

# Regulatory Impact Statement

## ESTABLISHMENT OF A KERMADEC OCEAN SANCTUARY

### Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Ministry for the Environment. It provides an analysis of the impacts associated with the decision to create the Kermadec Ocean Sanctuary (the Sanctuary), rather than the rationale behind the decision.

Cabinet agreed to create the Sanctuary in September 2015 [CAB-15-MIN-0104 refers] to recognise the importance of the Kermadec region and ensure that the environment was maintained in pristine condition.

This paper looks at the current costs to relevant stakeholders (predominately iwi and the fishing and mining industries) and considers the future costs that could be incurred by these parties.

We have information regarding existing economic interests in the Kermadec region, but we do not have robust information on the future potential economic interests in the region. Due to the existing protection in the Kermadec region, and the region's isolation with no access to infrastructure, we would expect the current level of human use and impact to stay the same for the foreseeable future if the status quo remained.

Our assessment is that there are limited costs imposed to users at this time but there is an opportunity cost in that creating the Sanctuary rules out potential future economic benefits from fishing and mining in the area. However, it is difficult to quantify this opportunity cost, due to the number of economic variables and uncertainties that would need to align.

In developing the proposal to create the Sanctuary, the proposal was constrained by the need to meet New Zealand's international obligations relating to marine management and protection and maritime law. Options for the operation of the Sanctuary have been investigated and analysed against the objectives of the Sanctuary and the current management of the area.

The timing that was necessary to enable the announcement of the proposal to create the Sanctuary meant that early engagement on the proposal with stakeholders did not occur. Since the announcement, Ministers and officials have engaged with closely connected stakeholders on the impacts of creating the Sanctuary and options for the operation of the Sanctuary. This information was used to inform decisions relating to the operation of the Kermadec Ocean Sanctuary (such as the management) and assess the impacts of the proposal.

The Government is currently consulting on a new approach to New Zealand's marine protection framework in the territorial sea, including the development of a representative network of marine protected areas. Although the Sanctuary is being developed in parallel to this policy work, this reform is being considered separately to the creation of the Sanctuary.



Glenn Wigley,

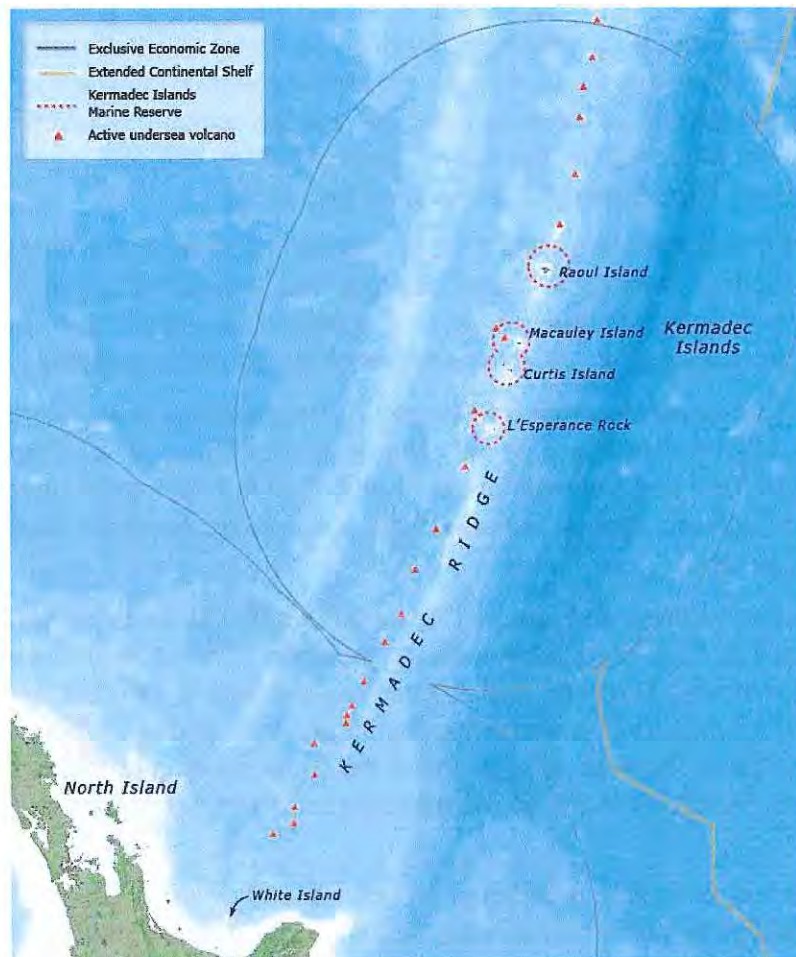
**Director, Environmental Systems Directorate**

Date: 25/2/16.

## Status quo

1. The Kermadec region (see map below) is the northern most part of New Zealand and our Exclusive Economic Zone (EEZ). The region is located in the South Pacific Ocean, around 1,000km northeast of New Zealand (about halfway between Tauranga and Tonga). The area contains the world's longest volcanic arc, the second deepest ocean trench (at 10km deep) and is one of the most pristine places on earth. Almost the entire seabed in the Kermadec area extends to over 1,000 metres deep and more than a third of it is over 5,000 metres deep. The region is home to six million seabirds of 39 different species, 35 species of whale and dolphin, three species of marine turtle (all endangered) and thousands of species of fish and other marine life, many of which are unique to this unusual habitat.

Map: The Kermadec region and islands



2. The Kermadec region is important from a global perspective because of its rich biodiversity and geology. Many of the species that exist in and pass through the ocean around the Kermadec islands exist only there, or are critically endangered in other parts of the world (e.g. some species of bryozoans and sea turtle).
3. The Kermadec region's biodiversity and relatively unspoiled nature gives it a crucial role in ocean ecosystems, including playing a role as a migration route and safe haven for far ranging species (e.g. seabirds, sharks, turtles and whales). This makes the Kermadec

region valuable to science and for furthering our global understanding of our marine environment, ecosystems and the ocean's life supporting processes.

4. The Kermadec region is also of cultural significance to a number of iwi, who used the islands as a stop-over point on their journey to New Zealand from the Pacific. Polynesian people settled in the Kermadec Islands between the 10<sup>th</sup> and 14<sup>th</sup> centuries. The first Europeans to reach the islands in May 1788 found no inhabitants. The New Zealand Government annexed the Kermadecs in 1887, with European settlers, including whalers, living on the islands from the early 19th century until 1937. The islands are now uninhabited, except for the permanently manned Raoul Island Station, which is manned by the Department of Conservation (DOC).
5. Visits to the islands are restricted by DOC, which allows visits to Raoul by volunteers assisting in environmental restoration or monitoring projects, other visitors engaged in nature study, and a limited number of visitors on nature tourism cruises (who need a permit from DOC). Visits to the other islands are generally restricted to those engaged in scientific study of the islands and are managed by DOC. Under international law, vessels are able to freely transit through the Kermadec Region.

#### **Existing protection in the Kermadec region**

6. The New Zealand Government has been actively conserving the Kermadec Islands and surrounding region since the mid-1900s. The Kermadec Island Nature Reserve was created in 1939 to protect the Kermadec Islands, and the Kermadec Islands Marine Reserve was created in 1990 to protect the sea around the Kermadec Islands establishing a no-take marine reserve from the shoreline out to the 12 nautical mile territorial sea boundary (see map above).
7. The EEZ surrounding the Kermadec islands has limited protection. A benthic protected area (BPA), created in 2007 under the Fisheries Act 1996, prohibiting some fishing activities (dredging and bottom trawling up to 50 metres off the seabed) covers the Kermadecs territorial sea and surrounding EEZ seabed out to 200 nautical miles.

#### **Government decision to create the Kermadec Ocean Sanctuary**

8. Over the last decade, a number of local and international stakeholders and conservationists<sup>1</sup> have been campaigning to extend the Kermadec Island Marine Reserve protection out to the Kermadec region's EEZ boundary. In September 2015, Cabinet agreed to create the Kermadec Ocean Sanctuary (the Sanctuary) [CAB-15-MIN-0104 refers] to recognise the importance of the Kermadec region and ensure that the environment was maintained in pristine condition.
9. The proposed Sanctuary will not include the existing marine reserve, but will rather build on it, extending from 12 nautical miles out to the 200 nautical mile EEZ limit covering 620,000km<sup>2</sup>. This equates to about 15% of New Zealand's EEZ.

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<sup>1</sup> In particular the Kermadecs Initiative partners – the Pew Charitable Trust, WWF New Zealand, and the Royal Forest and Bird Protection Society have advocated for the creation of a no-take marine reserve in the Kermadec EEZ.

10. The Sanctuary will be implemented through the development of an Act that will prohibit: all fishing activities; mineral and petroleum prospecting, exploration and mining activities; seismic surveying (except where it is for marine scientific research); dumping; and disturbance or removal of the seabed and subsoil.
11. There is growing international concern about the state of the marine environment. Other nations are increasingly recognising the importance of large fully protected marine areas in the Pacific to ensure examples of the marine environment are protected and managed in their natural state now and in the future (see map in Appendix One).
12. Large scale marine reserves can contribute to preserving biodiversity, providing a safe haven for marine species and providing opportunities for science to observe pristine marine ecosystems. These types of marine reserves provide an insight into how undisturbed marine ecosystems are structured and function, which can be used to inform marine environmental decision-making elsewhere and provide a natural reference for both global changes and changes caused by humans.
13. Recent large protected areas created in the Pacific include:
  - a. 1,269,065km<sup>2</sup> has been put aside by the United States in the North Pacific Ocean for the Papahānaumokuākea Marine National Monument (September 2009);
  - b. 1,064,485km<sup>2</sup> Marae Moana (Cook Islands Marine Park), put aside by the Cook Islands (2012);
  - c. 834,334km<sup>2</sup> has been proposed by the United Kingdom around Pitcairn Island (March 2015);
  - d. 1,300,000km<sup>2</sup> Le parc naturel de la mer de Corail (Natural Park of the Coral Sea) put aside by New Caledonia (2014); and
  - e. 989,842km<sup>2</sup> Coral Sea Commonwealth Marine Reserve put aside by Australia in the Coral Sea (2014).

#### **International obligations/commitments**

14. In addition to domestic obligations, New Zealand has international obligations to protect the marine environment and meet maritime law.

#### *Marine protection*

15. New Zealand is a globally significant maritime nation that has long taken a leadership position on international issues on oceans. New Zealand was early adopters of marine reserve legislation when the Marine Reserves Act was passed in 1971.
16. There are several existing tools that provide different forms of marine protection. No-take marine reserves are the highest level of marine protection afforded.
17. New Zealand's main international obligations relating to marine protection sit under:

- a. The United Nations Convention on the Law of the Sea (UNCLOS): New Zealand has a legal duty to protect and preserve the marine environment (Article 192); and
  - b. The Convention on Biological Diversity (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. New Zealand is required to develop national targets that will collectively achieve the CBD's Aichi targets. The CBD's Aichi Target 11, sets out the goal that by 2020 10% of coastal and marine areas are conserved effectively and equitably managed, whilst being ecologically representative and well-connected to other protected areas and area-based conservation measures.
18. Currently, 44 marine reserves in New Zealand's territorial sea fully protect less than 1% of New Zealand's marine area (about 9.8% of New Zealand's territorial sea).

### *Maritime law*

19. Along with international obligations relating to marine protection, there are a number of obligations and rights relating to maritime law that must be met. In particular, the rights of navigation and overflight, the laying of submarine cables and pipelines and the undertaking of marine scientific research. The regulation of shipping (and related matters such as dumping and discharge of waste) is governed by the international rules established by the International Maritime Organisation.

## **Problem definition**

20. In September 2015, Cabinet agreed to create the Kermadec Ocean Sanctuary [CAB-15-MIN-0104 refers] to ensure that the Kermadec marine region is preserved in its natural state now and in the future.
21. The Kermadec region has been identified as a highly significant marine environment for both New Zealand and the world due to its unique and sensitive habitats, isolation, low level of human impact and ability to provide a safe haven for species that are rapidly declining elsewhere.
22. There are a number of protection mechanisms in the Kermadec region (the BPA and marine reserve). However, this protection framework provides differing levels of protection throughout the Kermadec region, with only the territorial sea around the Kermadec Islands being afforded no-take marine protection. A further limitation of this fragmented framework is that parts of it can be undone.
23. Overall, the current marine protection framework does not provide the level of protection that the Government thinks is appropriate for a region with such global ecological significance.
24. New Zealand is aware that maritime nations around the world are establishing or considering large scale marine protection. The Government considers it important for New Zealand, with stewardship over a large marine area, to be at the forefront of global protection initiatives, to ensure areas such as the Kermadecs are protected and managed in their natural state now and in the future.

25. In addition to the decision to create the Sanctuary, there are a number of operational issues to consider to ensure that the region is preserved in its natural state now and in the future, including:
  - a. the management of the Sanctuary;
  - b. marine scientific research in the Sanctuary; and
  - c. enforcement of the Kermadec Ocean Sanctuary.

## Objectives

26. The overall objective of the Sanctuary is to *preserve the Kermadec region in its natural state now and in the future*.
27. This overall objective will be achieved by ensuring the following sub-objectives are met:
  - a. human use and anthropogenic impacts are controlled in the Kermadec region;
  - b. iwi/Māori interests are recognised in the legislation and governance framework for protecting the Kermadec region;
  - c. marine scientific research in the Kermadec region is promoted and encouraged, but is controlled to ensure it does not negatively impact upon the overall objective;
  - d. public access, tourism and recreation activities that are consistent with the overall objective of preserving the Kermadec region in its natural state is allowed so that the Kermadecs can be enjoyed by a variety of users; and
  - e. the Kermadec region is managed in accordance with New Zealand's international obligations.

## Impact analysis

28. The impact analysis is considered in two separate parts:
  - a. **Part one:** impacts of the creation of the Kermadec Ocean Sanctuary
  - b. **Part two:** decisions relating to the operation of the Kermadec Ocean Sanctuary

### Part one: Decision to create the Kermadec Ocean Sanctuary

29. Cabinet made the decision to create the Sanctuary in September 2015 [CAB-15-MIN-0104 refers].
30. As the decision to create the Sanctuary has already been made, the following impact analysis does not explore alternative options. Instead, it provides discussion and analysis on how the proposed Sanctuary impacts on: economic interests (particularly

fishing and mining); cultural interests; conservation objectives; and international obligations.

## **Economic interests**

### Fisheries

31. The creation of the proposed Sanctuary will prohibit all commercial, recreational and customary fishing activities within the Sanctuary. This approach is consistent with the overall objective and the sub-objective of controlling human use and impacts.
32. New Zealand's marine environment is divided into ten fisheries management areas (FMAs). The exact area proposed for the Sanctuary is referred to as FMA10 under the Fisheries Act 1996.
33. All fishing is prohibited in the Kermadec marine reserve, which covers the territorial seas surrounding the Kermadec Islands. In addition, a benthic protected area (BPA) prohibits fisheries dredging and bottom trawling within the Kermadecs territorial sea and its surrounding EEZ waters (covering the seabed and 50metres of water above the seabed).

### *Commercial fishing*

34. When the Quota Management System (QMS) was established under the Fisheries Act 1996, quota was established in FMA10 to cover the eventuality that commercially viable fisheries were found to be present in the region. This quota is held predominantly by the Crown with a proportion (<16%) held by the Maori Fisheries Trust Te Ohu Kaimoana (TOKM) on behalf of iwi under the Fisheries Settlement.<sup>2</sup>
35. Currently there is limited commercial fishing in the Kermadec region. The FMA10 fishery is presently considered commercially unviable due to the actual tonnage of FMA10 quota being very low, FMA10's distance from New Zealand and Australia, the existing no-take marine reserve in the territorial sea, and the fact that infrastructure cannot be built on/around the Kermadec Islands due to the Kermadec Islands nature reserves and marine reserve.
36. There has been limited commercial fishing. However, quota for highly migratory species (HMS) can currently be fished in FMA10. These species are not permanently resident in the region, moving between the High Seas and other parts of the EEZ. For this reason, quota for these species can be targeted throughout the entire EEZ and is not specific to FMA10.
37. A small proportion of HMS quota (less than 2% for each species) is caught within FMA10 (see Table 1 below).

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<sup>2</sup> Aotearoa Fisheries Limited holds 465,000 quota shares in the rock lobster quota CRA10 (≈0.01% of quota shares in FMA10). This equates to approximately 0.4kg of catch and is so small that they receive a zero allocation due to rounding. This rock lobster quota is not able to be fished in the Kermadec region because rock lobsters are limited to coastal areas which in the Kermadecs are covered by an existing no-take Kermadec marine reserve.

<b>Table 1: Average annual commercial highly migratory species catch taken from FMA10 (2010-15)</b>				
<b>Species</b>	<b>QMS or Non-QMS</b>	<b>Annual catch from FMA10 (tonne)</b>	<b>FMA10 catch as a percentage of EEZ catch</b>	<b>FMA10 export value (NZ\$)</b>
Swordfish	QMS	11.1 t	1.3%	\$124,960
Blue shark	QMS	2.8 t	0.4%	\$367
Bigeye tuna	QMS	2.3 t	1.6%	\$31,202
Moonfish	QMS	1.2 t	1.3%	\$2,208
Albacore tuna	Non-QMS	0.7 t	0.0%	\$2,158
Other	Both	2.0 t	0.01%	\$3,777
<b>TOTAL</b>		<b>20.1 t</b>	<b>0.1%</b>	<b>\$164,672</b>

38. Over the last five years the average annual HMS catch in FMA10 was 20.10 tonnes and the average value of those landings was \$164,672. This compares to the average annual New Zealand catch from all fisheries of 449,000 tonnes and export value of \$1.53 billion (i.e. 0.004% by tonnage and 0.011% by value).
39. The HMS caught in FMA10 contributes to the livelihoods of the five commercial fishing companies currently active in FMA10. However, their catch of HMS within FMA10 accounts for less than 4% of their total catch.
40. The maximum current economic loss is estimated at less than \$164,672 per year, because:
- a. there is no quota under the QMA for FMA10 that is being fished;
  - b. the current HMS fishing activity in the Kermadec region can continue in other areas of New Zealand's EEZ because the species being caught are HMS stocks; and
  - c. even if the Sanctuary did not progress, there is little expectation that quota would be increased in the short to medium term due to the existing fishing prohibition in the marine reserve and the BPA.
41. However, there is an opportunity cost in creating a no-take Sanctuary because it rules out potential future economic benefits from fishing in FMA10.
42. For this reason, TOKM and iwi (as FMA10 quota holders through the 1992 Fisheries Settlement), and other commercial fishing companies who see the Kermadec region as a potential commercial fishery (although the current quota weight equivalent available is



low), may consider that they will be disadvantaged by losing the option of future economic opportunities (see compensation section below).

43. The Government is a major FMA10 quota holder, with 84.5% of FMA10 quota. The Government are prepared to forgo this stake in quota to achieve the objectives of the Sanctuary.
44. It is difficult to quantify this opportunity cost, but any future benefits would be constrained by the same factors that currently constrain commercial returns (e.g. location; quota; existing protection; and ability to catch HMS quota elsewhere).

#### *Fisheries compensation*

45. "Compensation" is the term used for payments made to a party that has had a right or interest adversely affected by a government decision. The payment is to the individual. There is a right of compensation created by the statute or common law. Under the Fisheries Act 1996, quota under the Quota Management System (QMS) is seen as a statutory right.
46. There are a range of options available with respect to compensating users, including:
  - a. explicitly ruling out compensation;
  - b. providing for compensation to particular rights or interests in legislation;
  - c. non-statutory structural assistance payments that are provided by the government by choice, not because there is a legal obligation for the payment to be made.
47. It has been decided that compensation will not be paid in relation to the creation of the Sanctuary, on the grounds of sustainability, protection and biodiversity. This would be achieved by explicitly ruling out compensation in the legislation.
48. The principle not to compensate for global conservation initiatives of this significance is consistent with previous decisions not to compensate for other measures taken to secure the long-term sustainability of marine biodiversity, such as the establishment of marine reserves.
49. There is a risk that not compensating TOKM for this quota could be perceived as undermining the Fisheries Settlement.
50. As an additional option to considering compensation, a level of commercial fishing activity could be provided for in the Sanctuary. However, this option was dismissed as it would not meet the objectives of preserving the Kermadec region in its natural state now and in the future.
51. However, past fishing closures have occurred in New Zealand's marine environment (such as the creation of marine reserves and benthic protection areas) without assertions that the Fisheries Settlement has been undone. In particular, when TOKM was allocated quota in FMA10, it was aware of the value of the quota as it related to fisheries within the pre-existing Kermadec Islands Marine Reserve and the unique and fragile nature of the region's geography.

52. It is considered that not providing compensation is aligned with relevant legislation and precedents, and does not undermine the Fisheries Settlement.

#### *Customary fishing*

53. There are currently no permits issued for customary fishing in FMA10. However, it would be inconsistent with the biodiversity and sustainability objectives of the sanctuary if customary fishing was allowed in the Sanctuary.

#### *Recreational fishing*

54. It would be inconsistent with the biodiversity and sustainability objectives of the sanctuary if recreational fishing was allowed in the Sanctuary.
55. Recreational fishing is minimal and limited to private vessels transiting the area (generally trolling by yachts sailing between New Zealand and the Pacific), although there is no information available on the amount of recreational effort or catch in FMA10. Based on the information provided by Customs, it is estimated that approximately 700 yachts pass through the region from the Pacific each year.

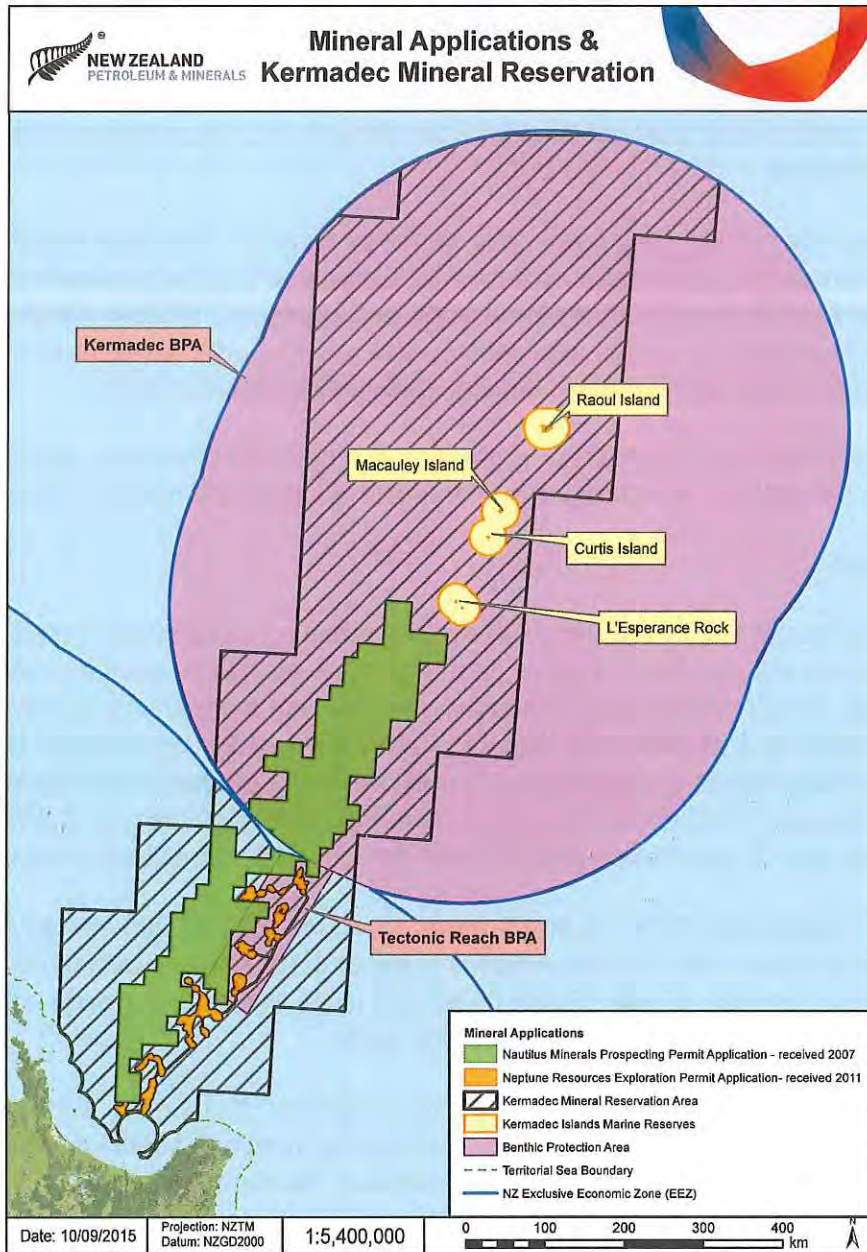
#### Minerals and petroleum resources

56. The creation of the Sanctuary would preclude all mining activity (this includes minerals and petroleum prospecting, exploration and production activities) within area. This approach meets the overall objective and the sub-objective of controlling human use and impacts.

#### *Current impacts*

57. No mining activity currently takes place in the area of the Sanctuary, and there are no current minerals permits (prospecting, exploration or mining) under the Crown Minerals Act 1991 (CMA). However, Nautilus Minerals NZ Limited (Nautilus) applied for a minerals prospecting permit under the CMA in 2007 (see map below). A large proportion of the area of this prospecting permit application sits inside of the proposed area for the Sanctuary.

Map: existing applications for permits under the Crown Minerals Act



58. The Minister of Energy and Resources created a Mineral Reservation under the CMA over certain areas of the Kermadec region in 2010 (see map above). The purpose of the reservation was to consolidate technical data over the reserved area and to consider options for the efficient allocation of the acreage, in order to better meet the purpose of the CMA. The reservation means that the Ministry of Business, Employment and Innovation (MBIE), which administers rights to Crown-owned minerals, is not accepting any new mineral permit applications over certain areas of the Kermadec Arc on the Continental Shelf. This doesn't affect Nautilus because their permit application predates the imposition of the reservation. The reservation has been extended several times since 2010 and is due to expire on 4 July 2017. The creation of the Sanctuary would make the coverage of the reservation in the Sanctuary's area redundant.
59. MBIE formally accepted Nautilus's mineral prospecting application in 2013, and are in the process of evaluating whether a prospecting permit can be awarded under the CMA.

Prohibiting mining activity in the Sanctuary means Nautilus will not be able to progress their prospecting plans in the area of the Sanctuary. However, under the proposal, Nautilus will still be able to progress their plans for prospecting in their application area south of the Sanctuary (if their application is approved under the CMA process).

60. The Sanctuary would prevent Nautilus from carrying out any mining activities in the Sanctuary area.
61. If Nautilus wished to proceed with their permit application, their area would be reduced to approximately 44% of their current application (limited to the application area south of the proposed Sanctuary). As a permit is yet to be awarded, MBIE is working with Nautilus to refine their permit application (MBIE working with applicants to refine their permit application areas to avoid sites of sensitivity is commonplace).
62. The present economic impacts of prohibiting mining in the Sanctuary are considered to be minor. Nautilus does not have, and has not had, any staff based in New Zealand.

#### *Future impacts*

63. There are thought to be high levels of mineral prospectivity on the Kermadec volcanic arc, primarily high grades of copper, gold and silver as well as seafloor massive sulphides. These minerals are potentially valuable, but the resource is not yet fully understood and is situated at significant depths in the ocean which make accessing the minerals complicated and expensive. Almost the entire seabed in the Kermadec EEZ extends to over 1,000 metres deep and more than a third of it is over 5,000 metres deep. The Kermadec-Tonga trench goes to more than 10,000 metres below the surface.
64. Nautilus' application wishes to target areas of around 1,000-2,000 metres deep. Although in Papua New Guinea Nautilus is within three years of commencing mining operations at depths of over 1500m below sea level, there are currently no successful ongoing deep sea mining operations at this depth.
65. Despite the difficulties, advances in seabed exploration and mining technology have resulted in interest from domestic and international investors seeking to identify and develop a range of submarine mineral deposits in the Kermadecs.
66. No comprehensive study of the mineral resource and potential economic value or biodiversity has been undertaken. In order to gather more information on the Kermadecs, GNS Science has advised it would need to undertake further surveys and data analysis. In July 2014, GNS advised that a budget of \$18 million spent over five years would significantly enhance the current knowledge of the nature and extent of minerals resources focusing on the Kermadec volcanoes for seafloor massive sulphide deposits. Extending the work to cover the remaining Mineral Reservation area (412,000 square kilometres and as explained below) is estimated to cost an additional \$15-20 million and would take three more years to complete.
67. Like the impact the Sanctuary has on prohibiting fishing, prohibiting mining in the Sanctuary rules out future potential economic benefits from mining within the Sanctuary.
68. However, the remaining area of Nautilus's application area outside of the Sanctuary is considered prospective and that it could offer an attractive mining investment opportunity. This would mean that future economic benefits from potential mining in the

Kermadec arc are not completely ruled out. Furthermore, Nautilus has indicated interest in additional prospecting acreage south of their current application which would not be affected by the Sanctuary's prohibitions (provided the application is fully outside of the Sanctuary).

69. As with fishing quota, by creating the Sanctuary, the Government is forgoing any potential royalties from future mining activities in the Kermadec region.
70. As Nautilus's prospecting application has not been granted, the Government would not face any cost as a consequence of limiting the application to the southern area below the Sanctuary's proposed boundary.

### Cultural interests

71. In *Ko Aotearoa Tēnei* (the Waitangi Tribunal's report into the Wai 262 claim), chapter four notes that relationships with the environment are fundamental to Māori. Parts of the environment are taonga (treasured things), for which iwi and hapū are obliged to act as kaitiaki (cultural guardians).
72. The Kermadec region is of particular importance to Māori because of its conservation values and because of the role the region played during their navigation to New Zealand from the Pacific.
73. Ngāti Kuri and Te Aupōuri (far-North iwi) claim an association with the Kermadec islands as tangata whenua, based on a period of habitation while travelling to New Zealand. This association has been recognised by the Crown in deeds of settlement signed in 2014.
74. Ngāti Kuri's Statutory Acknowledgements state that Ngāti Kuri has a particular cultural, spiritual, historical, and traditional association with the Kermadec Islands. Furthermore, in their deed of settlement Ngāti Kuri define their rohe as extending out to the Kermadec Islands.
75. Te Aupōuri's deed of settlement states that "*Rangitāhua [Raoul Island] is especially significant to Te Aupōuri and other Māori in that it served as one of the only stop-over points that allowed migratory waka to make the long and dangerous journey between the Cook Islands and Aotearoa...In a spiritual sense for Te Aupōuri, Rangitāhua represents a link to Hawaiki, to a bygone era of long-distance ocean voyaging and discovery, and their earliest Polynesian origins.*"
76. Other iwi, such as Ngaa Rauru Kītahi have also asserted that they have a strong connection to the Kermadec region.<sup>3</sup>
77. Although the Sanctuary would prevent customary fishing, cultural interests are recognised in the legislation and in relation to the management framework for the Sanctuary. This contributes to the sub-objective of ensuring that iwi/Māori interests are recognised in the legislation and management framework for protecting the Kermadec region is met.

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<sup>3</sup> As outlined in Ngaa Rauru Ki's letter to the Minister for the Environment on 8 January 2016.

78. To recognise the Treaty relationship, the legislation for the Sanctuary must recognise the iwi who have ties with Kermadecs in their settlement deeds and ensure that iwi can exercise their rights to act as kaitiaki in the operation and implementation of the Sanctuary, as well as being recognised in the legislation. Options for iwi involvement in the management of the Sanctuary are discussed below in part two of this impact analysis.

### **Conservation objectives**

79. As stated in the status quo, the overall objective of this proposal is to preserve the Kermadec marine region in its natural state now and in the future.
80. The Kermadec region is rich in marine species that are inherently valuable, both its contribution to the sustainability of the world's marine biodiversity, and for the opportunities they offer for science to observe pristine marine ecosystems both now and in the future. For example, 128 scientific papers have been published on the Kermadec region since 2010.
81. A number of scientific and conservation research projects are currently being undertaken in the region, including whale tagging and biodiversity studies. Large areas of the region are virtually unexplored and it is highly likely that future surveys will reveal new and rare marine species.
82. The protection afforded by the Sanctuary will have significant benefits for the biodiversity in the Kermadecs and the entire ocean ecosystem by expanding on the current protection afforded by the Kermadec Marine Reserve. The Sanctuary will make a significant contribution to New Zealand and global marine conservation, protecting unique and sensitive habitats and ecosystems and providing a safe haven for species, including:
  - a. chemosynthetic marine communities (life without light) present in the deep sea in the Kermadec region;
  - b. over 30 submarine volcanoes and the ecosystems they provide for, including extremely acidic hydrothermal vents and a range of volcanic landforms;
  - c. region is home to six million seabirds of 39 different species;
  - d. 35 species of whale and dolphin;
  - e. three species of marine turtle (all endangered);
  - f. thousands of species of fish and other marine life;
  - g. more than 250 species of corals and tiny animals called bryozoans (benthic suspension feeding invertebrates that form small coral-like colonies);
  - h. hydrothermal vent fauna new to science; and
  - i. the use of the Kermadec trench as a migratory pathway for humpback whales moving between the Pacific and Antarctic waters.

## International obligations

### *Marine protection*

83. The Sanctuary will be established as an International Union for Conservation of Nature (IUCN) category 1a area (strict nature reserve/wilderness area). Impacts of human activities and access will be strictly managed to protect the long-term ecological integrity of the area, which align with the objectives of protecting the Sanctuary and the IUCN category 1a criteria.
84. Preserving the Sanctuary in its natural state now and in the future, will contribute to New Zealand meeting Article 192 of UNCLOS.
85. In relation to the CBD and Aichi targets, New Zealand has no areas fully protected in the EEZ and around 9.8% of our territorial sea under no-take protection. Establishment of the Sanctuary would see 15% of the EEZ protected, which would significantly help towards New Zealand meeting obligations under the CBD Aichi Target 11. The creation of the Sanctuary itself would be a significant contribution towards meeting Aichi Target 11, protecting the wide range of biodiversity present in the Kermadec region and be seen as a major contribution by New Zealand to the long term health and integrity of our Pacific ocean.

### *Maritime law*

86. The sub-objectives of ensuring that the Kermadec region is managed in accordance with New Zealand's international obligations, and ensuring human use and impacts are controlled in the Kermadec region are met. The following activities will be allowed in the Sanctuary in accordance with New Zealand's international obligations:
  - a. navigation and overflight;
  - b. marine scientific research;
  - c. laying of submarine cables and pipelines; and
  - d. discharge activities from ships that comply with the Exclusive Economic Zone and Continental Shelf (Environmental Effects—Discharge and Dumping) Regulations 2015 (which meet international obligations).
87. Where marine scientific research will involve the taking of marine life or disturbing the seabed, the activity will need to be approved by the Environmental Protection Authority (EPA) and may be subject to conditions. We consider this approach is consistent with our international obligations.
88. A complete prohibition on dumping is consistent with New Zealand's jurisdiction in the EEZ under international law. Emergency dumping that complies with the requirements of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act) will be able to be authorised where the emergency poses an unacceptable risk, the dumping is necessary to remove the risk and there is no feasible alternative. It is proposed that dumping relating to marine scientific research (e.g. sacrificial anchors) be excluded from the definition of dumping, which is consistent with international law.

## Part two: operation of the Kermadec Ocean Sanctuary

89. Should Cabinet progress with the agreement to create the Sanctuary under an Act [CAB-15-MIN-0104 refers], there are three main operational issues to consider to ensure that the objective and sub objectives are met:
- a. the management of the Sanctuary;
  - b. marine scientific research in the Sanctuary; and
  - c. enforcement of the Kermadec Ocean Sanctuary.
90. The options for addressing these operational issues have been analysed against the objectives and are considered separately below.

### Management of the Kermadec Ocean Sanctuary

91. The Sanctuary will need to be managed to ensure the overall objective of preserving the Kermadec marine region in its natural state now and in the future is met, along with meeting the sub-objectives.
92. Given the remoteness of the proposed Sanctuary, and the current limited number of human impacts, the risk of non-compliance is relatively low. As the Sanctuary builds on the existing protection provided by the marine reserve and the nature reserve, it would be prudent to ensure the management approach for the Sanctuary is integrated with the existing marine reserves and islands.
93. The existing marine reserve and nature reserves are managed under the Conservation Act 1987, using a different process for managing the Sanctuary would make integrated management of the different protection mechanisms more difficult. For this reason, options for the management structure for the Sanctuary are constrained to processes that align with the Conservation Act 1987. The range of options include:
- a. **no management board:** The marine reserve and nature reserve would be managed by DOC as it is currently under the Conservation Act 1987 – in accordance with policies and objectives established in the Auckland Conservation Management Strategy (CMS) and with advice provided by the Auckland Conservation Board.
  - b. **creation of a subcommittee of the Auckland Conservation Board:** this would involve a subcommittee of the Auckland Conservation Board, as a chapter of the Auckland CMS under the Conservation Act 1987. The subcommittee would consist of four members, with two members being appointed by Ngāti Kuri and Te Aupōuri. The Board would recommend new material for the CMS to cover the Sanctuary to the New Zealand Conservation Authority (NZCA) for approval. The iwi members of the subcommittee would be appointed from the Te Hiku o te Ika Conservation Board.
  - c. **creation of a Kermadec Conservation Board (preferred option):** this would establish a new conservation board, the Kermadec Conservation Board, which would have jurisdiction over the Kermadec Islands, marine reserve and the Sanctuary. It would have six members and follow the process for developing



CMSs in the Conservation Act 1987 to develop a Kermadec CMS. Two members would be appointed by the Minister on the nomination of Ngāti Kuri and Te Aupōuri, with one member appointed on the nomination of the Minister of Māori Development to represent other iwi interests in the Kermadecs. The other three members would be appointed having regard to the need for these members to have appropriate and relevant knowledge, skill and experience.

*Option a – no management board*

94. It is considered that not having a Conservation Board will open up the risk of not meeting the overall objective and sub-objectives (particularly recognising iwi/Māori interests and controlling human use and impacts). Therefore, the most appropriate options are either option b (subcommittee) or option c (Kermadec Conservation Board).

*Option b – subcommittee of the Auckland Conservation Board*

95. A subcommittee of the Auckland Conservation Board would allow integrated management through the development of policies and objectives for the Kermadec region in a CMS.
96. Having two members being appointed by Ngāti Kuri and Te Aupōuri would recognise their connection with the Kermadecs. However it doesn't provide an avenue for representation from other iwi who have a connection with the Kermadecs.
97. A subcommittee may lack focus being under the Auckland Conservation Board and that the Te Hiku o te Ika Conservation Board (where the iwi representatives would be appointed from) is a Treaty Redress for Te Hiku Iwi and the Sanctuary is not.
98. Because the subcommittee would be made up of four members, it may be more difficult to appoint the appropriate level of expertise across the four members needed to consider the issues at hand.
99. There would be costs associated with the establishment of a subcommittee.

*Option c – Kermadec Conservation Board (preferred option)*

100. The creation of a separate Kermadec Conservation Board (the Board) would recognise that other iwi have special connections with the Kermadecs, and also recognise the importance of the Kermadec region as a whole by having a conservation board focused solely on the Kermadec region.
101. A separate new CMS for the Kermadec region would likewise recognise the importance of the Sanctuary and the Kermadec region, and would also help support integrated management for the region's protection mechanisms. Using existing provisions of the Conservation Act 1987, the Kermadec CMS will be approved by the NZCA after being recommended by the Board.
102. This option closely provides for iwi/Māori interests through the three members nominated by iwi and the Minister of Māori Development and recognising the importance of the Sanctuary by having a standalone Board.

103. Having three members in addition to the members nominated by iwi and the Minister of Māori Development, will ensure that the Board has the appropriate level of relevant expertise on it, as there would be additional members in comparison to option b.
104. For these reasons, the Board is the preferred option for the management framework of the Sanctuary.
105. The Board and the requirement for a CMS have costs implications for DOC. Additional costs of \$180,000 will be incurred in the 2017/18 financial year associated with the development of the Kermadec CMS, and per-annum costs of around \$90,000 will be incurred associated with creating and servicing the Board from the 2016/17 financial year.

### **Marine scientific research in the Kermadec Ocean Sanctuary**

106. One of the significant benefits of the creation of the Sanctuary is the opportunities the region offers for science to observe pristine marine ecosystems both now and in the future.
107. There is already a process for undertaking marine scientific research (research) in the Kermadec EEZ, under the EEZ Act's Exclusive Economic Zone and Continental Shelf (Environmental Effects—Permitted Activities) Regulations 2013 (Permitted Activity Regulations). Under UNCLOS, research can be conducted in the EEZ by other States<sup>4</sup> with New Zealand's consent.
108. Under the EEZ Act regime, research has been assessed as having a minor or less than minor environmental effect, and so has been classified as a permitted activity. This means that research can occur anywhere in the EEZ without a marine consent, subject to requirements outlined in regulations, namely:
  - a. notification to the EPA;
  - b. notifying relevant iwi and providing the EPA with any information received in response, and any changes made to the research activity as a result of the information received;
  - c. provision of an environmental impact assessment and sensitive environments contingency plan; and
  - d. providing a report to the EPA after the end of the activity.
109. It is appropriate, and in line with the objectives of the Sanctuary and the status quo, to promote and encourage research to continue in the Sanctuary provided that it is consistent with maintaining the Sanctuary in its natural state. There are three options for managing research in the Sanctuary:
  - a. permitting all marine scientific research;
  - b. regulating all marine scientific research; and

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<sup>4</sup> This is broadly defined and includes institutions like universities.

- c. either permitting or regulating marine scientific research, depending on the activity.

*Option a – permitting all marine scientific research*

110. This option would see all research activity permitted in the Sanctuary, which would align with the status quo under the EEZ Act.
111. For the majority of research activities, this would be fine, and in line with the objectives of the Sanctuary. However, in some circumstances this would result in activities that are prohibited in the Sanctuary, such as the taking of marine life or distributing the seabed, being specifically allowed if they were being undertaken as apart of research.
112. This means that permitting all research activities is not considered as the preferred option because it wouldn't align with the protection objectives and ensuring that any research does not negatively impact upon the overall objective.

*Option b – regulating all marine scientific research*

113. This option would see all research activities being undertaken in the Sanctuary needing approval from the EPA, who would provide regulatory oversight.
114. This level of oversight is considered appropriate where research involves activities that are prohibited in the Sanctuary, such as the taking of marine life or distributing the seabed, as it would ensure that any research does not negatively impact upon the overall objective.
115. However, having approvals for undertaking all research activities is considered onerous, as the majority of research activities are considered as having a minor or less than minor environmental effect. Regulating all research activities would also not be seen as encouraging or promoting research in the Sanctuary.
116. For these reasons, regulating all research activities is not seen as the preferred option.

*Option c – either permitting or regulating marine scientific research, depending on the activity*

117. This option would see research activity permitted in the Sanctuary except for where it involves activities that are prohibited in the Sanctuary, such as the taking of marine life or distributing the seabed. Like option b, the EPA would provide regulatory oversight.
118. Under this option, a research application will be able to be declined in limited circumstances. The EPA must decline the application if:
  - a. the EPA determines that the proposed research involves one of the following activities:
    - i. drilling;
    - ii. the use of explosives;
    - iii. the introduction of harmful substances;
    - iv. the installation of artificial islands, installations, and structures; and

- b. the EPA considers that the activity is unnecessary to achieve the purposes of the marine scientific research.

- 119. The EPA will be required to take any information provided by the iwi to the applicant into account. This will ensure that the time and costs associated with the process are proportionate to the limited grounds for the application to be declined.
- 120. This extra level of scrutiny provides a balance between controlling research so that it doesn't negatively impact the Sanctuary whilst encouraging and promoting research by permitting it in most circumstances. Based on this, option c is the preferred option and is appropriate because of the higher level of protection the Sanctuary is affording the area.

#### *Cost recovery*

- 121. Processing of permitted and regulated research applications will create additional costs for the EPA. Currently the EEZ Act enables the EPA to recover costs for functions and services undertaken under the EEZ Act, including processing permitted activities (research is a permitted activity under the EEZ Act).
- 122. The EPA does not cost recover for research where it is government funded or if it involves foreign states. In these cases, the EPA's costs are covered by the Crown. Where research is commissioned by the industry, EPA policy is to recover costs.
- 123. A significant proportion of the research currently carried out in the Kermadec region receives funding from international sources. Of the 128 papers published on the Kermadec region since 2010, 52 were based on research voyages that received funding from international sources.
- 124. The EPA's advice during the development of the Kermadec protection proposals has been that it must be funded for any new activities that cannot be specifically cost recovered. It is appropriate for there to be cost recovery provisions for the EPA to cost recover time and costs incurred related to research activities. This will ensure that costs associated with research applications can be cost recovered if they are not funded through a Crown appropriation. The EPA has also advised that should there be an unexpected increase in the number of research applications, additional implementation funding will be sought by the EPA to fulfil this function.
- 125. This approach is consistent with the status quo in the Kermadec region under the EEZ Act.

#### **Enforcement of the Kermadec Ocean Sanctuary**

- 126. The rules of the Sanctuary will need to be enforced at the level appropriate to ensure the overall objective of preserving the Kermadec marine region in its natural state now and in the future is met, along with meeting the sub-objectives.
- 127. Fishing and mining, the two main activities that will be limited and controlled by the Sanctuary are already enforced in the EEZ around the Kermadec Islands through existing legislation and government activities (such as monitoring by the New Zealand Defence Force). Because of this, it is recommended that the Sanctuary establish offence provisions and enforcement responsibilities by linking to existing legislation:

- a. as oil, gas and mineral activities will be prohibited in the Sanctuary a marine consent could not be issued under the EEZ Act, so any mining activity will be a breach of the EEZ Act and the EPA will remain responsible for enforcement;
  - b. illegal fishing in the Sanctuary will be a breach of the Fisheries Act 1996 and will be subject to the offence provisions of that Act. The Ministry for primary Industries (MPI) will remain responsible for enforcement.
128. Linking enforcement and offence provisions to existing legislation and government departments will allow the existing expertise in enforcement of the different regimes to continue to be available in the Sanctuary and allow enforcement to continue to use the existing risk-based framework.
129. An alternative option to the above preferred approach would be to develop a specific enforcement regime for the Sanctuary, rather than relying on existing enforcement regimes. This option was dismissed because the risks of this would include inconsistency with other protection legislation which generally uses existing enforcement regimes (such as the EEZ Act), and that it could unnecessarily complicate the Sanctuary's legislative framework.

## Consultation

130. The timing that was necessary to enable the announcement of the proposal to create the Sanctuary meant that early engagement on the proposal with stakeholders could not occur.
131. DOC, the EPA, MPI and MBIE have been actively engaged in the proposal to create the Sanctuary. The following departments have also been consulted: the Treasury, Te Puni Kōkiri, Ministry of Justice, Office of Treaty Settlements, Ministry for Foreign Affairs and Trade, Ministry of Transport, and Maritime New Zealand. Their views are reflected in the proposals.
132. Since the announcement, Ministers and officials have engaged with the following stakeholders closely connected with the Sanctuary:
- a. Ngāti Kuri;
  - b. Te Aupōuri;
  - c. Te Ohu Kaimoana (TOKM); and
  - d. Seafood New Zealand (SNZ).
133. This consultation focused on the impacts of creating the Sanctuary and options for the operation of the Sanctuary. This information was used to inform decisions relating to the operation of the Kermadec Ocean Sanctuary (such as the management) and assess the impacts of the proposal.

### *Ngāti Kuri and Te Aupōuri*

134. Consultation has been undertaken with the Chairs of Ngāti Kuri and Te Aupōuri to ensure their interests in the area are reflected in the development of the Sanctuary.

135. Ngāti Kuri and Te Aupōuri have statutory acknowledgements in their Treaty Settlements relating to the Kermadec Islands. Both iwi have expressed their support for the Sanctuary. To reflect consultation with both iwi, the proposals have been changed in how the CMS for the Kermadec Area would be developed and in creating a separate Kermadec Conservation Board (preferring option c, the creation of a Board, over option b, the creation of a subcommittee of the Auckland Conservation Board).

#### *Te Ohu Kaimoana and Seafood New Zealand*

136. TOKM and SNZ are concerned about the impact of the Sanctuary on fishing rights allocated to iwi under the Fisheries Settlement. There has been no fishing under this quota for the past 10 years and it is yet to be allocated to iwi, but TOKM and SNZ are concerned about the impact on the potential for future development of fisheries in the Kermadec area.

137. The opportunity cost is that creating a no-take Sanctuary rules out potential future economic benefits from fishing in FMA10. However, it is difficult to quantify this cost, due to the number of economic variables and uncertainties that would need to align.

138. Past fishing closures have occurred in New Zealand's marine environment (such as the creation of marine reserves and benthic protection areas) without assertions that the Fisheries Settlement has been undone. In particular, when TOKM was allocated quota in FMA10, it was aware of the notional value of the quota as it related to fisheries within the pre-existing Kermadec islands Marine Reserve.

## Conclusions and recommendations

139. The creation of the Sanctuary meets the overall objective to *preserve the Kermadec marine region in its natural state now and in the future* by prohibiting fishing, particular disturbance of the seabed, dumping of waste, seismic surveying, and oil, gas and minerals activities, along with controlling and limiting a number of other human uses and anthropogenic impacts.

140. Overall, the proposal will meet the sub-objectives by:

- a. controlling human use and impacts in the Kermadec region;
- b. recognising iwi/Māori interests in the legislation and through representation on the Kermadec Conservation Board;
- c. enabling marine scientific research to continue in the Kermadec region but controlling research activity to ensure the region is preserved in its natural state;
- d. allowing public access, tourism and recreation activities that meet the overall objective of preserving the Kermadec region in its natural state so that the Kermadecs can be enjoyed by a variety of users; and
- e. managing the Kermadec region in accordance with New Zealand's international obligations.

141. The Kermadec area is rich in marine species that are inherently valuable, both for the long-term sustainability of the world's marine biodiversity, and for the opportunities they offer for science to observe pristine marine ecosystems both now and in the future.
142. The protection afforded by the Sanctuary will have significant benefits for the biodiversity in the Kermadecs and the Pacific Ocean ecosystem. The Sanctuary will make a significant contribution to New Zealand and global marine conservation, protecting unique and sensitive habitats and providing a safe haven for species some of which are rapidly declining elsewhere.
143. Some existing activities will be affected by the establishment of the Sanctuary (e.g. the small level of existing commercial fishing and a percentage of Nautilus' minerals prospecting permit application). However, these impacts are likely to be limited, given the region's isolation and the existing technological barriers for undertaking some activities (such as for deep sea mining).
144. It is recommended that the Sanctuary have a separate Kermadec Conservation Board under the Conservation Act 1987. This will allow appropriate iwi representation, ensure that members have the necessary relevant skills and expertise needed, and allow the Board to focus solely on the Kermadec region.
145. To ensure alignment with the current regime, it is recommended that research be allowed in the Sanctuary in most circumstances. To recognise the level of protection afforded by the Sanctuary, it is proposed that research be regulated by the EPA where it involves activities that are otherwise prohibited in the Sanctuary, the taking of marine life or disturbing the seabed. This aligns with the objectives and is consistent with international obligations.
146. It is recommended that the enforcement of the Sanctuary be linked to existing legislation and government department activity. This will allow the existing expertise in enforcement of the different regimes to continue to be available in the Sanctuary and allow enforcement to remain at the existing levels.

## Implementation plan

147. The Sanctuary will be implemented through the creation of a Kermadec Ocean Sanctuary Act, to be introduced to Parliament in early 2016 and receive Royal Assent during 2016.
148. Enforcement and offence provisions will be implemented by the EPA (mining) and MPI (fishing). The EPA will be responsible for marine scientific research approvals and DOC will be responsible for implementing the management regime for the Sanctuary.

### *Transitional arrangements*

149. The current Auckland CMS provisions from the relevant general chapters and the Kermadec Islands and Kermadec marine reserve chapters will form the combined Kermadec CMS at the passing of the Sanctuary Act.
150. The Kermadec CMS provisions for the Kermadec islands and marine reserve will be reviewed and an ocean sanctuary chapter added at a time not specified.

151. To ensure flexibility in the Board commencing its duties, the Minister for Conservation will be able to commence the Board through Order in Council at a time of the Minister's choosing.

## **Monitoring, evaluation and review**

152. The Kermadec Conservation Board (preferred option) will:

- a. be consulted during the development of the CMS for the Kermadec Area (i.e. the Kermadec Island Nature Reserve and Marine Reserve and the Sanctuary);
- b. recommend the draft CMS to the NZCA for approval;
- c. advise the NZCA and DOC on the implementation of the CMS;
- d. recommend the review and amendment of the CMS to the NZCA; and
- e. advise the NZCA and DOC on any other conservation matter relating to the Kermadec region.

153. The continuation of enforcement by MPI and the outputs from scientific research will provide information for monitoring the Sanctuary, and feed into implementation of the Kermadec CMS.

154. As the Sanctuary will contribute to the growing network of large marine protected areas (MPAs) in the Pacific (see Appendix One), it will be appropriate to engage with the managers of other large MPAs in the Pacific to collaborate on monitoring and evaluation the MPAs individually and as a network. An example of this is the British and US embassies formally approaching the New Zealand government, since the announcement of the Sanctuary, regarding developing a joint monitoring approach.



Appendix One: Map existing and proposed marine protected areas (source: Big Ocean)



