1 Key issues with the Government's proposal for the new MPA Act

1.1 *Exclusion of the EEZ*

- A fundamental flaw of the Government's current proposal is that it excludes New Zealand's EEZ from the Act. The EEZ is the area that extends from 12 nautical miles out to 200 nautical miles, and makes up 95% of New Zealand's oceans. This means that our vast oceans beyond 12 nautical miles would not be considered in the process of creating New Zealand's national network of marine protected areas.
- The exclusion of the EEZ is a contradiction, and means that the Act will fail at achieving its purpose. The proposed objectives include the creation of a representative network of MPAs (objective 1) and to meet international obligations to protect our marine environment (objective 6). However, neither of these objectives can be achieved without including the EEZ. Furthermore, the Government is well aware of this contradiction. In a briefing paper to Dr Nick Smith titled: 'New Zealand's international obligations and comparative progress regarding Marine Protected Areas' the MfE states: "*We believe that protection of representative examples of bioregions is the key indicator of the effectiveness of New Zealand's marine protection regime. On this basis New Zealand's current marine protection is well below average when compared to international standards and the performance of other countries, notably Australia and the United States*". (Date: 18/06/15 Tracking #: 15- B-01036).

1.2 *A lack of clarity and detail about the purpose and objectives of the Act and how these will be achieved*

- The Consultation Document does not set out the purpose clearly or provide detail and explanation of the objectives for the different MPA types. There is no detail about the criteria that will be used to design the network, or the terms of reference and principles that will guide decision making throughout the development of the network.

1.3 *The absence of essential components required to achieve the development of a representative network*

- The proposal shows no strong leadership and direction to establish a representative network, and it perpetuates an ad-hoc and inefficient approach to marine protection.
- There is no marine science gap-filling process or dedicated scientific support to help develop the network.
- There is no detail about who can make proposals, how the development of proposals will be supported or funded, and how to ensure that proposals relate to the science about what habitats should be included in order to achieve a representative network.

1.4 Decision-making is fragmented and will not facilitate the development of a network

- The proposed approach to decision-making involves too many different Ministers and provides too many opportunities for Ministers to stop a proposal from going forward.

1.5 The provisions aimed at balancing economic considerations need improving

- While it is important to consider and mitigate the implications for existing economic activity of establishing MPAs, the proposal also seeks to ‘protect’ possible future economic activity by creating a ‘review provision’ if new valuable resources are discovered in a protected area. This seems counter intuitive, somewhat pointless and is likely to be unworkable. A full reserve or a sea-bed reserve should prohibit exploration activity, which limits the possibility of discovering economically recoverable resources making this provision fairly redundant. In any case, even if resources were found the suggested repeal, break-up or reduction in size of an MPA would be politically difficult to achieve.
- Regarding economic impact assessments, more clarity is needed on what this will entail. For example, will this assessment be required to include the benefits of marine protection such as ecosystem services, possible marine tourism or potential spill-over benefits for fishing? It is also important to provide guidance on who will be conducting these assessments and who will be required to fund them and whether similar provision will be made for cultural impact assessments.

1.6 More clarity of thought is needed about how the proposed act will complement and/or replace existing legislation

- WWF-New Zealand appreciates that the interaction between the proposed Act and existing legislation is complex. However, more clarification is needed on how the Fisheries Act and MPA Act will be linked to ensure effective management and monitoring, and how other Acts involved in marine protection such as the Conservation Act 1987, Wildlife Act 1953, and Marine Mammal Protection Act 1978 will be accommodated.
- Similarly, more clarification is needed on how the MPA Act will recognise and complement Mataitai and Taiapure reserves.

2 WWF-New Zealand recommendations

2.1 Purpose of the Act

The overarching purpose for the MPA Act should be marine biodiversity protection. We understand that the Government wants to ensure the legislation is adaptable, flexible and recognises sustainable-use. Our analysis of international best-practice marine protection legislation shows that enabling a flexible range of marine protection tools can be very useful, as long as marine biodiversity is the primary purpose, and all tools work towards achieving marine biodiversity conservation.

The following purpose statement would be appropriate:

The purpose of this Act is to protect biodiversity in New Zealand's marine environment (including the Territorial Sea and the Exclusive Economic Zone).

This will be achieved by using a range of tools to protect habitats and species including establishing a representative network of Marine Protected Areas.

2.2 Coverage of the Act

Effectively protecting New Zealand's marine biodiversity requires establishing a national MPA network that includes a full-range of different marine habitat types including representative deep-sea habitats within our EEZ.¹ The basic understanding is that each different habitat type is the home to unique biological communities, and therefore when we protect 'representative' examples of each habitat we have the best chance at building and maintaining biodiversity in our oceans.² Therefore if the EEZ is excluded from the Act, the MPA network will not be "representative" and it will not effectively protect New Zealand's marine biodiversity. Please see Appendix 1 for a full discussion of the reasons to include the EEZ.

2.3 Specific objectives

While each category of MPA in the network will be used in different circumstances, they should all fit with the over-arching purpose of marine biodiversity protection. New Zealand's MPA Act should be in line with international best-practice, which is to ensure that all MPAs have clearly stated conservation/ biodiversity protection objectives.

For example, to qualify for one or more of the International Union for Conservation of Nature (IUCN) categories of MPAs, a site must meet the IUCN definition of a protected area, as given in the 2008 Guidelines: "*A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.*"

Table 1 shows the Government's proposed purposes of the different MPA types and WWF-New Zealand's recommended amendments to the purposes (in italics) and other comments and considerations. A key feature of our recommended amendments is the removal of the words "*while allowing sustainable use.*" The term 'sustainable use' needs to be clearly defined in the Act, and the Convention of Biological Diversity definition could be used as a basis for the definition.³ However, we

¹ The importance of protecting a full range of habitat types in a national network of MPAs is recognised in the Convention of Biological Diversity. The Ad Hoc Technical Expert Group (AHTEG) on Marine and Coastal Protected Areas which defines a MPA network as "*an appropriate mix of highly protected areas and ancillary areas, which interact collectively to provide benefits greater than the sum of their individual benefits*". The AHTEG recognised that to achieve the full benefits, this network needs to be "*representative (meaning that the entire network should include the full range of marine and coastal ecosystems, and that individual MPAs in the network should reflect the biotic diversity of the ecosystems from which they derive)*." (UNEP, 2003).

² It is increasingly accepted in the scientific community that protected areas must be part of connected networks, with conservation cores and effective connectivity in order to maintain genetic diversity (Woodly *et al.*, 2012; Lindenmayer & Fischer, 2006; Worboys *et al.*, 2010).

³ According to the Convention of Biological Diversity, "*Sustainable use means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity,*

do not think it is necessary to include the words “*while allowing sustainable use*” in each mixed-use MPA purpose. If the core of no-take marine reserves is established with priority to protect a full range of habitat types, the other MPA types can enable sustainable use if it does not slow or inhibit the achievement of their biodiversity protection objectives.

Table 1: WWF recommended amendments to Government proposed MPA purposes

	Marine reserve	Species-specific sanctuary	Seabed reserve	Recreational fishing park*
Government proposed purpose (consultation doc)	To preserve and protect areas in their natural state for the conservation of marine biodiversity. These areas will protect not only unique and special sites but also representative sites that exemplify important ecosystem features and values.	To preserve and protect one or more named species while allowing sustainable use. These sanctuaries will provide the ability to establish spatial protection for marine species at sea and on land areas used by the species, including those protected under the Marine Mammals Protection Act 1978 or the Wildlife Act 1953.	To preserve and protect the seabed environment while allowing sustainable use. Seabed reserves will control activities that affect the seabed and a zone above it.	To enhance the enjoyment and value of recreational fishing in high-demand areas by reducing the impact of commercial fishing and enabling recreational fishers to take more responsibility for the effects of their activities in these areas and the sustainability of the fishery.
WWF proposed purpose	To preserve and protect areas in their natural state for the conservation of marine biodiversity. <i>To preserve and protect representative examples of the full range of marine habitats and ecosystems, and also outstanding, rare, distinctive or internationally or nationally important marine habitats and ecosystems.</i> ⁴	To preserve and protect one or more named species. These sanctuaries will provide the ability to establish spatial protection for marine species at sea and on land areas used by the species, including those protected under the Marine Mammals Protection Act 1978 or the Wildlife Act 1953.	To preserve and protect the seabed environment. Seabed reserves will control activities that affect the seabed and a zone above it.	To enhance the enjoyment and value of recreational fishing in high-demand areas by <i>enabling management measures to achieve and maintain a high level of fishery abundance and marine biodiversity.</i> *

*If recreational fishing parks remain in the Act (see below)

2.3.1 Recreational Fishing Parks – do not fit with the purpose of the Act

Above all else, good quality recreational fishing requires an abundance of fish. Ultimately, only sound fisheries management that maintains stocks at abundant levels can deliver this.

WWF-New Zealand supports efforts to better monitor recreational catch and provide more effective management of that activity. It is possible that spatial allocation could have a role in achieving better recreational fishing but we believe both of these can be achieved under the existing Fisheries Act and, for clarity’s sake, do not think spatial allocation for recreational fishing should be part of legislation focused on biodiversity conservation.

WWF-New Zealand recommends that Recreational Fishing Parks are removed from the Act. However, if the Government is intent on their inclusion, the purpose of Recreational Fishing Parks

thereby maintaining its potential to meet the needs and aspirations of present and future generations” (CBD, Article 2. <https://www.cbd.int/convention/articles/default.shtml?a=cbd-02>)

⁴ These words come from the MPA Policy (2005), and tie back to the NZ Biodiversity Strategy (Objective 3.6) (DOC and MfE, 2005; and DOC, 2000).

should be amended so that they are primarily managed for conservation and biodiversity protection objectives (see table above).⁵

Every type of MPA under the new Act should have clear conservation and biodiversity protection objectives. The IUCN guidelines (section 6.1) clearly state that MPAs that enable recreational fishing must be primarily managed for conservation and biodiversity protection objectives in order to meet the definition of an MPA (IUCN, 2012).

2.4 Design of the MPA Network – what should be included

To develop a representative network for the purpose of protecting marine biodiversity - the core of the network should be no-take marine reserves in ecologically representative areas. No-take areas are more effective in the recovery of habitats and depleted stocks than multiple-use areas. It is international best practice to establish no-take marine reserves as the core of the network (IUCN, 2008; Halpern, 2003; Lester *et al.*, 2009)). In addition to these no-take MPAs, partially protected multiple-use MPAs can play an important role in, for example, protecting sensitive habitats and benthic ecosystems against specific harmful activities such as bottom trawling or sea-bed mining, while allowing low impact uses (IUCN, 2008). Similarly, species specific reserves can be created that are tailored to addressing identified risks to threatened species while continuing to permit no-risk activities.

2.4.1 Criteria for identifying MPAs and network design

The Bill should set out the criteria that will be used to identify and establish the core of no-take marine reserves and other types of MPAs.

A useful guide for designing a representative network of MPA has already been developed for the New Zealand context. Useful criteria for identifying MPA sites are provided in the NZ Government's *MPA Classification, Protection Standard and Implementation Guidelines* (approved by the NZ Government in 2008). WWF-New Zealand recommends that the Government use these criteria, or further develop, update and improve these criteria so that they are aligned with international best-practice.

Guidance about what is best-practice can be found from the Convention of Biological Diversity's COP 9 which adopted (in decision IX/20) scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in open-ocean waters and deep sea habitats.⁶ The IUCN (2008) also defines ecological design criteria for: representativeness, replication, viability,

⁵ Section 6.1 of the IUCN guidelines states: "MPAs or zones that allow sustainable commercial or recreational fishing/collecting should be categorized as V or VI (note: as stated throughout this document MPAs must first meet the definition of a protected area and thus be primarily managed for nature conservation)".

http://cmsdata.iucn.org/downloads/iucn_categoriesamp_eng.pdf

⁶ The criteria includes uniqueness or rarity; special importance for life-history stages of species; importance for threatened, endangered or declining species and/or habitats; vulnerability, fragility, sensitivity or slow recovery; biological productivity; biological diversity; and naturalness (COP 9, Decision IX/20).

precautionary design, permanence, maximum connectivity, resilience, and size and shape MPA networks.⁷

We recommend that any process for developing and improving criteria for identifying MPAs is Government-funded and resourced with expert independent advice. The process for developing criteria should be a high priority and time-bound so that it does not hold up progress towards developing the network of MPAs.

2.4.2 Principles to guide policy and decision-making

Guiding principles that cover ecological, socio-economic and cultural considerations can be useful where decisions require balancing different interests.

WWF-New Zealand recommends that the Government includes principles to guide policy and decision-making in the MPA Act that are based on international best-practice and tailored to the New Zealand context, with particular respect to the Treaty of Waitangi. WWF-New Zealand considers that the planning principles in the MPA Policy and Implementation Plan (DOC, 2005, p17) provide a good basis from which to develop principles for the new Act.

Some examples of principles that could be useful to further develop and improve the principles for New Zealand can be found in the Australian Environment Protection and Biodiversity Conservation Act (EPBC Act 1999). All decisions under the Act must follow the principles of “ecological sustainable development”⁸ which includes the precautionary principle. This means that lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The EPBC Regulations specify the narrower principle of “ecologically sustainable use” in relation to MPAs.⁹

⁷ Criteria to determining network ‘ecological coherence’, ‘connectivity’, and ‘representative’ critical habitats and species were also developed for the North Atlantic OSPAR MPA network (Binet and Lutchman, 2007; and OSPAR, 2004).

⁸ The following principles are principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (EPBC Act, s3A).

⁹ Resource use should be based on the principle (the principle of ecologically sustainable use) that:

- (a) natural resources should only be used within their capacity to sustain natural processes while maintaining the life-support systems of nature; and
- (b) the benefit of the use to the present generation should not diminish the potential of the reserve or zone to meet the needs and aspirations of future generations (EPBC Regulations 2000, Schedule 8, cl 5).

2.4.3 Treaty clause

There needs to be a strong Treaty Clause in the MPA Act. This should be developed with, and agreed by, iwi leaders. WWF-New Zealand considers the clause should be no weaker than Section 4 of the Conservation Act 1987.¹⁰

The MPA Act should recognise iwi as Treaty partner in governance and management of natural resources and acknowledge the special customary interests and responsibilities of tangata whenua in use and management of marine resources. The process of establishing the MPA network should actively enable iwi and hapū to participate through their representatives in decision-making bodies including Boards of Enquiry and in collaborative groups/processes, and through iwi leaders at higher decision-making levels. At a more practical on-the-ground level, there can be mechanisms in the MPA management and monitoring plans that enable relevant iwi and hapū to practice kaitiakitanga and be involved in the management and monitoring of the MPAs.

WWF-New Zealand considers there may be value in enabling Rahui Tapu, with a co-governance model and a 25 year generational review.

The Act should recognise Mataitai and Taiapure reserves as contributions to conservation and clarify how these can complement the reserves enabled under the Act.

2.5 Strong leadership and political will for MPA network

In the current proposal, there is no clear leadership or resourcing to ensure that a national MPA network is actually established. Experience from around the world shows that strong leadership and political will to actively establish the MPA networks is fundamental to success (IUCN 2008). There needs to be clarification about how important processes will be funded and who will be responsible for making them happen, and in what time frames. The legislation should ensure strong leadership and political will for each important part of the process for developing the network by:

- Specifically assigning leadership (including clearly defined roles, responsibilities, and accountability).
- Ensuring sustainable funding.
- Setting some time bounds on particular processes.

A single lead Minister and Ministry

WWF-New Zealand considers the lack of a single lead Minister and Ministry to be a fundamental problem with the current proposal. MPA proposals for different biogeographical regions are likely to include a combination of tools and MPA types. While some MPA types may be of more interest to particular Ministers than others MPA types, it does not make practical sense to have multiple Ministers involved in assessing different proposals or different aspects of proposals for a region. This would be a fragmented and incoherent approach.

WWF-New Zealand recommends that a single Minister is empowered to achieve the development of the network. This would enable a more systematic streamlined and efficient process. The Minister

¹⁰ The Conservation Act Section 4 (Act to give effect to Treaty of Waitangi) states:

“This Act shall so be interpreted and administered as to give effect to the principles of the Treaty of Waitangi”.

and Ministry would have a coherent overview of how the network is developing and how regional proposals contribute to achieving the well-connected representative network.

There could be a requirement that the lead Minister consults with other relevant Ministers before making a final decision on the proposals.

2.6 Process for establishing MPA network

The Government proposal does not set out the process for establishing the network. There is no detail about who can make proposals, how the development of proposals will be supported or funded, and how to ensure that proposals relate to the science about what habitats need to be included in order to achieve a representative network.

The new Act needs set out the process for establishing the MPA network. The process should have four main components including:

1. Scientific scoping process and marine science support for network development.
2. Systematic network planning and development of proposals (this includes the collaborative processes and Boards of Enquiry).
3. Ad-hoc proposal development.
4. Decision-making.

Please see Appendix 4 for a diagram of the process proposed by WWF New Zealand.

2.6.1 Scientific scoping and identification of MPA sites, and establishment of a marine science advisory group to support the development of the MPA network

The Act should direct a Government-driven marine science-scoping process aimed to achieve the marine biodiversity protection objectives of the Act, and establish a science panel/group to support the processes of developing the MPA network. The consultation document identifies the existing Sustainable Seas National Science Challenge as a potential source of funding or science work; however this would need to be specifically tied to achieving the purposes of the Act.

An initial science scoping process should: collate existing marine science research; conduct a gaps analysis; and develop a geographical schedule to plan for and prioritise marine protection. A key priority for the science scoping process will be to identify representative habitats that could be protected in the core network of no-take marine reserves.

The MPA Policy and Implementation Plan (DOC, 2005) already identifies biogeographical regions and provides a framework for creating a geographical schedule. For example, 14 coastal biogeographical regions (within the territorial sea) have been identified, and three major biogeographical regions in the EEZ. Representative habitats in the sub-tropical region will be well protected in the Kermadec Ocean Sanctuary, so the next focus for protection in the EEZ should be the sub Antarctic region and the temperate marine zone.¹¹

¹¹ The biogeographical ocean zones are described in the Marine Protected Area Policy and Implementation Plan (<http://www.doc.govt.nz/about-us/science-publications/conservation-publications/marine-and-coastal/marine-protected-areas/marine-protected-areas-policy-and-implementation-plan/>)

The marine science advisory group should provide the information required by the collaborative groups, Boards of Enquiry and Ministers to develop and assess proposals so that they meet the Act's biodiversity objectives and criteria such as representativeness and connectivity. The marine science advisory group should enable assessment of how proposals fit within, or contribute to, the MPA network as a whole. The 'network design principles' in the MPA Policy and Implementation Plan (DOC, 2005), as well as the MPA Classification and Protection Standard (DOC, 2008) are useful tools to help the marine science advisory group do this.

2.6.2 Systematic network planning and development of proposals

In order to move away from the current ad-hoc approach to marine protection, the Act must direct Government to systematically plan and facilitate the development of proposals for the MPA network.¹² Systematic planning based on the outcomes of the science scoping process and advice from the marine science advisory group is essential to achieve a well-connected and representative network. We consider that there should be three pathways to developing the network: 1) an inshore (territorial sea) regional collaborative process, 2) an offshore (EEZ) process, and 3) an ad-hoc process to enable additional one-off applications outside of the systematic planning and proposal development.

2.6.2.1 Inshore (territorial sea) regional collaborative groups

The systematic planning and the development of proposals for the MPA network should be carried out in collaborative processes involving regional collaborative groups for each priority biogeographical area. The Government should lead a process to establish and coordinate these regional collaborative groups. The model set out in the MPA Policy and Implementation Plan (DOC, 2005) for marine protection planning forums could be used, and improved upon.

The purpose of the collaborative groups will be to develop MPA proposals that will achieve the biodiversity protection objectives of the Act and negotiate the MPA network design for their region. The terms of reference for these groups should be set out in the legislation and should be in line with biodiversity objectives and criteria. The groups should be guided by general principles for decision-making such as the 'planning principles' outlined in the MPA Policy and Implementation Plan (DOC, 2005. p17).

To enable collaborative processes to be successful, the Act should ensure:

- Clear terms of reference (linked to the objectives of the Act) for the regional collaborative groups and provide principles to guide decision-making (such as the network design principles and the planning principles outlined in the MPA Policy and Implementation Plan) (DOC, 2005. p17).

¹² The current Ad hoc process of developing MPAs is identified as a key driver and need for new legislation. Currently, local community groups make proposals to protect areas of interest and concern to them. As the consultation document identifies: "*proposals are considered in isolation, making it difficult to determine a specific area's contribution to a broader network of protected areas*" (Section 2.2 of the consultation document).

- Collaborative groups have an independent chair who has clearly defined mandate and responsibilities, and good capacity (e.g. negotiation skills, knowledge of local *tikanga* etc.).¹³
- Collaborative groups include mandated representatives of all key interest groups (as outlined in the MPA Policy and Implementation Plan (DOC, 2005).
- A fair balance of stakeholder representatives (e.g. extractive vs. non-extractive interests).
- Members are funded and resourced to participate. This includes funding and support to produce an independent economic impact assessment, cultural impact assessments and marine ecological assessments. Groups should have support from the marine science advisory group. This support will be vital to ensure different stakeholders have the capacity to participate equally in the collaborative processes.
- Time-limits on the collaborative process.

The opportunity for a collaborative process should be assured in the Act. We do not support the current Government proposal that four (and potentially more) Ministers (of Conservation, Primary Industries, Environment, and Māori Development) will decide whether a collaborative process or a Board of Enquiry process is taken. The importance of participation of marine resource users and interests groups in establishing MPA networks is well established (Institute for European Environmental Policy/IEEP and Natural Resources Defense Council/NRDC, 2008). Conflict is the most costly and time-consuming barrier to establishing MPAs and good participation is the key to minimising conflict.

We recommend that in the situation when collaboration has failed to reach consensus, the independent chair of the collaborative group should recommend that the proposal is passed to an Independent Board of Enquiry.

The Board of Enquiry should be guided by the same terms of reference and criteria used for the collaborative groups.

2.6.2.2 Off-shore (EEZ) process planning

Establishing protected areas in the deep-water environment should be implemented at a national level by an expert panel that has specific expertise and representation of offshore interests, including Iwi representatives.

The EEZ can be split into three Zones: 1) the Sub-Tropical (defined as the Kermadec region - which will be fully protected by the Kermadec Ocean Sanctuary); 2) the Temperate Zone; and 3) the sub-Antarctic Zone. The EEZ portion of the sub-Antarctic Zone could be managed by reconstituting the Sub-Antarctic Forum which has already been established under the MPA Policy (DOC and MfE, 2005). The Temperate EEZ zone has the most stakeholders, and a new forum should be established for this region.

¹³ The need for an independent chair is considered important by everyone I have to that has been involved with establishing marine reserves.

2.6.2.3 Ad-hoc process – for one-off MPAs

There will still be the need to enable additional one-off applications outside of the Government-led systematic planning and proposal development process. This will enable people/groups to propose protection of areas that are of particular interest to them, but which may be additional to, or outside of the regional collaborative groups' priorities. This will need to follow the same terms of reference and principles to ensure the proposals are science-based and contribute to the representative network; and include a public consultation process, before recommendations are provided for Ministerial decision.

2.7 Decision-making

The Government's proposed approach to decision-making (summarised in Box 1) provides too many opportunities for Ministers to stop a proposal from going forward, and it does not assure the option of a collaborative process for developing proposals.

We recommend that the Act mandate the development of proposals (through the three processes described above), and provide clear criteria and guidance to ensure that proposals meet the purpose of the Act, so that Ministers do not need to assess proposals before they are fully developed. Ministerial decision-making should only occur after the proposals have been developed.

As discussed in section 3.4 there should be one lead Minister for all sets of proposals. This way the lead Minister will have an overview of the whole network and be able to effectively assess and keep track of progress towards a representative network.

Box 1: Government's proposed decision-making process

- To be approved by the lead Minister in the first instance, proposals must be consistent with the purposes of the Act; describe the environment and benefits of protection; and assess economic impacts. For many applicants paying for economic and environmental assessments would be a significant economic barrier.
- Once approved by the lead Minister, the application must be approved by all other relevant Ministers (Conservation, Primary Industries, Environment, and Māori Development and potentially more). Ministers will consider the urgency of the issues and resources available to support the development of proposals.
- If all Ministers agree that the proposal should be advanced, then they decide whether a collaborative process or Board of Inquiry is used.
- After public consultation, and an independent economic assessment, collaborative groups or Boards of Inquiry will make recommendations to the Ministers.
- Ministers accept, reject, or refer proposal back for reconsideration or amendment.

2.8 Links between Acts for management decisions

The Government proposal lacks clarity of thought about how the proposed act will compliment and or replace existing legislation.

There will need to be clear links between Fisheries Act and MPA Act to ensure sharing of information that needs to feed into monitoring and management decisions. For an example, there will need to be estimates of the expected fishing displacement from MPAs (increased fishing pressure in areas outside of MPAs) to determine whether there needs to be a "sustainability adjustment" in the Quota Management System (QMS). Displacement is when a closure intended to protect one vulnerable

species or area may increase unintended fishing pressure on another species or areas (Wenzel and Brock, 2013).

2.9 *Monitoring and reporting*

The legislation needs to enable robust monitoring. Monitoring of MPAs is important for adaptive management and in order to assess progress towards achieving objectives (IEEP and NRDC, 2008; IUCN 2008).¹⁴ Participants at the Transatlantic Civil Society Conference on Marine Protected Areas (15-16 May 2008) agreed that:

- Monitoring should be built into MPA networks from the outset.
- Good monitoring should include a wide range of stakeholders and not just researchers. Monitoring advisory group made up of fisheries management, scientists, social/economic specialists – can be useful to set monitoring requirements i.e. data collected. In New Zealand, including tangata whenua and their local knowledge in monitoring will be an important way of enabling them to carry out their kaitiaki roles.
- The timescale for monitoring the impacts of MPAs is important. In some cases, this could be 2-3 years; in other cases there may be need for longer-term monitoring programmes to evaluate effectiveness of specific MPAs.
- It is important to monitor stocks and fishing activities inside and outside the MPAs in order to fully evaluate the impacts of the closed areas. This will include measuring spill over effects which can be useful in demonstrating value of MPAs, and measuring fishing displacement.
- Monitoring should be objective, repeatable and transparent. Results should be accessible and published.
- The Act should include triggers for action to mitigate external impacts on marine protected areas – for example if monitoring reveals the integrity of an MPA is being undermined by sedimentation.

WWF recommends that the Act enable robust monitoring to be built into the MPA network from the outset and that a monitoring advisory group including tangata whenua, marine science experts, and other interested stakeholders to set monitoring requirements.

We also recommend that the Fisheries Act and MPA Act are appropriately linked to enable monitoring and management of fishing effort displacement, and to improve fisheries research and science.

2.10 *MPA information base*

In association with the formation of a network, an online information base for the MPAs including ecological, social and economic information should be created. Having an accessible information base for the MPAs helps to develop logical choices in how to expand MPAs effectively and how to

¹⁴ Long-term monitoring results are valuable in supporting planning decisions, such as re-zoning MPAs based on an improved understanding of the distribution of marine habitats; also to inform a variety of routine management decisions, such as the development of educational programmes, compliance efforts, introduced species control and infrastructure development in MPAs (IUCN, 2008).

efficiently manage them through strategic efforts based on the network design. This information base stimulates the MPA stakeholders or communities to coordinate with one another to share experiences, enhancing the efforts to manage their respective MPAs (IUCN, 2008).

2.11 Balancing social and economic considerations

WWF-New Zealand supports taking into account, and where possible mitigating impacts on, existing economic activity in the creation of a network of marine protected areas.

For example, WWF-New Zealand recognises that marine biodiversity protection needs to be complementary to sustainable fisheries management. While it seems unlikely that creating a network of MPAs will have a significant impact on existing fishing activity, local displacement of fishing effort remains a possibility if an MPA was to be established over an area of ocean that is currently fished. It is important that the Act includes provisions to mitigate these possible impacts. WWF-New Zealand therefore supports the legislation establishing clear principles and processes to ensure whether and how assistance can be provided in cases where proposed marine protection has an impact on existing activities and where no alternatives exist. We note that the current Marine Reserves Act allows the Minister to reject a marine reserve if it has a significant impact on fishing and we believe that a better solution is to enable the Minister to provide assistance so that an MPA can be created while ensuring that adverse social or economic impacts are mitigated.

Similar provisions could be created relating to existing mineral extraction. The effective likely result would be no fully-protected area or sea bed reserve being established where oil and gas and minerals are currently being extracted.

WWF-New Zealand does not support blanket provisions aimed at ‘protecting’ possible future economic activity. The science process of identifying the most ecologically-important areas should include the large areas where exploration/prospecting is currently permitted and should be conducted as promptly as is feasible. Socio-economic considerations will be a part of the decision-making process on defining the representative network but should not pre-determine what the science process should look at. Ultimately, certainty should be created by robust and time-bound decision-making on the network of MPAs.

Also, the ‘review provision’ if new valuable resources are discovered in a protected area seems counterintuitive, somewhat pointless and is likely to be unworkable. Once a fully protected reserve or a sea-bed reserve is established exploration should be prohibited. This obviously limits the possibility of discovering economically recoverable resources and makes the ‘review provision’ fairly redundant. In any case, even if resources were found the suggested repeal, break-up or reduction in size of an MPA would be politically difficult to achieve.

Regarding economic impact assessments, more clarity is needed on what this will entail. For example, will this assessment be required to include the benefits of marine protection such as ecosystem services, possible marine tourism or potential spill-over benefits for fishing? It is also important to provide guidance on who will be conducting these assessments and who will be required to fund them and whether similar provision will be made for cultural impact assessments.

Overall, WWF-New Zealand considers that the new legislation should be driven by the understanding that MPAs make good economic sense, rather than fear that marine protection is an economic barrier. Marine protection has clear economic benefits including:

- **Ecosystem services:** Our oceans provide vital ecosystem services including cleansing, nutrient cycling and renewal, the maintenance of biodiversity, and the production of goods such as seafood, fuels, pharmaceuticals, and recreation amenities (MEA 2005; van den Belt and Cole, 2014; Ausseil *et al.*, 2011; Worm *et al.*, 2006).

A study of the ecosystem services of seven New Zealand marine areas, including the EEZ (and Territorial Sea), a marine mammal sanctuary and five marine reserves, found that collectively these areas generated an average value of NZ \$403B per year for 2010 (van den Belt and Cole, 2014).¹⁵ This is about 2.07 times gross domestic product (GDP) for that same year (NZ \$194B) and equates to a per capita ES value of NZ\$92,245 per year (van den Belt and Cole, 2014).

- **Marine tourism:** There are substantial economic benefits to be gained from businesses based on sustainable marine tourism. A study in 2008 found that there were approximately 375,000 visits annually to the Cape Rodney - Okakari Point marine reserve, contributing \$18.6 million into the local economy.¹⁶
- **Improving resilience against climate change and helping sustain a productive fishing industry:** The most significant driver of change in our oceans in our lifetime and for our future generations will be climate change¹⁷ (NOAA, 2015; Britten *et al.*, 2015; EGI 10/09/15). There is strong scientific evidence that one of the best ways to ensure our oceans can adapt to and withstand climate change is to build and maintain marine biodiversity. Biodiversity makes marine ecosystems and the economically important fish stocks within them, more robust and resilient (Riemer *et al.*, 2015; Perry *et al.*, 2010; Levin and Lubchenco, 2008; Worm *et al.*, 2006).

The importance of protecting biodiversity for productive fisheries has also led to the use of MPAs as fisheries management tools.¹⁸ MPAs can produce 'spill-over benefits' – building the health of ecosystems, species diversity and biomass outside the reserve (da Silva *et al.*, 2015; Harrison *et al.*, 2012; Lester *et al.*;2009); and protecting structured habitats, nursery grounds, and fish spawning areas can help sustain fish reproduction, resilience and abundance (Reimer *et al.*, 2015; Low *et al.*, 2003).¹⁹

¹⁵ This study used the rapid ecosystem services assessment (RESA) method.

¹⁶ http://www.marinenz.org.nz/documents/leigh_eco_impact.pdf

¹⁷ Environmental change/variability includes warming of oceans, changes in ocean currents including potential regime shifts (large-scale and persistent changes in ocean circulation and vertical water column structure), increase the likelihood of invasive species (Willis *et al.*, 2007), increasing ocean acidification, changes in salinity, and sea level rise (Office of the Prime Minister's Science Advisory Committee, 2013).

¹⁸ 24% of 1600 of MPAs in the USA are focused on sustainable fisheries (Wenzel and Brock, 2013)

¹⁹ It is for these reasons that southeast U.S. fishery managers are considering a proposal to protect certain areas where fish live and spawn. The proposed spawning special management zones would target small,

- ***Providing more certainty for New Zealand marine resource industries:*** The fact that New Zealand has not yet effectively implemented our international obligations to protect areas of the EEZ (explained in Appendix 1 section 3), means that our governance framework is incomplete. This creates uncertainty for marine resource industries about what areas can be used and what areas will either be fully protected or be subject to specific limitations on use. This uncertainty has an impact on long term planning and investment.²⁰ Including the EEZ in the MPA legislation is therefore an essential step to achieving a more robust marine governance framework and creating greater certainty.

2.12 Further development of the Act and engagement with stakeholders

WWF-New Zealand recommends that the Government provide further opportunity for engagement on the development of the Act. We believe this is a really important piece of legislation and, although the proposal has some significant flaws, there are solutions that we and others are keen to explore.

important areas on the edge of the continental shelf (<http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2015/08/protecting-fish-spawning-sites>).

²⁰ The Government already recognises that "*Developing a robust marine governance framework would enable more certain development of our rich marine resource base while sustaining our unique marine environment*" (Natural Resources Sector Briefing to the Incoming Minister (2014), page 6.). (<http://nrs.mfe.govt.nz/sites/default/files/nrs-bim-final.pdf>)

References

- Brander, L., Baulcomb, C., van der Lelij, J. A. C., Eppink, F., McVittie, A., Nijsten, L., and P. van Beukering. (2015). *The benefits to people of expanding Marine Protected Areas*. VU University, Amsterdam, The Netherlands.
- Britten, G.L., Dowd, M., and Worm, B. (2015). Changing recruitment capacity in global fish stocks. *Proceedings of the National Academy of Sciences*.
- Economic Growth and Infrastructure Committee/EGI. (2015). Cabinet paper, Economic Growth and Infrastructure Committee 10/09/2015.
- Conservation International. (2010). *Biodiversity hotspots*. Available from <http://www.conservation.org/Documents/cihotspotmap.pdf>.
- Convention on Biological Diversity/ CBD. (2010). *Convention on Biological Diversity Fact Sheet*. <https://www.cbd.int/iyb/doc/prints/factsheets/iyb-cbd-factsheet-cbd-en.pdf>
- Czybulka, D., and Bosecke, T. (2003). Marine Protected Areas in the EEZ in light of international and European Community law — Legal basis and aspects of implementation, in Dr. Henning von Nordheim, Dieter Boedeker, Dr. Jochen C. Krause, (2006). *Progress in Marine Conservation in Europe*.
- da Silva, I.M., Hill, N., Shimadzu, H., Soares, A.M., and Dornelas, M. (2015). *Spillover Effects of a Community-Managed Marine Reserve*. PLoS ONE 10(4): e0111774.
- Department of Conservation/DOC and Ministry for the Environment/MfE. (2000). *The New Zealand Biodiversity Strategy, Our Time to Turn the Tide*.
- DOC. (2013). *New Zealand Threat Classification System*.
- DOC. (2013). *Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations*.
- Ellenberg, U., and Mattern, T. (2012). Yellow-eyed penguin-review of population information. *Final Report of Contract 4350*, Manuscript for Department of Conservation Science Publication.
- Gordon, D., Beaumont, J., MacDiarmid, A., Robertson, D., and Ahyong, S. (2010). Marine biodiversity of Aotearoa New Zealand. PLoS ONE, 5(8), e10905.
- Harrison, H.B., Williamson, D.H., Evans, R.D., Almany, G.R., Thorrold, S.R., Russ, G.R., Feldheim, K.A., van Herwerden, L., Planes, S., Srinivasan, M., Berumen, M.L., and Jones G.P. (2012). *Larval export from marine reserves and the recruitment benefit for fish and fisheries*. Current Biology 22: 1023-1028.
- Lascellesa, B.G., Langhamb, G.M., Ronconic, R.A., and Reidd, J.B. (2012). From hotspots to site protection: Identifying Marine Protected Areas for seabirds around the globe, *Biological Conservation*, Vol. 156, November–December 2012, Pages 5–14.

Lester, S.E., Halpern, B.S., Grorud-Colvert, K., Lubchenco, J., Ruttenberg, B.I., Gaines, S.D., Aíramé, S., and Warner, R.R. (2009). *Biological effects within no-take marine reserves: a global synthesis*. Marine Ecology Progress Series 384:33-46.

Lindenmayer, D., and Fischer, J. (2006). *Habitat Fragmentation and Landscape Change: An Ecological and Conservation Synthesis*. Covelo, California: Island Press.

MacDiarmid, A., Bowden, D., Cummings, V., Morrison, M., Jones, E., Kelly, M., Neil, H., Nelson, W., and Rowden, A. (2013). *Sensitive marine benthic habitats define*. National Institute of Water and Atmospheric Research/ NIWA.

Mattern, T. (2006). *Marine ecology of offshore and inshore foraging penguins: the Snares penguin *Eudyptes robustus* and Yellow-eyed penguin *Megadyptes antipodes**. PhD, University of Otago, Dunedin.

Meynier, L. (2009). *Feeding ecology of the New Zealand sea lion (*Phocarctos hookeri*)*. PhD thesis, Massey University, Palmerston North.

Meynier, L. (2010). *New Zealand sea lion bioenergetics modelling: final report for project IPA2009-09*. Cited in Ministry for Primary Industries/MPI 2014 AEWG.

MfE, DOC, and MPI. (2016). *An New Marine Protected Areas Act, Consultation Document*. New Zealand Government

National Oceanic and Atmospheric Administration/NOAA. (2015). *Fish Stock Climate Vulnerability Assessment*.

Office of the Prime Minister's Science Advisory Committee. (2013). *New Zealand's Changing Climate and Oceans: the impact of human activity and implications for the future – an assessment of the current state of knowledge by the Office of the Chief Science Advisor*.

Pendoley, K.L., Schofield, G., and Whittock, P.A. (2014). Protected species use of a coastal marine migratory corridor connecting marine protected areas, *Marine Biology*, 2014.

Perry, R.I., Cury, P., Brander, K.M., Jennings, S., Möllmann, C., and Planque, B. (2010). Sensitivity of marine systems to climate and fishing: concepts, issues and management responses. *Journal of Marine Systems* 79: 427-435.

Revuelta, O., Hawkes, L., León, Y.M., Godley, B.J., Raga, J.A., and J. Tomás. (2015). Evaluating the importance of Marine Protected Areas for the conservation of hawksbill turtles *Eretmochelys imbricata* nesting in the Dominican Republic, *Endangered Species Research*, 2015, Volume 27, Number 2.

The Royal Forest and Bird Protection Society. (2014). *New Zealand Seabirds – Important Bird Areas and Conservation*.

United Nations Environment Programme/ UNEP. (2003). *Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work - Report of the Ad Hoc Technical Expert Group on Marine and Coastal Protected Areas*. UNEP/CBD/SBSTTA/8/INF/7.

Willis, T., Handley, S., Chang, F.H., Law, C.S., Morrisey, D.J., Mullan, A.B., Pinkerton, M.H., Rodgers, K.L., Sutton, P.J.H., and Tait, A. (2007). *Climate change and the New Zealand Marine Environment*. NIWA Client Report. 76 p.

Woodley, S., Bertzky, B., Crawhall, N., Dudley, N., Londoño, J.M., MacKinnon, K., Redford, K., and Sandwith, T. (2012). Meeting Aichi Target 11: What Does Success Look Like for Protected Area Systems? *Parks* 2012 Vol 18.1.

Worboys, G.L., Francis, W.L., and Lockwood, M. (eds.). (2010). *Connectivity Conservation Management: A global guide*. London: Earthscan.

Worm, B., Barbier, E. B., Beaumont, N., Duffy, J. E., Folke, C., Halpern, B. S., and Watson, R. (2006). Impacts of biodiversity loss on ocean ecosystem services. *Science* 314(5800): 787-790.

Wright, A.J., and Cosentino, A.M. (2015). JNCC guidelines for minimising the risk of injury and disturbance to marine mammals from seismic surveys: We can do better. *Marine Pollution Bulletin*, 2015.

Appendix 1: Reasons to include the EEZ in the new MPA Legislation

The Government's current proposal excludes New Zealand's EEZ from the Act. The EEZ is the area that extends from 12 nautical miles out to 200 nautical miles, and makes up 95% of New Zealand's oceans. This means that our vast oceans beyond 12 nautical miles would not be considered in the process of creating New Zealand's national network of MPAs.

This section outlines important reasons for the Government to change their proposal and include the EEZ in the new MPA legislation. The reasons are:

- A representative network of MPAs must include a full-range of habitat types including those in the deep sea.
- Our EEZ contains biodiversity of global importance.
- Meeting New Zealand's international obligations and commitments to contribute to global marine biodiversity conservation.
- Achieving national goals for marine biodiversity protection and honouring promises made to the New Zealand public .
- Improving resilience against climate change and helping sustain a productive fishing industry.
- Providing more comprehensive governance of the marine environment and more certainty for New Zealand marine resource industries.
- Future-proofing the Act and avoiding costly amendment/review at a later date.

1. A representative network of MPAs must include a full-range of habitat types – including deep sea habitats

With the primary purpose of the legislation being marine biodiversity protection, this legislation should be strongly driven and developed from the best scientific understanding about how to protect marine biodiversity.

There is strong agreement within the international marine science community that the best way to protect marine biodiversity is to safeguard a full range of different marine habitat types.²¹ The basic understanding is that each different habitat type is home to unique biological communities, and therefore when we protect 'representative' examples of each habitat we have the best chance at building and maintaining biodiversity in our oceans (Woodly *et al.*, 2012; Lindenmayer & Fischer,

²¹ The importance of protecting a full range of habitat types in a national network of MPAs is recognised in the Convention of Biological Diversity. The Ad Hoc Technical Expert Group (AHTEG) on Marine and Coastal Protected Areas which defines an MPA network as "*an appropriate mix of highly protected areas and ancillary areas, which interact collectively to provide benefits greater than the sum of their individual benefits*". The AHTEG recognised that to achieve the full benefits, this network needs to be "*representative (meaning that the entire network should include the full range of marine and coastal ecosystems, and that individual MPAs in the network should reflect the biotic diversity of the ecosystems from which they derive)*". (UNEP, 2003)

2006; Worboys *et al.*, 2010).²² Effectively protecting New Zealand’s marine biodiversity requires establishing a national MPA network that includes a full range of different marine habitat types including representative deep sea habitats within our EEZ.

The new Bill to establish a Kermadec Ocean Sanctuary (KOS) is an important step in improving protection in the EEZ. However, while this will protect many important sub-tropical habitats and species, New Zealand still needs to be able to protect habitats and species in temperate and sub-Antarctic biogeographic zones.

The Government’s consultation proposal recognises the value of a ‘representative network’ of MPAs; however it can not achieve a representative network if the EEZ is left out of the Act.

2. Our EEZ contains biodiversity of global importance

New Zealand’s oceans are a biological treasure-chest of global importance and interest. Our marine estate is the 6th largest in the world (3,947 124 million km²)²³, and the life within it is abundant, diverse, and unique. The high level of endemic species²⁴ and the range of coastal and marine habitats found in New Zealand’s marine environment make it one of the top hot spots for biodiversity in the world (Conservation International, 2010; Kingsforce *et al.*, 2009).²⁵ Nearly half of the world’s dolphins, porpoises and whales are found in our waters and more species of seabird breed on our islands than anywhere else in the world (Baker *et al.*, 2010; Gordon *et al.*, 2010; Taylor, 2000).

There are many ecologically-important and unique marine habitats and species that live and range in our EEZ. Some particularly sensitive deep sea habitats include: deep-sea hydrothermal vents, macro-algal beds, methane or cold seeps, sea pen fields, sponge gardens, and stony coral reefs

Box 1: New Zealand marine biodiversity facts

- As much as 80% of New Zealand’s indigenous biodiversity is found in the Sea (DOC and MfE, 2000).
- At least 17,135 species live in New Zealand waters, of which 4,315 are undescribed. On average, around 20 new species of fish are discovered every year. Given that fish are only a small proportion of all marine species, the New Zealand EEZ could contain up to 100,000 species in total. The number of undiscovered marine species in New Zealand’s oceans likely exceeds the number of species that have been identified (Gordon *et al.*, 2010: 9, 12.).
- DOC identifies 56 species of marine mammals that reside in New Zealand waters (DOC, 2013a).
- Of the 359 species of birds in the world that obtain all or nearly all their food from the sea (sea birds), 140 species of seabirds live or visit in NZ, 86 species breed in NZ and 36 are endemic – breeding nowhere else in the world. The total number of seabirds breeding in NZ is c. 14 million pairs.

(The Royal Forest and Bird Society, 2014).

²² It is increasingly accepted in the scientific community that protected areas must be part of connected networks, with conservation cores and effective connectivity in order to maintain genetic diversity (Woodly *et al.*, 2012; Lindenmayer & Fischer, 2006; Worboys *et al.*, 2010).

²³ <http://www.linz.govt.nz/about-linz/what-were-doing/projects/ocean-survey-2020/about-ocean-survey-2020>

²⁴ New Zealand endemic species are unique to New Zealand and live nowhere else in the world.

²⁵ What makes our waters so biologically diverse is the huge range of coastal and marine habitats. Whether it is kelp forests, sea mounts, thermal vents, reefs, or rocky shores – each different type of habitat contains unique communities of plants and animals.

(MacDiarmid *et al.*, 2013).

Some of our most endangered endemic species such as the New Zealand sea lion, Māui and Hector's dolphins, yellow-eyed penguin, and New Zealand albatrosses live and/or forage in the EEZ. Good work has already been done to identify priority areas for sea bird conservation (Royal Forest & Bird Protection Society of New Zealand, 2014) so enabling protection in the EEZ would be necessary to carry this work forward.

Additionally, many rare and endangered species migrate through New Zealand's EEZ such as blue whales, humpback whales, and great white sharks.

The EEZ is where most of our biodiversity resides; therefore it makes no sense to exclude the EEZ from the new MPA Act.

3. Meeting New Zealand's international obligations and commitments to contribute to global marine biodiversity conservation

The marine science community has established that different ecoregions²⁶ of the world have unique marine biodiversity, and that action to safeguard marine biodiversity in our planet's oceans requires a global response.

Scientific understanding about how best to protect marine biodiversity has driven formal international agreements, such as the Convention of Biological Diversity, to call for the creation of networks of MPAs within national marine jurisdictions, in order to contribute to a global MPA network.²⁷ Countries such as Australia, USA, UK and Chile have led the way in creating networks of MPAs within their oceans (including their EEZs).

New Zealand has a large responsibility to participate in the global movement of marine biodiversity protection because we have a particularly large, unique, and biodiverse marine environment (as outlined in section 2). Our Government has recognised that there is an opportunity for New Zealand to be a world leader in managing oceans;²⁸ however their decision to exclude the EEZ sends the opposite signal.

²⁶ Ecoregions are large areas with characteristic combinations of habitats, species, soils and landforms. Ecoregions reflect the distributions of fauna and flora across the entire planet (Woodly *et al.*, 2012).

²⁷ The World Summit on Sustainable Development, the 5th World Parks Congress, the Convention on Biological Diversity and the G8 Group of Nations – have all called for the establishment of a global system of MPA networks.

The Convention of Biological Diversity (COP 7 Decision VII/518) agreed that *“the goal for work under the Convention relating to marine and coastal protected areas should be: The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network”*. The Report of the Ad Hoc Technical Expert Group (AHTEG) on Marine and Coastal Protected Areas used to inform COP 7 Decision VII/518 states: *“...given that a very small portion of marine and coastal biological diversity is currently included in MCPAs, the goal for the future should be the development of an effectively managed, ecologically representative global system of MCPA networks”* (UNEP, 2003).

²⁸ The Department of Conservation 2014 Briefing to the Incoming Minister stated: *“There is an opportunity for New Zealand to be a world leader in managing oceans, given the international recognition of its fisheries management, large EEZ and the potential to provide a more balanced framework for marine protection within the marine environment”* (DOC BIM 2014, p10. <http://www.doc.govt.nz/Documents/about-doc/role/publications/bim-2014/briefing-to-incoming-minister-2014.pdf>).

As party to UNCLOS, New Zealand has a legal duty to protect and preserve the marine environment. Sovereign rights to exploit its natural resources must be exercised in accordance with this duty.²⁹ We have legislation that provides for the use and development of marine resources (such as the Fisheries Act 1996, The Crown Minerals Act 1991 and the EEZ Act 2012). However, we do not currently have legislation that enables effective marine biodiversity protection in the EEZ. Including the EEZ under the MPA Act would address this important legal issue.

As a party to the CBD, New Zealand has a range of legal obligations in relation to the development and establishment of protected areas for the conservation and sustainable use of biological diversity in our oceans.³⁰ In particular, New Zealand has committed to the 'Aichi Target 11', which requires setting up a representative and well-connected system of protected areas in our oceans.³¹

The Government is aware that New Zealand is falling behind in their international obligations to protect marine biodiversity. In a briefing paper to Nick Smith titled: 'New Zealand's international obligations and comparative progress regarding Marine Protected Areas' the MfE states: "*We believe that protection of representative examples of bioregions is the key indicator of the effectiveness of New Zealand's marine protection regime. On this basis New Zealand's current marine protection is well below average when compared to international standards and the performance of other countries, notably Australia and the United States*" (Date: 18/06/15 Tracking #: 15- B-01036).

This new MPA Act is the perfect opportunity for New Zealand to set this right.

²⁹ UNCLOS Part XII article 192, 194, and 56(1)(b)(iii) oblige coastal States to protect the marine environment in their own Exclusive Economic Zones (EEZs). Article 192: "*States have the obligation to protect and preserve the marine environment*". Article 193: "*States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment*".

³⁰ Marine and coastal biological diversity was the focus of CBD-COP7 Decision VII/5 where parties agreed to establish and maintain (by 2012) marine and coastal protected areas that are "*effectively managed, ecologically based and contribute to a global network of marine and coastal protected areas*".

³¹ The exact words of 'Aichi Target 11' are that "*by 2020 [...] 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures*".

4. *Achieving national goals for marine biodiversity protection and honouring promises made to the New Zealand public*

New Zealand's own goals for marine biodiversity protection would not be achieved if the Government leaves out the EEZ from the national network of MPAs. The New Zealand Government's commitments to marine protection are detailed in the National Biodiversity Strategy and Action Plan (2000), which had a goal to "[protect a] *full range of marine habitats and ecosystems representative of New Zealand's biodiversity*" (DOC and MfE, 2000). The Marine Protected Area Policy outlined that this should be done through "*establishing a network of MPAs that is comprehensive and representative of New Zealand's marine habitats and ecosystems*" (DOC and Ministry of Fisheries/MFish, 2005).

By excluding the EEZ, the Government is breaking promises it made to the New Zealand public. The Environment Minister, the DOC and the National Party have all made explicit promises to the New Zealand public to include the EEZ in the MPA legislation.³² See box 2 for examples.

Furthermore, there is clear evidence that better enabling marine protection in the EEZ was a key purpose of the new legislation. On 2 May 2014, the Ministry of Business Innovation and Employment (MBIE) produced a briefing to Minister Simon Bridges which states: "*The Aim of the proposed new legislation is to fill a gap in New Zealand marine protection regime*

Box 2: Government promises to the public

Environment Minister Nick Smith, 2014

"The new Marine Protected Areas Act will broaden the purpose to include conservation and recreation, allow for marine protected areas in the Exclusive Economic Zone, provide for a stronger role for local communities and iwi in decision-making, and improve the processes for establishing reserves, parks and sanctuaries."

National Party, 2012:

"National will pass a new Marine Reserves bill to allow marine reserves beyond the territorial sea, and to improve the way they are created."

Environment Minister Nick Smith, 2011:

"The EEZ legislation announced today does not provide for areas of complete marine protection. The proper vehicle for this is a new and updated Marine Reserves Act."

Department of Conservation, 2014:

"There are still significant marine ecosystems that are not within marine protected areas. Improvements to New Zealand's legislative framework for marine protection would help to ensure protected status for marine areas in the territorial seas and the Exclusive Economic Zone (EEZ)."

³² Nick Smith's 2014 election promise can be found at: <https://www.national.org.nz/news/news/media-releases/detail/2014/09/07/national-to-create-two-recreational-fishing-parks> The 2012 National Party quote is from: National Party, (2012) *Building a Bluegreen Future: An environment policy paper by the New Zealand National Party*, March 2012, page 13. Nick Smith's 2011 quote is from: Nick Smith 2 June, 2011. EDS National Conference – The Bluegreen Agenda. [http://www.edskonference.com/content/docs/2011_papers/Smith,%20Nick%20\(Speech\).pdf](http://www.edskonference.com/content/docs/2011_papers/Smith,%20Nick%20(Speech).pdf) (accessed 12/02/14). The DOC quote is from: DOC, Briefing to the Incoming Minister, 2014, page 9. <http://www.doc.govt.nz/Documents/about-doc/role/publications/bim-2014/briefing-to-incoming-minister-2014.pdf>

by putting in place a process to establish marine reserves in the country's Exclusive Economic Zone."³³

In June 2015, the Cabinet Economic Growth and Infrastructure Committee identified a "key shortcoming" of the current approach to marine protection to be that "*the Marine Reserves Act 1971 does not provide for marine protection in the vast majority of our ocean environment – the EEZ and continental shelf*". (EGI 18/06/15, paragraph 8).

It is also clear that the Government's original purpose for enabling MPAs in the EEZ was for biodiversity protection: "*The legislation aims to further the objective of the New Zealand MPA Policy to 'protect marine biodiversity by establishing a network of MPAs that is comprehensive and representative of New Zealand's marine habitats and ecosystems'*".³⁴

By excluding the EEZ, the Government has set the Act up to fail at achieving its original purpose of biodiversity protection.

5. Improving resilience against climate change and helping sustain a productive fishing industry

The most significant driver of change in our oceans in our lifetime and for our future generations will be climate change³⁵ (NOAA, 2015; Britten *et al.*, 2015; EGI 10/09/15). There is strong scientific evidence that one of the best ways to ensure our oceans can adapt to and withstand climate change is to build and maintain marine biodiversity. Biodiversity makes marine ecosystems and the economically-important fish stocks within them, more robust and resilient (Reimer *et al.*, 2015; Perry *et al.*, 2010; Levin and Lubchenco, 2008; Worm *et al.*, 2006).

The importance of protecting biodiversity for productive fisheries has also led to the use of MPAs as fisheries management tools.³⁶ MPAs produce 'spill-over benefits' – building the health of ecosystems, species diversity and biomass outside the reserve (da Silva *et al.*, 2015; Harrison *et al.*, 2012; Lester *et al.*;2009); and protecting structured habitats, nursery grounds, and fish spawning areas can help sustain fish reproduction, resilience and abundance (Reimer *et al.*, 2015; Low *et al.*, 2003).³⁷

6. Providing more comprehensive governance of the marine environment and more certainty for New Zealand marine resource industries

³³ 2/05/ 2014 MBIE briefing to Simon Bridges (Briefing number 2822 13/14). '*The MBIE comment on proposal for new marine protected areas legislation*'.

³⁴ Briefing: Marine protection in New Zealand and global comparisons, Tracking number: 1862 13-14. Executive Summary, paragraph 3.

³⁵ Environmental change/variability includes warming of oceans, changes in ocean currents including potential regime shifts (large-scale and persistent changes in ocean circulation and vertical water column structure), increase the likelihood of invasive species (Willis *et al.*, 2007), increasing ocean acidification, changes in salinity, and sea level rise (Office of the Prime Minister's Science Advisory Committee, 2013).

³⁶ 24% of 1600 of MPAs in the USA are focused on sustainable fisheries (Wenzel and Brock, 2013)

³⁷ It is for these reasons that the southeast U.S. fishery managers are considering a proposal to protect certain areas where fish live and spawn. The proposed spawning special management zones would target small, important areas on the edge of the continental shelf (<http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2015/08/protecting-fish-spawning-sites>)

According to international law (UNCLOS), proper governance of our ocean requires legislation that enables protection as well as sustainable use. The fact that New Zealand has not yet effectively implemented our international obligations to protect areas of the EEZ (explained in section 3), means that our governance framework is incomplete. This creates uncertainty for marine resource industries about what areas can be used and what areas will either be fully protected or be subject to specific limitations on use. This uncertainty has an impact on long-term planning and investment.³⁸

Including the EEZ in the MPA legislation is therefore an essential step to achieving a more robust marine governance framework and creating greater certainty.

7. Future-proofing the Act and avoiding costly amendment/review at a later date

If the EEZ is not included in the legislation now, it is highly likely that it will have to be included later in order to meet New Zealand's international obligations. Therefore, enabling the inclusion of the EEZ in legislation now will future-proof the Act, provide essential management and protection options for future decision-makers, and avoid costly and inefficient legislative amendments/reviews to include the EEZ at a later date.

We already know that: the biodiversity in our EEZ is globally important; that a representative network of MPAs is not possible without the EEZ; that greater certainty benefits users of the oceans as well as conservation; that greater resilience to ecosystem disturbance is important; and that the Government has promised this reform. It makes no sense to leave out the EEZ. It makes every sense to include it. Let's do it once and do it right!

³⁸ Government already recognises that "*Developing a robust marine governance framework would enable more certain development of our rich marine resource base while sustaining our unique marine environment.*" (Natural Resources Sector Briefing to the Incoming Minister (2014), page 6.) (<http://nrs.mfe.govt.nz/sites/default/files/nrs-bim-final.pdf>)