Proposed Regional Coastal Plan: Kermadec and Subantarctic Islands

Section 32 Report

Department of Conservation
Te Papa Atawhai

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1. Introduction

Regional plans are usually prepared by regional councils or unitary authorities. Regional coastal plans are the only mandatory regional plans required under the Resource Management Act 1991 (RMA). Section 64(1) of the RMA requires that there shall be at least one regional coastal plan for the coastal marine area of a region at all times. Section 31A of the RMA requires the Minister of Conservation to prepare a regional coastal plan for the Kermadec and Subantarctic Islands.

Section 31A of the RMA gives the Minister of Conservation certain powers of local authorities (District and Regional councils) as follows (emphasis added):

(1) The Minister of Conservation—

(a) has, in respect of the coastal marine areas of the Kermadec Islands, the Snares Islands, the Bounty Islands, the Antipodes Islands, the Auckland Islands, Campbell Island, and the islands adjacent to Campbell Island, **the responsibilities, duties, and powers that a regional council would have under section 30(1)(d)** if those coastal marine areas were within the region of that regional council; and

(b) may exercise, in respect of the islands specified in paragraph (a),—

(i) the responsibilities, duties, and powers that a regional council would have under this Act if those islands were within the region of that regional council; and

(ii) the responsibilities, duties, and powers that a territorial authority would have under this Act if those islands were within the district of that territorial authority.

(2) The responsibilities, duties, and powers conferred on the Minister of Conservation by subsection (1)(b) are in addition to the powers conferred on that Minister by subsection (1)(a).

(3) The responsibilities, duties, and powers conferred on the Minister of Conservation by this section are in addition to the responsibilities, duties, and powers conferred on that Minister by this Act.

The Proposed Regional Coastal Plan: Kermadec and Subantarctic Islands has been prepared following identification of the key issues facing the two groups of Islands and consultation with the following groups, identified as key stakeholders:

- Central and local government
- Iwi (Ngāti Kurī, Te Aupōuri and Ngāi Tahu)
- Tourism, fisheries and mining sectors
- Research providers
- National environmental groups
- Conservation boards

New Zealand's Subantarctic Islands are made up of five groups of islands: Snares Islands/Tini Heke; Bounty Islands; Antipodes Islands; Auckland Islands; and Campbell Island/Motu Ihupuku and the islands surrounding it. The Kermadec Islands are made up of four groups of islands extending 240 kilometres along the western ridge of the Kermadec Trench. Raoul Island and the Herald Islets form the northernmost group of islands, and L'Esperance Rock is the southernmost island. Macauley, Curtis, Cheeseman and Haszard Islands lie between Raoul and L'Esperance Rock (refer to Fig. 1 in the Proposed Regional Coastal Plan: Kermadec and Subantarctic Islands).

1.1 Section 32 of the RMA

Any plan or policy statement (regional or national) prepared under the RMA must be accompanied by a section 32 report. Section 32 of the RMA requires the Proposed Regional Coastal Plan: Kermadec and Subantarctic Islands to be accompanied by an evaluation that examines:

- The extent to which each objective is the most appropriate way to achieve the purpose of the RMA
- Whether the proposed policies and methods, including rules, are the most appropriate way in which to achieve the objectives in terms of their efficiency and effectiveness

Such an evaluation must take into account:

- The benefits and costs of the policies, rules or other methods
- The risk of acting or not acting if there is uncertain or insufficient information

The section 32 evaluation assists in confirming the resource management issues for the islands and how best to deal with those issues. The full text of section 32 of the RMA is included in Appendix 1.

1.2 Resource management issues

An issue is an existing or potential problem that must be resolved to promote the purpose of the RMA. The purpose of the RMA is captured in section 5:

5 Purpose

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—

(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

To assist in identifying the resource management issues for the islands, the values of the Kermadec and Subantarctic Islands were established first. The coastal marine areas of both groups of islands have extremely high natural character, recognised both nationally and internationally. The need to preserve this natural character is critical to achieving section 5 of the RMA, and hence is a critical issue for the proposed regional coastal plan.

2. Assessment of objectives, policies, rules and other methods

The following assessment first outlines the issue and then considers the appropriateness of the proposed objectives, followed by the benefits/costs; effectiveness; efficiency; and appropriateness of the policies and other methods in achieving the relevant objectives. An evaluation of the rules proposed follows in Section 3.

2.1 Issue 1: Natural character

Recognise the significant natural character values of the coastal marine areas of the Kermadec and Subantarctic Islands and of the islands themselves, and ensure that they are preserved, by restricting activities with the potential for adverse effects on natural character and minimising the risk of oil spill and biosecurity breaches.

Preservation of natural character is a matter of national importance under section 6(a) of the RMA. This is reinforced by policy 13 of the New Zealand Coastal Policy Statement 2010.

Natural character includes the natural processes, elements and patterns that are present in an area. Natural character can be considered as comprising both 'biophysical' and 'experiential' elements. Biophysical elements of the coast include geology, climate and natural communities. The biophysical values are clearly significant in both groups of islands. Experiential values involve the human experience of places, and include recreational or visual amenity, along with cultural and historical elements. The experiential values of both groups of islands are also significant.

It is the isolation, remoteness and challenging environmental conditions of both groups of islands that has allowed them to retain such significant natural character. There is only minimal development in these islands, and it is considered important to continue this situation so that the significant natural character of the islands and their marine environment can be maintained. This approach is consistent with the degree of protection already provided for the both the islands and their coastal marine areas under other legislation.

The Kermadec Islands are nature reserves, and the entire coastal marine area (from MHWS to the outer limits of the Territorial Sea) is a marine reserve (under the Reserves Act 1977 and the Marine Reserves Act 1971, respectively). The Subantarctic Islands are both nature reserves and national reserves under the Reserves Act. The entire coastal marine area of the Auckland Islands is a marine reserve (under the Marine Reserves Act) and a Marine Mammal Sanctuary (under Marine Mammals Protection Act 1978). In the Subantarctic Islands, both the land and surrounding marine areas (out to 12 nautical miles) have international status as a World Heritage Area[1].

To better understand the biodiversity values of the coastal marine area of the Kermadec Islands, the Department of Conservation (DOC) contracted the National Institute of Water & Atmospheric Research Ltd (NIWA) to describe the islands' deepwater (above 100 m) benthic invertebrate and fish assemblages (Beaumont et al. 2009). The study concluded that biological or ecological values of the area would satisfy the criteria

[1] This status is provided pursuant to the World Heritage Convention 1972 administered by UNESCO.

published by the Convention on Biological Diversity for inclusion in a large-scale network of marine protected areas (CBD Secretariat 2009).

The documentation for the World Heritage Nomination – IUCN Technical Evalution for New Zealand's Subantarctic Islands noted that:

> *In summary, the NZSAI* [New Zealand Subantarctic Islands]*, taken together, are the most diverse and extensive of all subantarctic archipelagos. The five island groups of the NZSAI vary markedly in size, geology, landforms and climate but their main distinction is that they are the most significant site for seabirds in all of Insulantarctica. They also stand out for their diversity and numbers of endemic landbirds, flora and for their low level of human disturbance.*[2]

The significant natural character values combined with the isolation of both the Kermadec and the Subantarctic Islands and the fact that access is predominantly by boat, make the risks of biosecurity breaches and oil spills the largest threats to the islands and their coastal marine areas.

To further evaluate and address these risks of maritime incidents, oil spills and biosecurity breaches, the Department of Conservation commissioned Captain Kees Buckens to prepare expert maritime advice. The Department had already undertaken some preliminary work to restrict vessel access close into shore, depending on the length of the vessel. This was based on the assumption that the larger the vessel, the greater the risk of incident and potential for oil spill. Captain Buckens considered the zones suggested and concluded:

> *The creation of such zones of restricted access seems to be a pragmatic approach to protecting the islands and the marine environment from both human intervention and from pests. The reasoning behind the ranges of the suggested limits based on DOC experience with distances that rats and other rodents are able to swim is very reasonable. These limits should not interfere with the normal operation of vessels that are currently visiting the islands. Nor hinder the innocent passage that all ships enjoy while passing the islands, as good seamanship demands a greater distance to any known dangers to navigation.* (Buckens et al. 2009: 2)

Further rationale for a precautionary approach that restricts vessel access is the accuracy of the maritime charts for the waters around the islands. Buckens notes that the nautical charts of both the Kermadec and Subantarctic islands show that most surveys were carried out before the introduction of the IHO1998 standards. Only all areas of NZ2411 (covering the Snares Islands/Tini Heke) have been surveyed since the introduction of the IHO1998 standards—in 1999. In a review of the advice provided by Buckens et al. (2009), Maritime New Zealand also noted that vessels in areas of inadequate charting are a serious navigational risk.

Buckens et al. (2009) provided additional advice that has not been included in the rules of the proposed regional coastal plan, such as:

- Requiring all vessels going to the Kermadec or Subantarctic Islands to complete a Category 1 Safety Certificate for Maritime New Zealand and an Inspection Certificate (MNZ 12409) for Customs clearance;
- Requiring all vessels going to the Subantarctic Islands to carry additional weather fax machines (so as to be able to receive regular weather information) and radar (to identify the numerous outlying rocks, islets and other dangers);
- Requiring vessels going to the Subantarctic Islands to be equipped with anchor

[2] http://whc.unesco.org/uploads/nominations/877.pdf

chain, strong anchor handling gear and a spare anchor and chain in addition to the Category 1 safety gear. These are needed to mitigate the high wear on the anchor gear in the high-energy environment of the islands.

This advice will be followed up outside of the regional coastal plan process.

The potential for harmful and invasive aquatic species transferred through biofouling to cause harm has been recognized by the International Maritime Organization, the Convention on Biological Diversity (CBD), several UNEP Regional Seas Conventions (e.g. the Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution), the Asia Pacific Economic Cooperation forum (APEC), and the Secretariat of the Pacific Region Environmental Program (SPREP) (IMO 2010, Annex 1: 2).

The Department was already aware of the risk of a biosecurity breach as a result of fouling on vessels visiting the Subantarctic Islands and had been requiring vessels carrying passengers with permits to land (under the Reserves Act 1977) to have a hull inspection prior to departure. The Department commissioned NIWA to develop a template for vessel hull inspections and assessment of biosecurity risks to the Kermadec and Subantarctic Regions (Floerl et al. 2010).

Floerl et al. 2010 note that vessel biofouling is one of the main contemporary vectors for the introduction and spread of harmful or invasive species. Most of the > 200 marine harmful or invasive species established in New Zealand waters are thought to have arrived on the hulls of ships, a pattern reported from other locations around the world (Floerl et al. 2010: 1). Vessel biofouling is thought to be the mechanism behind introductions of NIS globally to isolated high-value locations, including sub-polar and polar latitudes (Floerl et al. 2010: 1).

In assessing the Department's approach, Floerl et al. 2010 noted that the expectation that vessels visiting the islands will have no visible biofouling on the hull—only marine biofilm ('slime') is acceptable. Although this is difficult to achieve in practice, NIWA consider it represents a simple and clear standard that vessel operators can work towards. It is also consistent with the recent draft Import Health Standard developed by MAF Biosecurity New Zealand for biofouling on international vessels (MAFBNZ 2010a; MAFBNZ 2010b: 9, 11), and the draft International Maritime Organisation (IMO) guidelines for minimising the transfer of invasive aquatic species through biofouling of ships (IMO 2010, Annex 1: 5).

Floerl et al. 2010 note three options to prevent the introduction of marine harmful and invasive species to New Zealand's high value islands:

i Improvements in vessel hygiene measures, such as regular antifouling paint renewal and/or hull cleaning, can be used to ensure that vessels visiting these locations do not carry biofouling organisms.

ii When a clean hull has not been achieved, a risk assessment process can be used to ensure that only those vessels with biofouling that does not pose a biosecurity risk to the islands are allowed to travel to them.

iii A third option which denies access to the islands (Floerl et al. 2010: 1).

The age of the antifouling paint on a vessel's hull is the best known predictor for biofouling extent and the presence of harmful or invasive species (Floerl & Inglis 2005; Floerl et al. 2010: 4). Vessels that have very recently received a new coating of antifouling paint will mostly be free of biofouling on surfaces coated with the paint. Likewise, a vessel that has very recently received *comprehensive* in-water or shore-based cleaning may be clear of biofouling and pose no immediate biosecurity risk. (Floerl et al. 2010: 4).

All ships have some degree of biofouling, even those which may have been recently cleaned or had a new application of anti-fouling coating. Studies have shown that the biofouling process begins within the first few hours of a ship's immersion in water.

Implementing practices to control and manage biofouling can greatly assist in reducing the risk of the transfer of harmful and invasive species. Such practices can also improve a ship's hydrodynamic performance and can be an effective tool in enhancing energy efficiency on ships. This has been identified by the International Maritime Organisation (commonly known as the IMO) in the Guidance on developing a Ship Energy Efficiency Management Plan and is a tool used within the industry to increase fuel efficiency and reduce air emissions from ships (IMO 2010: 2).

A precautionary approach focussed on preventing introductions of harmful or invasive species is required because of the costs involved in marine pest eradication attempts; the limited success of marine eradications to date (unless detected early); and the added complication of the remoteness of location in the case of the Kermadec and Subantarctic Islands. Examples of marine eradications and the costs involved include:

- The sabella (Mediterranean fanworm, *Sabella spallanzanii*) programme aimed at eliminating sabella from Lyttelton Port (about 1 km^2 in area) by searching and removing individual worms. At the time of planning, the programme was estimated to cost $3.5 million, but was closed about 18 months into its application because of widespread detections of sabella in Auckland. Despite the Auckland findings, the area of the Lyttelton programme was considered to be the limit of feasible elimination for a worm-like species such as sabella.
- Some $2 million was spent on a *Styela clava*, not to eradicate it because it was too well established, but with a focus on education. Despite these efforts, *Styela clava* is still present in all the areas it was originally found, plus in some new areas.
- The eradication programme for the brown mussel (*Perna perna*) incursion after the defouling of the Ocean Patriot oil rig in Tasman Bay cost approx $250,000. This was considered a 'relatively' inexpensive response. It was unique in that the incursion site was small because of the nature of the 'incursion', which was known to be recent and therefore not an established population.
- A successful undaria (*Undaria pinnatifida*) eradication programme was carried out on the Chatham Islands. This cost the insurers of Seafresh 1—Shipowners Mutual Protection and Indemnity Association—approximately NZ$2.5 million for salvage attempts, NZ$380,000 for treatment, and NZ$43,500 for monthly inspections. Eradication was achieved at only 17% of the cost of failed salvage attempts, but required a long-term commitment. In this case, the restriction of undaria to a confined area (i.e. a vessel's hull), the early knowledge of the incursion and rapid response increased the likelihood of eradication.

In the draft Import Health Standard consultation document, MAFBNZ note that: 'In the marine environment, it is often difficult to detect the arrival of new non-indigenous species early enough to make eradication feasible. Tools for detecting, eradicating or managing an established pest are limited, difficult to perform, and expensive.' (MAFBNZ 2010b: 5). Floerl et al. 2005 also stress the point that preventing the introduction and establishment of non-indigenous species is the safest and most efficient way to avoid costs and impacts associated with biological invasions (Floerl et al. 2005: 1).

The objectives to be achieved in addressing Issue 1: Natural character are:

1.1 **To preserve natural character by protection from inappropriate use and development.**

1.2 **To enable use that is consistent with the preservation of natural character.**

1.3 **To protect the indigenous biological diversity of the Kermadec and Subantarctic Islands and their coastal marine areas by avoiding the adverse effects of activities on the nationally significant indigenous community types present.**

It is considered that the proposed objective 1.1 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises the existing significant natural character values of the coastal marine areas of the islands. This sets a clear benchmark for the sustainable management of activities in the coastal marine areas of the islands, that they should be regulated and monitored to ensure they preserve the natural character.

It is considered that the proposed objective 1.2 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises that people do use the coastal marine areas of the islands to provide for their economic, social and cultural well being and health and safety, but such use can be achieved in a way that preserves the significant natural character of the coastal marine areas of the islands.

It is considered that the proposed objective 1.3 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises the high degree of indigenous biological diversity (or biodiversity) in the Kermadec and Subantarctic Islands (including several species which are endemic to individual islands), and the contribution the indigenous biodiversity makes to the significant natural character of the coastal marine areas of the islands.

Overview of benefits and costs of all the natural character policies

There are a range of activities with the potential to affect natural character and exacerbate the risks of biosecurity breaches and oil spills. The policies to manage these risks, and achieve the natural character objectives, are grouped under the following sub headings:

- Maintenance of biodiversity and biosecurity
- Control of surface water activities
- Control of discharges of contaminants
- Controls on structures, disturbance, deposition and reclamation

Benefits

- The policies set a high benchmark consistent with both the existing significant natural character of the islands and the protection status afforded the coastal marine area and the adjacent land by other legislation.[3]
- The policies recognise that vessel biofouling is one of the main contemporary vectors for introduction and spread of marine harmful or invasive species. As noted above, most of the 200 marine harmful or invasive species established in

[3] The Marine Reserves Act 1971, Marine Mammals Protection Act 1978, Reserves Act 1977 and the UNESCO World Heritage status.

New Zealand waters are thought to have arrived on hulls of ships (Floerl et al. 2010: 1).

- The policies should achieve the desired environmental outcome of preserving the existing significant natural character by providing for activities in the coastal marine area of the islands in a manner that will not diminish this natural character.
- The policies will help to reduce the risk of oil spills and biosecurity breaches—the key resource management issues for the coastal marine area of the islands.

Costs

- The policies will result in additional costs for users wanting to go close into shore by requiring them to have a certified clean hull and niche areas. Those costs are likely to be higher for those users who do not already use an effective anti-fouling regime. If a vessel fails the initial diver inspection, then the costs increase in two ways. First, the operator would need to apply for a resource consent and have an independent risk assessment, and, secondly, a potential loss of income for the period while the risk assessment is undertaken and the resource consent for the vessel is processed. In a worst case scenario, if the outcome of the risk assessment is that the risk is greater than negligible, the vessel may be declined access.
- Potential costs in terms of the residual risk of a biosecurity breach despite the proposed controls on structures and biofouling. Experience with marine biosecurity breaches in New Zealand waters to date is that it is nearly impossible to eradicate a pest species once it has established, and eradication attempts are very expensive, as noted in the examples above.
- Potential costs in terms of the residual risk of an oil spill despite the proposed controls on access close into shore relative to vessel size. Oil spill response is a costly exercise at any time. An oil spill response in the Kermadec or Subantarctic Islands will be significantly higher due the remoteness of the islands and the need to transport equipment and personnel and the challenging, high-energy operating environments. Any oil spill response also carries with it a high risk of a biosecurity breach.
- There is a potential cost to tourist operators if competing demand for access to a particular bay develops.
- The policies do not provide for development.

2.1.1 Policies to provide for maintenance of biodiversity and biosecurity

1. To assess any applications for activities in the coastal marine area of the islands to ensure they will not give rise to adverse effects on the natural and physical resources of the islands, including, but not limited to, indigenous flora and fauna and the life-supporting capacity of ecosystems.	
Summary of benefits	Sends a clear policy direction that all activities will be assessed in terms of their potential to adversely affect indigenous flora and fauna and the life-supporting capacity of ecosystems.
Summary of costs	No direct monetary cost. However, the policy maintains the high benchmark set for the assessment of applications for activities in the islands.
Effectiveness	Effective in helping to maintain the significant natural character values, including indigenous flora and fauna and the life supporting capacity of ecosystems.
Efficiency	Efficient because it states upfront the high benchmark against which applications for activities will be assessed.

Appropriateness	The policy is appropriate to give effect to the purpose and principles of the RMA and the New Zealand Coastal Policy Statement 2010 (particularly policies 11 and 13).

2. To maintain and protect biodiversity and the intrinsic values of ecosystems by reducing the risk of introductions of harmful or invasive species from above the waterline of vessels, by requiring checks prior to departure for the islands to ensure vessels avoid introductions of harmful organisms, including but not limited to: • Pest animals (particularly rodents and insects) • Exotic plants • Fouling of equipment that is used in the water but stored on deck	
Summary of benefits	Recognises that vessels are the most likely vector for the introductions of harmful or invasive species in the coastal marine and terrestrial environments and states how the risk of a biosecurity breach from above the water line will be managed.
Summary of costs	The policy will impose additional costs on vessel owners/operators in terms of taking the time for topside (above the water line) inspections prior to departure for the islands if they wish to go close into shore. The cost of not requiring topside inspections is the risk of a biosecurity breach. The cost of a biosecurity breach to the environment of the islands is considered to be huge and is usually irreversible. Considerable work to eradicate pest animals on a number of the islands has taken place, and at great cost. The eradication of feral cats and rats from Raoul Island cost $1 million. The rat eradication from Campbell Island cost $2.6 million. Given the strong interdependency between the land and sea parts of the islands, the adverse effects of a biosecurity breach will affect both environments. A biosecurity breach threatens natural character and the life-supporting capacity of ecosystems.
Effectiveness	It will be effective because it seeks to reduce the risk of a biosecurity breach. Giving effect to this policy will raise awareness and understanding of the need for such checks.
Efficiency	It is an efficient approach because it provides certainty to users of the coastal marine area of the islands, raises awareness of the issue and can be implemented by regional rules.
Appropriateness	It is an appropriate policy for achieving the objective of preserving natural character by protecting against introductions of harmful or invasive species from a vessel above the water line or equipment stored on it. This policy is consistent with Part 2 RMA and policies 11, 12 and 13 of the New Zealand Coastal Policy Statement 2010.

3. To maintain and protect biodiversity and the intrinsic values of ecosystems by managing the risk of introductions of harmful or invasive species by restricting access inside 1000 m from MHWS of the islands to those vessels that can: • Provide evidence of a dry dock cleaning and hull maintenance regime, appropriate to the vessel and its operating environment, that is consistent with the specifications of the manufacturer of the anti-fouling system; and • Demonstrate that they present a low risk of introducing organisms not native to the islands by an in-water diver inspection and certification; or • Obtain a discretionary coastal permit—for which the application must include an independent risk assessment by a qualified contractor.	
Summary of benefits	Recognises that vessels are the most likely vector for the introductions of harmful or invasive species in the coastal marine environment of the islands and states how the risk of a biosecurity breach will be managed.
Summary of costs	The cost of maintaining a clean vessel hull and niche areas is a routine maintenance cost for vessel owners/operators and is in their best interests for fuel efficiency. More frequent, in-water cleaning in order to maintain a clean hull and niche areas to a standard that passes the initial diver inspection will increase these maintenance costs. The policy will impose additional costs on vessel owners/operators to have inspections carried out prior to their departure for the islands if they wish to go close into shore. The hull inspection process proposed is a staged

	process. There needs to be an initial hull and niche area diver inspection that is low cost and serves as an indicator of whether a more thorough assessment is needed. If that initial diver inspection is failed, then the next stage requires a coastal permit and an independent risk assessment, the cost of which will be greater, both for the actual permit and independent risk assessment and the potential loss of income if a vessel is delayed. The cost of not imposing inspections and assessments is the risk of a biosecurity breach. The cost of a biosecurity breach to the marine environment of the islands is considered to be huge, as noted in the examples above in section 2.1. Unless an invasive species is detected early and eradicated while still closely contained, marine invasions are usually irreversible. Given the strong interdependency between the land and sea parts of the islands, the adverse effects of a biosecurity breach will affect both environments. A biosecurity breach threatens natural character and the life-supporting capacity of ecosystems.
Effectiveness	It will be effective because it provides a staged approach to management of the risk. If the inspection and independent risk assessments are failed, and cleaning of the vessel is not an option, vessels will be prevented from entering the coastal marine areas of the islands.
Efficiency	It is an efficient approach because it provides certainty to users of the coastal marine area of the islands and can be implemented by regional rules.
Appropriateness	It is an appropriate policy for achieving the objective of preserving natural character by protecting against introductions of harmful or invasive species from a vessels hull or niche areas. It is consistent with Part 2 RMA and policies 11, 12 and 13 of the New Zealand Coastal Policy Statement 2010.

4. To maintain records of inspections and samples taken from vessel hulls and niche areas during inspections and/or risk assessments.	
Summary of benefits	Contributes to building knowledge and monitoring the effectiveness of the provisions of the plan.
Summary of costs	Administrative costs associated with running a database and sample library.
Effectiveness	Maintaining records of samples taken from vessel hulls and niche areas is an effective way to build knowledge and understanding of, for example, recurrent species, areas of susceptibility and key vectors.
Efficiency	Efficient because it makes use of data that are already being collected during inspections.
Appropriateness	Appropriate in that it allows learning from current activities and helps to meet the RMA requirement to monitor the effectiveness of the provisions of the plan.

5. If an operator opts to have a risk assessment of fouling on a vessel's hull and niche areas, to process the coastal permit application as expeditiously as possible and endeavour to process on a non-notified basis wherever possible.	
Summary of benefits	Recognises the need to be reactive and minimise delays to vessels.
Summary of costs	The costs are associated with obtaining the permit and the independent risk assessment. This policy seeks to minimise costs to operators by minimising delays.
Effectiveness	For this policy to be effective it requires procedures, protocols and requirements to be clearly set out up front.
Efficiency	Efficient because the policy provides certainty to users of the coastal marine area.
Appropriateness	It is appropriate to seek to minimise costs and delays to users of the coastal marine area.

6. To provide for and encourage appropriate research that builds knowledge and understanding of the intrinsic values of the ecosystems.	
Summary of benefits	Sends a clear signal that research and building knowledge and understanding of the marine environments of the islands is appropriate. Such knowledge will inform assessments of the effectiveness of the proposed regional coastal plan and future policy and regulatory planning. This is particularly important for the Kermadec Islands, as the NIWA report (Beaumont et al. 2009) identifies that there has been limited scientific research at water depths less than 100 m in the Kermadec Islands and that more systematic biological surveys are needed to document the islands'marine habitats. Research has, to date, focused on seamounts associated with hydrothermal vents at depths between 100 m and 2500 m.
Summary of costs	Knowledge and understanding of the ecosystems and how they function could potentially result in more regulation to ensure preservation or, conversely, allow for less regulation of activities.
Effectiveness	Effective because it acknowledges the importance of research to increase knowledge about the islands' marine environment and ecosystems.
Efficiency	Providing a regime that encourages research is an efficient way of building knowledge and understanding of the marine environment and ecosystems.
Appropriateness	It is appropriate to clearly signal that research is needed to build knowledge and understanding in order to preserve the significant natural character values of the islands.

2.1.2 *Policies to provide for control of surface water activities*

7. To provide for public access to the coastal marine area of the islands, by vessels, in a manner that addresses both the need for navigation safety, thereby reducing the risk of an incident resulting in an oil spill, and the associated risk of biosecurity breach, by restricting vessel access close into shore relative to vessel size.	
Summary of benefits	Recognises that providing for public access is a matter of national importance, but does this in a way that preserves the natural character of the islands.
Summary of costs	Imposes restrictive regulation on vessels wanting to access close into shore.
Effectiveness	Effective because it manages the activities of the key risk vector—vessels visiting the islands.
Efficiency	Approach is efficient because it provides certainty to users of the coastal marine area of the islands and can be implemented by regional rules.
Appropriateness	The restrictions are justified given the significant natural character of the islands and the key threat of oil spills, and the associated risks of biosecurity breaches, particularly given the isolation of the islands and the extreme environmental conditions. The restrictions give effect to policies 11 and 13 of the New Zealand Coastal Policy Statement 2010.

8. To avoid adverse effects on southern right whales when they are breeding and nursing in Port Ross by restricting vessel access	
Summary of benefits	Recognises the importance of Port Ross as the main breeding ground for southern right whales in the South Pacific.
Summary of costs	No direct monetary cost; however, there may be additional measures a vessel needs to take if it does have access to Port Ross during the breeding and nursing periods. There may be costs to some vessels if their access to Port Ross is restricted.
Effectiveness	The policy would be more effective in avoiding adverse effects on southern right whales if vessels were prohibited from Port Ross when the whales were breeding and nursing. However, this is not practical from a research perspective, nor is it safe in the event of smaller vessels needing to seek shelter.
Efficiency	The policy is efficient in that it seeks to avoid potential adverse effects on

	southern right whales while they are breeding and nursing but recognises that vessels may still need to use the coastal marine area of Port Ross at this time, particularly for shelter.
Appropriateness	Policy is appropriate in that it seeks to avoid adverse effects on an indigenous and formerly endangered species, while recognising that some use is still appropriate, particularly to provide for safety. The policy gives effect to policies 11 and 13 of the New Zealand Coastal Policy Statement 2010.

9. To identify preferred anchorages as exceptions to the access restrictions to allow for safe anchorage for vessels of an appropriate size.	
Summary of benefits	Provides for the health and safety of users of the coastal marine area of the islands.
Summary of costs	No direct monetary cost; however, by allowing vessels close into shore there is a risk of biosecurity breaches and oil spills, the costs of which would be huge. For example, the eradication of feral cats and rats from Raoul Island cost $1 million, and the eradication of rats from Campbell Island cost $2.6 million. There are also examples above in section 2.1 of the costs involved in marine eradication programmes.
Effectiveness	The preferred anchorage sites, noted as exceptions to the access restrictions, allow for access for shelter for smaller vessels and were identified with the input of existing users. They provide for shelter for vessels up to 75 m in length for a range of wind conditions in the coastal marine area of the Subantarctic Islands. Identifying specific sites is effective in that it contains the risk of biosecurity breaches and oil spills to the identified sites.
Efficiency	The policy is efficient because it provides certainty to users of the islands' coastal marine areas.
Appropriateness	Providing for health and safety is paramount. To do so in a manner that reduces the risk of oil spills and biosecurity breaches is appropriate, given the high natural character values of the islands, and is consistent with Part 2 RMA.

10. To avoid cumulative adverse effects on natural character values and the intrinsic values of ecosystems by limiting the number of commercial tourist vessels within different parts of the coastal marine area of the Subantarctic Islands.	
Summary of benefits	Preserves the remoteness and wilderness aspects of the high natural character values of the islands for eco-tourists, while at the same time keeping adverse effects on wildlife to a minimum.
Summary of costs	There is the risk of forced last-minute itinerary changes if overlaps in the itineraries of commercial tourist operators are not picked up in advance.
Effectiveness	The policy is effective because it provides certainty as to how the cumulative effects of commercial tourist vessels will be addressed.
Efficiency	While minimising the effects of vessel activity on wildlife and ecosystems, the policy also recognises that the expedition-type trips provided by the eco-tourism operators rely, to an extent, on the isolation and remoteness of the islands. This experience would be significantly diminished if there was more than one tourist vessel at a time at particular locations.
Appropriateness	The policy is appropriate because it addresses a key factor contributing to the significant natural character values of the islands: remoteness, isolation and the limited presence of humans. It allows the cumulative impacts of increasing visitor activity to be managed.

11. To provide for vessels that facilitate monitoring, research and operational activities in the coastal marine area of the Kermadec and Subantarctic Islands that will contribute to building knowledge of and support sustainable management of the coastal marine area of the Islands.	
Summary of benefits	Monitoring, research and operational activities contribute to the sustainable management of the coastal marine areas of the islands. For example, there is a lack of information on the marine habitats of the Kermadec islands in

	waters less than 100 m deep, even though these areas may be quite close to the islands themselves (Beaumont et al. 2009).
Summary of costs	No direct costs foreseeable. Any vessel presence in the waters of the islands presents a risk of oil spills and biosecurity breaches.
Effectiveness	The policy is effective as it sends a clear message about the types of activities considered appropriate in the coastal marine areas of the islands.
Efficiency	Providing for monitoring, research and operational activities in the coastal marine area of the islands is efficient, because these are essential to achieving sustainable management.
Appropriateness	It is appropriate to provide for activities that will benefit sustainable management of the islands, as long as the activities comply with other provisions of the proposed regional coastal plan.

12. To provide for unrestricted public access to the surface waters of the coastal marine area of the islands by ancillary craft.	
Summary of benefits	Under section 6 of the RMA it is a matter of national importance to provide for public access to and along the coastal marine areas of the islands. While landing on the islands themselves is tightly controlled under other legislation, they can be viewed and appreciated from the water. Ancillary craft represent significantly less risk of a biosecurity breach than vessels continuously in the water. Movement of ancillary craft between fishing vessels seeking shelter in the Auckland Islands is essential to the wellbeing and health and safety of the vessels' crews.
Summary of costs	There will be some adverse effects from the use of ancillary craft, particularly if such effects (e.g. noise and disturbance to wildlife) are cumulative.
Effectiveness	Policy is effective because it recognises the need to provide for public access.
Efficiency	As access by ancillary craft is essential, it is efficient to clearly provide for it.
Appropriateness	It is appropriate and necessary to allow ancillary craft access to the coastal marine area of the islands, because of requirements under section 6 of the RMA and also for health and safety.

Control surface water activities—other methods

1. The Department of Conservation will encourage operators of commercial tourist vessels to provide passage plans to the Department in advance, to allow early detection of any potential overlaps in itineraries.	
Summary of benefits	Allowing potential overlaps to be identified in advance will assist in ensuring minimal disruption to vessels' itineraries.
Summary of costs	There will be some administrative and time costs in providing the information.
Effectiveness	The effectiveness of this method will depend on operators' willingness to provide passage plans. Providing this information will be voluntary, but it is in the best interests of the operators to do so.
Efficiency	The policy is efficient in that it allows vessel operators to be informed and able to avoid overlapping itineraries.
Appropriateness	This method is appropriate as it gives effect to policy 7 and the rules controlling surface water activities in the islands.

2.1.3 Policies to control discharges of contaminants

13. To prohibit the use and transport of heavy fuel oil and ship-to-ship transfers of any fuel type in the coastal marine areas of the Kermadec and Subantarctic Islands.	
Summary of benefits	This policy reduces the risk and impact of oil spill in the coastal marine areas of the islands.
Summary of costs	There will be a cost to those vessels that use heavy fuel oil that may wish to visit the islands, given that the policy excludes those vessels that use or carry heavy fuel oils from entering the coastal marine area of the islands. Vessels wanting to undertake ship-to-ship fuel transfers will also be faced with the costs of finding alternative options.
Effectiveness	It is effective because while it does not remove all risk of oil spills, it significantly reduces any potential impacts associated with them, as heavy fuel oils are likely to be much more persistent in the environment than lighter fuels. Prohibition of ship-to-ship transfers of fuel removes the risk of oil spills associated with that activity.
Efficiency	The policy is efficient because it provides clarity on what is acceptable in terms of fuel use and transport.
Appropriateness	Restricting the types of fuel and how fuel is handled is appropriate as this approach will reduce the risk and impact of oil spills. It is also consistent with the existing restriction on carrying and using heavy fuel oils in Antarctic waters.

14. To avoid the discharge of untreated human sewage directly to water in the coastal marine area from land, and only allow the discharge of treated sewage where: (i) There has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and (ii) The action is informed by an understanding of tangata whenua values and the effects on them.	
Summary of benefits	The discharge of any sewage to water is offensive to Māori and the practice is generally considered inappropriate and unacceptable by most people. Avoiding discharges of untreated sewage and only allowing treated sewage to be discharged when all alternatives have been considered will assist in maintaining the existing high water quality of the islands.
Summary of costs	There will be costs associated with ensuring the infrastructure and methods are in place to manage sewage in a way that meets the requirements of policy 14.
Effectiveness	The policy sends a clear signal that discharges of untreated sewage are not allowed in the islands and gives effect to the various statutory obligations noted below in the discussion of appropriateness.
Efficiency	It is efficient because it will avoid degradation of water quality.
Appropriateness	It is appropriate for a number of reasons to avoid discharges of untreated sewage and only allow discharges of treated sewage when alternatives have been considered. In particular: discharges of sewage to water are offensive to Māori and considered generally unacceptable to everyone; this policy satisfies Part 2 of the RMA (matters of national importance the regional coastal plan for the islands must recognise and provide for (particularly sections 6(a), (c) and (e)); other matters that the plan should have particular regard to (particularly sections 7(a), (aa), (b), (c), and (f)); and talking account of the Treaty of Waitangi (section 8); and giving effect to numerous policies in the New Zealand Coastal Policy Statement 2010, particularly policy 23(2).

15. To acknowledge that: (i) There is a small and intermittent discharge of untreated sewage from land to the coastal marine area from a toilet on Campbell Island/Motu Ihupuku. (ii) There are technical difficulties that affect the management of sewage on Campbell Island/Motu Ihupuku—such as peat soils, high water table and remoteness of the island. (iii) Options and/or alternatives to treat or remove the current discharge will be investigated and implemented within 5 years of this plan becoming operative.	
Summary of benefits	This policy recognises that there is a discharge of untreated sewage from a toilet on Campbell Island/Motu Ihupuku that needs to be addressed.
Summary of costs	There will be costs associated with ensuring the infrastructure and methods are in place to manage sewage in a way that meets the requirements of policy 14.
Effectiveness	The policy is effective because it acknowledges that there is an unacceptable discharge of untreated sewage to the coastal marine area that needs to be addressed.
Efficiency	It is efficient in that it provides a 5-year period to address the problem, thus allowing time for technical difficulties associated with managing sewage on Campbell Island/Motu Ihupuku to be addressed efficiently.
Appropriateness	It is appropriate to avoid discharges of untreated sewage and only allow discharges of treated sewage when alternatives have been considered. The reasons for this include: discharging sewage to water is offensive to Māori and considered generally unacceptable to everyone; Part 2 of the RMA (matters of national importance the regional coastal plan for the islands must recognise and provide for (particularly sections 6(a), (c) and (e)); other matters that the plan should have particular regard to (particularly sections 7(a), (aa), (b), (c), and (f)); and talking account of the Treaty of Waitangi (section 8); and giving effect to numerous policies in the New Zealand Coastal Policy Statement 2010, particularly policy 23(2).

16. To avoid discharges of contaminants to water or air and, where avoidance is not practicable, to remedy or mitigate the adverse effects of such discharges on ecosystems and habitats.	
Summary of benefits	This policy will maintain the existing high water quality and air quality on the islands.
Summary of costs	There may be costs to applicants wanting to undertake activities that include discharges, either because these are declined or for methods to remedy or mitigate the effects of discharges.
Effectiveness	The policy is effective because it sends a clear signal that discharges of contaminants are not desirable.
Efficiency	It is efficient because it will avoid degradation of water or air quality.
Appropriateness	It is appropriate in that it encourages people to strive to maintain the existing high water and air quality of the coastal marine area of the islands.

17. To encourage anyone undertaking activities in the coastal marine area of the islands to minimise the generation of artificial noise and, where artificial noise cannot be avoided, to remedy or mitigate the effects as far as practicable.	
Summary of benefits	Limiting artificial noise reduces its potential to adversely affect animals (including insects), and the significant natural character and amenity values of the islands.
Summary of costs	There may be costs associated in using alternative methods to minimise noise, if there are such options.
Effectiveness	This provision will be effective by keeping unnecessary artificial noise to a minimum, without imposing standards.
Efficiency	This approach is more effective because setting absolute noise standards for the coastal marine areas of islands is neither practical nor easily enforceable, given their remoteness.
Appropriateness	Given the protection status of the islands themselves, and high natural values of the islands and the waters around them, it is appropriate to seek to keep artificial noise in the coastal marine area of the islands to a minimum.

18. To encourage anyone undertaking activities in the coastal marine area of the islands to minimise the generation of artificial light (excluding lights required for navigation) and, where use of artificial light cannot be avoided, to remedy or mitigate the effects as far as practicable.	
Summary of benefits	Artificial light has the potential to adversely affect animals (including insects), and the significant natural character and amenity values of the islands.
Summary of costs	There may be costs associated in using alternative methods to minimise light, if there are such options.
Effectiveness	Effective in keeping unnecessary artificial light to a minimum, without imposing standards. The phrase 'as far as practicable' recognises the need for navigational safety lighting.
Efficiency	Setting absolute standards for artificial light for the coastal marine areas of the islands is neither practical nor easily enforceable given the remoteness of the islands.
Appropriateness	Given the highly-protected status of the islands, and the high natural values of the islands and the waters around them, it is appropriate to seek to keep artificial light in the coastal marine area of the islands to a minimum without compromising navigational safety.

Discharges artificial light and noise—other methods

2. The Department of Conservation will encourage all users of the coastal marine areas of the islands to minimise use and generation of artificial light and artificial noise. This may be in the form of guidelines.	
Summary of benefits	The method gives effect to policies 17 and 18. Accordingly, it should reduce the potential for adverse effects of discharges of artificial light and noise on animals (including insects), and the natural character and amenity values of the islands—both in the coastal marine areas of the islands and the coastal margins of the islands themselves.
Summary of costs	There may be some minor costs to users to adopt alternative methods to minimise noise and light. There will be costs associated in developing guidelines.
Effectiveness	This approach should be effective in keeping unnecessary artificial noise and light to a minimum, without imposing standards. Trying to determine appropriate standards would be difficult given the natural state (undeveloped) of the islands.
Efficiency	Setting absolute standards for artificial noise and light for the coastal marine areas of the islands is neither practical nor easily enforceable given their remoteness.
Appropriateness	Given the highly-protected status of the islands and the high natural values of the islands and the waters around them, it is appropriate to seek to keep artificial noise and light in the coastal marine area to a minimum.

2.1.4 Policies for controls on structures, disturbance, deposition and reclamation

19. To avoid the placement of new structures on the foreshore or seabed, unless they are necessary for the maintenance of existing infrastructure and/or for monitoring of seismic or volcanic activity.	
Summary of benefits	The policy recognises the high natural character values of the islands and the need to avoid activity that would degrade those values.
Summary of costs	The policy restricts any future development of the coastal marine area of the islands.
Effectiveness	Restricting new structures will be effective in avoiding development and preserving the significant natural character values.
Efficiency	The policy sends a clear signal that, generally, new structures are not considered appropriate.
Appropriateness	It is appropriate to restrict development-oriented activities in the coastal marine areas of the islands, thereby preserving their significant natural character values.

20. To provide for the continuation of safe and effective functioning of existing working structures by providing for the maintenance of those working structures within their existing footprint. (Refer objectives and policies of 'Issue 3: Cultural and historic heritage', where the working structure is also a historic structure.)	
Summary of benefits	The existing working structures are necessary for continued access to the islands. This policy provides for the ongoing maintenance of these structures, without increasing their footprints.
Summary of costs	There are no additional costs, other than those associated with the actual maintenance work. Specific policy provision for upgrading work should keep consent costs to a minimum.
Effectiveness	The policy is effective because it recognises the need for working structures to be maintained.
Efficiency	It is efficient because it makes provision for such maintenance work as a permitted activity.
Appropriateness	It is appropriate that existing working structures are maintained.

21. As an exception to policies 19 and 20, to provide for the upgrading of existing landing platforms at Fishing Rock and Boat Cove (including the adjacent rock wall) on Raoul Island, including the placement of new structures, disturbance, deposition and reclamation.	
Summary of benefits	The upgrade will provide for safer access to Raoul Island from the coastal marine area.
Summary of costs	Having a policy specifically providing for upgrading work should keep consent costs to a minimum.
Effectiveness	The policy is effective because it recognises the need for safe access to Raoul Island from the coastal marine area.
Efficiency	It is efficient because it will reduce the risk of, and the costs associated with, a navigation safety incident in landing on Raoul Island.
Appropriateness	It is appropriate to provide for health and safety associated with the use of the coastal marine area of Raoul Island.

22. To avoid activities that involve disturbance of the foreshore or seabed to the extent practicable and, where disturbance is unavoidable, to keep the effects and area of disturbance to a minimum, and to remedy or mitigate those effects.	
Summary of benefits	The policy recognises the significant natural character values of the islands and the need to avoid activity that would degrade those values.
Summary of costs	There may be the cost of applications that involve disturbance being declined, or the costs of remedying or mitigating effects of disturbance where the activity is allowed.
Effectiveness	Restricting activities involving disturbance will be effective in avoiding development and preserving the significant natural character values of the islands.
Efficiency	The policy is efficient in that it sends a clear signal that disturbances are not considered appropriate.
Appropriateness	It is appropriate to restrict disturbance in the coastal marine areas of the islands, in order to preserve their significant natural character values, and to keep development-oriented activities to a minimum.

23. To avoid activities that involve deposition of material on the foreshore or seabed and reclamations of foreshore and seabed and, where deposition is unavoidable, to keep the effects of the deposition to a minimum, and remedy or mitigate those effects.	
Summary of benefits	The policy recognises the significant natural character values of the islands and the need to avoid any activity that would degrade these values.
Summary of costs	There may be the cost of applications that involve deposition or reclamation being declined, or the costs of remedying or mitigating effects of deposition where the activity is allowed.

Effectiveness	Restricting activities involving deposition will be effective in avoiding adverse effects on the environment and preserving the significant natural character values.
Efficiency	Sends a clear signal that activities involving deposition are not considered appropriate.
Appropriateness	It is appropriate to restrict deposition in the coastal marine areas of the islands, in order to preserve the significant natural character values, and keep development-oriented activities to a minimum.

24. To allow minor disturbance associated with approved research when non-invasive methods are not practicable and/or samples are needed.	
Summary of benefits	The policy recognises the benefits of research and allows for minor disturbance associated with approved research, and recognises that there will be instances where samples are needed.
Summary of costs	The policy will reduce costs by providing for minor disturbances as permitted activities.
Effectiveness	The policy recognises that, in some instances, minor disturbance may be appropriate provided it is associated with approved research; and acknowledges that samples are sometimes required.
Efficiency	It is efficient because it makes provision for minor disturbance associated with approved research as a permitted activity.
Appropriateness	The policy is appropriate because it recognises the value of research in the ongoing sustainable management of the islands.

25. To allow minor disturbance associated with the placement of a temporary mooring to continue to provide for the safe mooring of Mr Stuart Cave so long as he continues to hold CRA8 quota and fish that quota in the vicinity of the Snares Islands/Tini Heke.	
Summary of benefits	This policy recognises and provides for the existing use of the coastal marine area around the Snares Islands/Tini Heke by Mr Stuart Cave, and the need to provide for his health and safety.
Summary of costs	Mr Cave will incur some costs in ensuring that both his mooring equipment and vessel do not present biosecurity risks. These will be minimal compared with the costs of biosecurity breaches, which would be significant, as noted in relation to policies 2, 3 and 9 above.
Effectiveness	The policy is efficient because it allows continued safe use of the area with appropriate safeguards.
Efficiency	Overall, the proposed regional coastal plan recognises that structures and permanent moorings increase the risk of biosecurity breaches. However, this policy acknowledges that, in some instances, it is more efficient to allow an exception. Due to the nature of the seabed and environmental conditions at the Snares Islands/Tini Heke, conventional anchoring is not practical.
Appropriateness	The policy is appropriate because it recognises the existing use of this area and the need to continue to provide for that use in a safe manner. The policy is consistent with Part 2 of the RMA.

2.2 Issue 2: Kaitiakitanga of the coastal marine area

The issue to be addressed is that of recognition of, and provision for, the physical, historical and cultural relationship of Ngāi Tahu ki Murihiku with the coastal marine area of the Subantarctic Islands, and tangata whenua including Ngāti Kurī and Te Aupōuri with the Kermadec Islands, including:

- The exercise of tino rangatiratanga by iwi and hapū in the coastal marine area;
- The role of tangata whenua as kaitiaki of coastal resources;
- The values and perspectives of tangata whenua with respect to the spiritual qualities of water (its mauri and wairua); and
- The protection of wāhi tapu, e.g. urupā, coastal battlegrounds, tauranga waka, mauri stones, toko taunga ika, and other taonga.

Given the different circumstances (Ngāi Tahu have a Treaty settlement, which clearly states their relationship with the Subantarctic islands, while the tangata whenua of the Kermadec Islands have yet to develop a settlement with the Crown) and histories of the two groups of islands, the objectives and policies are separate and different.

Kaitiakitanga of the coastal marine area—Kermadec Islands

The objective to be achieved in addressing this issue is:

2.1 To establish and build a relationship with tangata whenua in the management of the coastal marine area of the Kermadec Islands.

It is considered that the proposed objective 2.1 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> Under section 6 of the Act it is a matter of national importance, in promoting sustainable management, to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other toanga. Section 7 of the Act also requires the Minister of Conservation when carrying out his/her functions and powers under the Act to have particular regard to kaitiakitanga. This objective recognises those requirements in the relation to the Kermadec Islands where tangata whenua are just beginning to explore their relationships and connections to the islands. In relation to the Kermadec islands Ngāti Kurī and Te Aupōuri have both expressed an association with the Islands.

2.2.1 Policies to provide for kaitiakitanga of the Kermadec Islands

26. To liaise and consult with tangata whenua with regard to the management of the Kermadec Islands coastal marine area.	
Summary of benefits	Policy provides a clear statement that the Minister of Conservation will consult with tangata whenua, including Ngāti Kurī and Te Aupōuri, in the management of the coastal marine area of the Kermadec Islands.
Summary of costs	The policy may increase the timeframes required in making management decisions. It is also unclear which tangata whenua groups should be consulted.
Effectiveness	This policy is effective in giving effect to the requirements of section 6 of the RMA in terms of current knowledge. The general term 'tangata whenua' is used to recognise the overall lack of information and understanding about the Polynesian habitation of the Kermadec Islands (Dodd 2010) and links to present-day iwi. If Treaty settlement legislation or published research clarifies this relationship, then the policy could be changed to reference specific iwi.

Efficiency	Given the requirements of the Act and lack of information and understanding of Polynesian habitation of the Islands, this policy is the most efficient means of starting a dialogue about the relationships between tangata whenua (including Ngāti Kurī and Te Aupōuri) and the Kermadec Islands.
Appropriateness	Given our current levels of knowledge and understanding this policy is the most appropriate means to meet the purpose of the Act.

27. To recognise and provide for the tangata whenua relationship with the Kermadec Islands and values by: • Encouraging applicants for new coastal permits to consult with tangata whenua. • Consulting tangata whenua when monitoring or reviewing this coastal plan.	
Summary of benefits	This policy gives a clear commitment to tangata whenua, including Ngāti Kurī and Te Aupōuri, that the Minister of Conservation, in administrating the proposed regional coastal plan, will encourage applicants for new resource consents to consult with them. It also shows a clear intention to consult with tangata whenua when monitoring or reviewing this plan. This policy will enable the Minister of Conservation to gain, through the involvement of tangata whenua, a better understanding of their relationship with the Kermadec Islands.
Summary of costs	This policy may increase timeframes and costs for applicants for new coastal permits. Since 2004, only one coastal permit has been applied for and granted (to GNS, to allow installation of a tsunami-monitoring device). There may be an increased cost to the Minister of Conservation in monitoring or reviewing the plan, but it is thought that the benefits of establishing a relationship with tangata whenua would far outweigh this initial cost.
Effectiveness	This policy is an effective way of establishing a relationship with tangata whenua in the management of the coastal marine area of the Kermadec Islands
Efficiency	The policy is efficient as it provides a meaningful way to trigger discussions about the relationship between tangata whenua and the coastal marine area of the Kermadec Islands.
Appropriateness	This policy is appropriate because, given the lack of information and knowledge about the relationship tangata whenua (including Ngāti Kurī and Te Aupōuri) have with the Kermadec Islands, it achieves the purpose of the Act.

Kaitiakitanga of the coastal marine area Subantarctic Islands

Ngāi Tahu ki Murihiku are kaitiaki of the Southland region and the oceans around it out to 200 nautical miles, including the Southern (Subantarctic) Islands. They have prepared an iwi management plan: Te Tangi a Tauira—the Cry of the People, the purpose of which is to:

- Describe the values underpinning the relationship between Ngāi Tahu ki Murihiku and the natural environment;
- Identify the primary issues associated with natural resource and environmental management in the area from the perspective of Ngāi Tahu ki Murihiku; and
- Articulate Ngāi Tahu ki Murihiku policies and management guidelines for natural resource and environmental management, wāhi tapu and wāhi toanga.

The objective to be achieved in addressing this issue is:

2.2 To recognise and provide for the relationship and values of Ngāi Tahu ki Murihiku with the coastal marine area of the Subantarctic Islands in a manner reflective of their status as tangata whenua and in accordance with tikanga/tikaka Maori.

Objective 2.2 is appropriate because it will ensure the relationship of Ngāi Tahu ki Murihiku with the coastal marine area of the Subantarctic Islands is provided for and it will ensure that management of the Subantarctic Islands can be undertaken in partnership with Ngāi Tahu ki Murihiku, recognising and providing for their values as set out in Te Tangi a Tauira—the Cry of the People.

Overview of benefits and costs of the policies providing for kaitiakitanga

Benefits

- The policies will provide for ongoing involvement of Ngāi Tahu ki Murihiku in decision-making and keep them informed of activities in the coastal marine area of the islands, and is therefore consistent with the purpose of the Resource Management Act 1991 (RMA).
- The policies will allow Ngāi Tahu ki Murihiku to identify sites of significance for protection if they wish to and to protect taonga species, and is therefore consistent with section 6(e) of the RMA.
- The policies also set out how the proposed regional coastal plan will have regard to the values, issues and policies of the iwi management plan developed by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People; particularly with respect to taonga and endemic species, managing the risk of biosecurity breach and potential adverse effects of tourism.

Costs

- The policies could result in time delays associated with consulting Ngāi Tahu ki Murihiku.

2.2.2 Policies to provide for kaitiakitanga of the Subantarctic Islands

28. To adopt procedures and approaches to enable Ngāi Tahu ki Murihiku to exercise their role as kaitiaki and participate as a partner in coastal management decisions.	
Summary of benefits	This policy will recognise Ngāi Tahu ki Murihiku as a partner and provide for their ongoing involvement of in resource management decisions for the coastal marine area of the Subantarctic Islands.
Summary of costs	The policy will require time and resources from Ngāi Tahu ki Murihiku to enable them to engage in planning and consent processes; and applicants for coastal permits may need to factor in Ngāi Tahu ki Murihiku timeframes for meetings.
Effectiveness	The policy is effective as a means for providing Ngāi Tahu ki Murihiku involvement in their ongoing role as kaitiaki for coastal marine area of the Subantarctic Islands.
Efficiency	Having procedures in place in advance—such as regular meetings with Kaitiaki Rōpū (and/or Te Ao Marama)—will assist efficiency.
Appropriateness	The policy is appropriate because it is consistent with Part 2 of the RMA, objective 4 and policy 2 of the New Zealand Coastal Policy Statement 2010 and an iwi management plan prepared by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People.

29. To actively consult Ngāi Tahu ki Murihiku, and encourage resource consent applicants to actively consult, when an activity could affect a site identified in this plan as being of significance to Ngāi Tahu ki Murihiku, or adversely affect the values of Ngāi Tahu ki Murihiku.	
Summary of benefits	The policy ensures that Ngāi Tahu ki Murihiku are aware of proposed activities and have the opportunity for involvement, enabling them to fulfil their role as kaitiaki.

Summary of costs	As above, with policy 26, the key costs of the policy are time and resources from Ngāi Tahu ki Murihiku to enable them to engage in planning and consent processes, and factoring in Ngāi Tahu ki Murihiku timeframes for meetings, which will possibly result in time delays for coastal permit applicants. There is one scenario where this policy is not likely to be given effect to: a coastal permit application for a risk assessment of fouling on a vessel's hull or niche areas. As provided for in policy 5, these will be processed on a non-notified basis and assessed as expeditiously as possible.
Effectiveness	Active consultation will be an effective way of ensuring that the relationships and values Ngāi Tahu ki Murihiku have with the islands are recognised and provided for.
Efficiency	As noted above, the policy is efficient because Ngāi Tahu ki Murihiku already have committees and meeting structures in place to enable them to engage in planning and consenting processes.
Appropriateness	The policy is appropriate because it is consistent with Part 2 of the RMA, objective 4 and policy 2 of the New Zealand Coastal Policy Statement 2010 and an iwi management plan prepared by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People.

30. To provide copies of all coastal permit applications for activities in the coastal marine area of the Subantarctic Islands to Ngāi Tahu ki Murihiku.	
Summary of benefits	This policy ensures that Ngāi Tahu ki Murihiku are aware of proposed activities and have the opportunity for involvement, enabling them to fulfil their role as kaitiaki.
Summary of costs	Costs are similar to those associated with policies 26 and 27, i.e. time and resources from Ngāi Tahu ki Murihiku to engage in consent processes and possible time delays for coastal permit applicants to factor in Ngāi Tahu ki Murihiku timeframes for meetings. As also noted in relation to policy 27, there is one scenario where this policy is not likely to be given effect to: a coastal permit application for a risk assessment of fouling on a vessel's hull or niche areas. As provided in policy 5, these will be processed on a non-notified basis and assessed as expeditiously as possible.
Effectiveness	Keeping Ngāi Tahu ki Murihiku informed of activities proposed to take place in the coastal marine area of the islands is an effective method of achieving objective 2.2.
Efficiency	The policy is an efficient means to keep Ngāi Tahu ki Murihiku informed of activities proposed to take place in the coastal marine areas of the islands.
Appropriateness	The policy is appropriate because it is consistent with Part 2 of the RMA, objective 4 and policy 2 of the New Zealand Coastal Policy Statement 2010 and an iwi management plan prepared by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People.

31. To recognise and provide for the protection of taonga species, including the following: • Hoiho • Miromiro • Pokotiwha • Tītī • Toroa • Tutukiwi • Ihipuku • Kekeno • Pakea • Parāoa • Tohorā	
Summary of benefits	The policy recognises the value of these taonga species to Ngāi Tahu ki Murihiku.
Summary of costs	The costs of achieving this policy will be negligible, given that it is consistent with other objectives and policies of the proposed regional coastal plan.

Effectiveness	The policy is effective because it recognises the values and relationships of Ngāi Tahu ki Murihiku with these species and is consistent with other objectives and policies of the plan—these species are a key component of the natural character of the islands.
Efficiency	This policy is an efficient way of recognising the values and relationship of Ngāi Tahu ki Murihiku with these species.
Appropriateness	The policy is appropriate because it is consistent with Part 2 of the RMA, objective 4 and policy 2 of the New Zealand Coastal Policy Statement 2010 and an iwi management plan prepared by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People.

32. To consult with Ngāi Tahu ki Murihiku when monitoring or reviewing this coastal plan.	
Summary of benefits	This policy allows recognition of the values and relationship of Ngāi Tahu ki Murihiku with the coastal marine area of the islands during monitoring and any reviews of the proposed regional coastal plan.
Summary of costs	The cost of implementing this policy will be negligible—there may possibly be some time delays in factoring-in Ngāi Tahu ki Murihiku timeframes for meetings.
Effectiveness	This policy is an effective way of including Ngāi Tahu ki Murihiku in the management of the coastal marine areas of the islands, recognising the values and relationships Ngāi Tahu ki Murihiku have with the islands.
Efficiency	Consultation with Ngāi Tahu ki Murihiku when monitoring or reviewing this plan is an efficient way of including Ngāi Tahu ki Murihiku in the management of the coastal marine areas of the islands and recognises the values of Ngāi Tahu ki Murihiku and their relationships with the islands.
Appropriateness	The policy is appropriate because it is consistent with Part 2 of the RMA, objective 4 and policy 2 of the New Zealand Coastal Policy Statement 2010 and an iwi management plan prepared by Ngāi Tahu ki Murihiku: Te Tangi a Tauira—the Cry of the People.

2.3 Issue 3: Cultural and historic heritage

To recognise and provide for the protection of cultural and historic heritage from inappropriate use and development.

Cultural heritage sites, buildings, places or areas in, or associated with, the coastal marine area are an important component in the history and identity of the coastal environment of the Kermadec and Subantarctic Islands. They provide us with evidence of past human activity in the islands. Sites of cultural and or historic heritage in the coastal marine area of both groups of islands need to be protected from activities with the potential to adversely affect them.

The definition of historic heritage in the RMA (refer glossary in the proposed regional coastal plan) includes (among other things) cultural heritage. However, given the significance of cultural heritage in the islands, the proposed plan refers to cultural and historic heritage for clarity and emphasis.

Recognising and providing for the protection of historic heritage from inappropriate use and development is a matter of national importance under section 6(f) of the RMA. Protection of historic heritage is a requirement of policy 17 the New Zealand Coastal Policy Statement 2010.

The objectives to address this issue are:

3.1 To protect and, where appropriate, conserve cultural and historic heritage sites of significance.

3.2 To recognise and provide for the protection of sites, areas and values of special spiritual, historical and cultural significance to tangata whenua.

3.3 To facilitate research into and understanding of sites of historic and cultural heritage and promote awareness and appreciation of those sites.

It is considered that the proposed objective 3.1 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises that it is a matter of national importance to protect sites of cultural and historic heritage, and give effect to policy 17 of the New Zealand Coastal Policy Statement 2010.

It is considered that the proposed objective 3.2 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises the importance of the coastal marine area to tangata whenua, spiritually, historically, and culturally.

It is considered that the proposed objective 3.3 is the most appropriate way to achieve the purpose of the RMA for the following reason:

> The objective recognises the benefit of increasing awareness and understanding of sites of cultural or historical significance.

Overview of benefits and costs of all the cultural and historic heritage policies

Benefits

- The policies clearly set out how the proposed regional coastal plan will manage sites of cultural and historic heritage to protect them from inappropriate use or development.
- The policies recognise a preference for protection of sites of cultural and historic heritage in situ.
- The policies offer tangata whenua the option to identify sites for protection if they choose to.
- The policies clearly set out what will be considered in assessing coastal permit applications for activities that may have adverse effects on sites of cultural or historic heritage.
- The policies promote research that will assist in building understanding of the cultural and historic heritage of the Islands.
- The policies seek to raise the public's awareness of cultural and historic heritage of the Islands.

Costs

- The policies will result in additional costs for applicants wanting to undertake activities within sites of cultural and historic heritage if they are required to prepare a Historic Work Plan or Conservation Plan, and under take any works, in accordance with a Historic Work Plan or Conservation Plan.
- There will be costs associated with preparing and submitting a coastal permit application if works will involve a disturbance and/or structure and are required to obtain a coastal permit for a discretionary activity.
- Delays are possible if additional consultation is required and/or recording of details of cultural or historic heritage sites.

2.3.1 *Policies to provide for the protection of cultural and historic heritage*

33. To protect the sites of cultural or historic heritage listed in Appendix 2.	
Summary of benefits	Listing the known sites of cultural and historic heritage will ensure potential users are aware of those sites.
Summary of costs	There will be costs associated with a plan change if further sites are identified that need to be included in the list.
Effectiveness	Including the list of known sites is an effective way of communicating them to potential users and/or applicants.
Efficiency	It is efficient to have a list for ease of reference. It is not so efficient that a plan change will be required to update the list; while this is unavoidable, it is manageable.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

34. To conserve the following sites of cultural or historic heritage, which are a subset of Appendix 2: • Grafton Wreck and Epigwaitt Castaway Hut Site, Auckland Island • North East Harbour Whaling Station, Campbell Island/Motu Ihupuku	
Summary of benefits	The policy makes it clear that these two sites are subject to active conservation.
Summary of costs	There will be costs associated with a plan change if further sites are to be actively conserved and listed in this policy.
Effectiveness	Specifying the sites that are subject to active conservation is an effective way of communicating their protected status to potential users and/or applicants.
Efficiency	It is efficient to have these two sites listed in the policy for ease of reference. It is not so efficient that a plan change will be required to update the list; while this is unavoidable, it is manageable.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

35. To only allow activities at any of the sites listed in policy 33 in accordance with the provisions of a Historic Work Plan; and at the sites listed in policy 34 in accordance with the provisions of a Conservation Plan; approved by the Department of Conservation.	
Summary of benefits	Clearly sets out the expectations if an applicant wishes to undertake activities in one of the sites listed in either (or both) Appendix 2 or Policy 34.
Summary of costs	For those sites listed in Appendix 2 but not policy 34, there will be costs associated in developing and approving a Historic Work Plan, and undertaking works in accordance with it. For those sites listed in Policy 34, while the Conservation Plan is likely to have been prepared, there may be costs associated with undertaking works in accordance with it.
Effectiveness	The requirements of a Historic Work Plan or Conservation Plan will be effective methods of achieving the extra safeguards warranted for activities involving sites of cultural and historic heritage, as required by section 6(f) RMA and policy 17 in the New Zealand Coastal Policy Statement 2010.
Efficiency	It is efficient for potential users/applicants to have these expectations clearly set out in the policies of the plan.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

36. To identify sites of special spiritual, historical and cultural significance to tangata whenua and record in Appendix 2 if tangata whenua wish to do so.	
Summary of benefits	This policy recognises that tangata whenua have the right to choose whether they wish to identify sites for protection.
Summary of costs	If any sites are identified, there will be the costs of a plan change to include them.
Effectiveness	The policy is an effective way of leaving the discretion to identify sites to tangata whenua.
Efficiency	The policy may not be efficient given the need to undertake a plan change to include any sites identified; while this is unavoidable, it is manageable.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010. It also gives effect to policy 2(g) on the New Zealand Coastal Policy Statement 2010.

37. To protect all sites with cultural or historic heritage value, whether previously identified as significant and/or included in Appendix 2 or not. Activities that would modify, damage or destroy the sites with cultural or historic heritage value should be avoided. However, where complete avoidance is not possible, remedying or mitigating the adverse effects of activities that would modify, damage or destroy the sites or their values shall be undertaken.	
Summary of benefits	This policy recognises and provides for sites of cultural and historic heritage that have not been previously identified and/or included in Appendix 2. The policy takes account of the fact that such sites may only be discovered over time or as different activities occur.
Summary of costs	There may be unanticipated additional costs to users of the coastal marine area, in resources and time delays, if a site of cultural or historic heritage is discovered during an activity.
Effectiveness	The policy is effective in ensuring all sites of cultural or historic heritage are recognised and provided for, even if not identified in advance.
Efficiency	The policy is efficient in the sense that it provides a backstop for any potential sites of cultural and historic significance that have not been previously identified.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

38. To protect sites of cultural or historic heritage value, whether previously identified as significant and/or included in Appendix 2 or not, in situ unless it can be demonstrated that an artefact is rare or has significant importance such that it should be removed for research and preservation.	
Summary of benefits	The policy recognises the benefits of in situ protection. Excavating a site can result in damage and loss of context. Current best practice is that it is better to leave sites in-situ rather than damage or destroy a site and have them locked away in museum storage. However, the policy recognises that there will be some instances where removal/excavation is preferable.
Summary of costs	No direct costs are anticipated as a result of this policy.
Effectiveness	The policy is effective in providing protection for sites of cultural and historic heritage and clearly indicating the expectation of protection in situ for most sites/artefacts.
Efficiency	It is more efficient to leave sites of cultural and historic heritage in situ in terms of costs of removal/excavation, risk of damage to the site/artefact, loss of context of the location. It is inefficient to have such sites or artefacts sitting in storage.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

39. To generally consider appropriate any methods of archaeological investigation for the purpose of approved research that will enhance knowledge and understanding of a cultural or heritage site that will not damage, modify or destroy the site, subject to tangata whenua concerns for Māori sites.	
Summary of benefits	The policy encourages appropriate research that will assist in building understanding of past human activity while acknowledging that sites should be protected.
Summary of costs	No direct costs are anticipated as a result of this policy.
Effectiveness	The policy is effective in encouraging research while providing for protection of sites of cultural and historic heritage, consistent with the preferred approach of protection in-situ for most sites/artefacts.
Efficiency	It is efficient to clearly state that research is valued, but particularly research using methods of minimal damage and disturbance, and that leave sites of cultural and historic heritage in situ.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

40. To potentially consider appropriate an activity involving archaeological excavation of sites of cultural or historic heritage value when alternative, less destructive methods can not be used. Under such circumstances, excavation will be kept to a minimum[4].	
Summary of benefits	The policy recognises that, in some cases, excavation and removal may be considered appropriate.
Summary of costs	There may be costs associated in trying to keep damage and destruction to a minimum.
Effectiveness	The policy is effective because it recognises that excavation may be appropriate in some circumstances, but in conjunction with policies 38 and 39, this will be the exception rather than the norm.
Efficiency	It is efficient to acknowledge that while protection and recording in situ is the preferred approach, there may be justifiable circumstances where excavation is appropriate.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

[4] Note: Archaeological sites associated with human activity that occurred before 1900 are protected by the Historic Places Act 1993. An archaeological Authority will be required from the New Zealand Historic Places Trust to destroy, damage or modify these sites.

41. In assessing an application for an activity that has the potential to affect cultural or historic sites that, having considered the policies above, is appropriate, including shipwreck salvage and archaeological investigation, to have regard to: a) The intrinsic values of the sites, including the relationship that people might have with the site and the extent to which it will be maintained. b) Māori spiritual, historical, and cultural values and the outcome of tangata whenua consultation. c) The integrity of the site, including, in the case of a structure, its physical appearance, and the extent to which it will be maintained. d) The extent to which the activity will enhance knowledge and understanding of the heritage site. e) The extent to which the proposed modifications will maintain or enhance the efficient operation of an operating facility. f) The possibility of the activity being undertaken somewhere else (i.e. away from the location of the heritage values or outside the coastal marine area of the Subantarctic Islands).	
Summary of benefits	The policy clearly sets out the matters that will be had regard to for any applications for activities that have the potential to affect sites of cultural and historic heritage.
Summary of costs	There may be costs associated in managing potential adverse effects or the application being declined.
Effectiveness	The policy is effective in providing protection for sites of historic and cultural heritage from activities that may adversely effect them.
Efficiency	It is efficient because it clearly sets out the matters that will be considered in any application for an activity that may adversely affect a site of cultural or historic heritage.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

42. In respect of any application for an activity that has the potential to affect heritage sites, to make provision for the recording of details of the site, by any or all of the following means: a) Photographic record b) Written record c) Identification at or near the site d) Archaeological investigation and recording to accepted professional standards e) Provision of information to the Minister of Conservation	
Summary of benefits	The policy clearly sets out the expectations and requirements.
Summary of costs	There will be costs associated with resources and time to undertake the recording of details.
Effectiveness	The policy clearly sets the expectations for record keeping for activities with the potential to affect sites of cultural and historic heritage.
Efficiency	The policy provides an efficient method of record keeping and should ensure consistency in record keeping.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

43. To generally consider appropriate activities that facilitate research opportunities that will contribute to the knowledge and understanding of historic and cultural heritage and inform effective management of sites and artefacts, subject to tangata whenua concerns for Māori sites.	
Summary of benefits	The policy encourages research that will build knowledge, understanding and awareness and will assist with ensuring appropriate management of sites.
Summary of costs	No direct costs are anticipated as a result of this policy.
Effectiveness	The policy is effective in encouraging research.
Efficiency	It is efficient to state in the policy that research that contributes to knowledge and understanding of historic and cultural heritage is appropriate.
Appropriateness	The policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

44. Activities that promote awareness and understanding of the value and significance of historic and cultural heritage shall generally be considered appropriate.	
Summary of benefits	The policy should result in enhancement of awareness and understanding of the value and significance of historic and cultural heritage.
Summary of costs	There will be costs to the Department of Conservation in achieving this policy.
Effectiveness	Promoting awareness and understanding of the value and significance of historic and cultural heritage will assist in protecting it.
Efficiency	Building awareness and understanding of the value and significance of historic and cultural heritage is an efficient method of recognising and providing for the protection of historic heritage.
Appropriateness	This policy is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

Cultural and historic heritage—other methods

3. The Department of Conservation will prepare, update and implement Historic Work Plans or Conservation Plans for sites of cultural and historic heritage in Appendix 2, to national best practice standards and to the standards of ICOMOS NZ charter.	
Summary of benefits	The method provides for protection and active conservation of sites of cultural and historic heritage.
Summary of costs	There will be costs to the Department in developing these plans.
Effectiveness	Historic Work Plans or Conservation Plans will be effective means of ensuring protection for sites of cultural and historic heritage.
Efficiency	It is effective to assist both coastal permit applicants and the Department of Conservation to achieve protection of sites of cultural and historic heritage by having the requirements clearly set out in Historic Work Plans or Conservation Plans.
Appropriateness	The method is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

4. To achieve integrated management for cultural and historic heritage sites both above and below Mean High Water Springs, the Department of Conservation and the New Zealand Conservation Authority (NZCA) will endeavour to ensure consistency between the policies in this plan and the approach taken in Conservation Management Strategies for both the Subantarctic Islands and the Kermadec Islands when they are reviewed.	
Summary of benefits	The method recognises that many sites of cultural and historic heritage span the boundary of this plan and the Conservation Management Strategies of the islands.
Summary of costs	No additional costs are anticipated as a result of this policy.
Effectiveness	The method is effective in clearly stating the requirement for integrated management for an issue that spans jurisdictional boundaries.
Efficiency	The method is efficient because integrated management is a requirement of both the RMA and the New Zealand Coastal Policy Statement 2010.
Appropriateness	The method is appropriate because it is consistent with section 6(f) of the RMA; and it gives effect to policy 17 of the New Zealand Coastal Policy Statement 2010—policy 17 (b) in particular.

5. The Department of Conservation will maintain and contribute to updating inventory systems, such as the NZ Archaeological Association Site Recording Scheme (ArchSite).	
Summary of benefits	This method will ensure accurate and consistent recording of cultural and historic heritage.
Summary of costs	Costs should be minimal given that the inventory systems are already established. There will be cost benefits to potential applicants in having the information readily accessible.
Effectiveness	The method will be effective in ensuring accurate and consistent recording of sites, when they are identified.
Efficiency	It is efficient to clearly state that recording is required and ArchSite will be a key repository.
Appropriateness	The method is appropriate because it is consistent with section 6(f) of the RMA; and it gives effect to policy 17 of the New Zealand Coastal Policy Statement 2010—policy 17 (a) in particular.

6. The Department of Conservation will encourage a greater public awareness and understanding of cultural and historic heritage sites in the coastal marine area to foster support for their preservation and protection by: a) Providing advice and information on cultural and historic heritage resources in the coastal marine area where appropriate; and b) Advocating the conservation of cultural and historic heritage resources in the coastal marine area where appropriate.	
Summary of benefits	This method provides for the implementation of policy 44. As such, it should result in enhancement of awareness and understanding of the value and significance of historic and cultural heritage.
Summary of costs	There will be costs to the Department of Conservation in achieving this method.
Effectiveness	The method is effective because promoting awareness and understanding of the value and significance of historic and cultural heritage will assist in protecting it.
Efficiency	It is efficient to provide encouragement for building awareness and understanding of the value and significance of historic and cultural heritage.
Appropriateness	The method is appropriate because it assists in recognising and providing for the protection of historic heritage from inappropriate use and development as a matter of national importance under section 6(f) of the RMA; and it gives effect to policy 17 the New Zealand Coastal Policy Statement 2010.

3. Evaluation of Rules

The proposed regional coastal plan contains three categories of activities:

- Permitted
- Discretionary
- Prohibited

They are grouped in tables as follows:

- Occupation
- Structures
- Discharges
- Shipwrecks
- Disturbance
- Use of water
- Harmful or invasive species
- Deposits from ships
- Temporary rules for hull and niche area fouling
- Controls on hull and niche area fouling
- Surface water activities in the Subantarctic Islands
- Surface water activities in the Kermadec Islands

3.1 Occupation

Explanation

There are two rules for occupation, one is a permitted activity and the other discretionary. As noted above in the discussion about natural character, development is minimal and it is considered important to keep it that way in order to maintain the significant natural character of the islands and their marine environment. Accordingly, occupation will be limited to those activities that demonstrate that it is necessary for them to be located in the coastal marine area.

Evaluation

Occupation: Rule 1: Temporary occupation for research purposes—*permitted activity* Rule 2: Other occupation—*discretionary activity*	
Summary of benefits	• Rule 1 provides for temporary occupation for research purposes in the Subantarctic Islands only, subject to meeting the conditions listed. Those conditions include being consistent with the New Zealand Subantarctic Islands Research Strategy 2003. This recognises the value of research and that, for health and safety, a temporary mooring may be necessary. Seasonal mooring for research is not currently required in the Kermadecs. • Rule 2 is a discretionary rule that will allow applications for occupation to be considered, but as noted above, they will have to demonstrate a need to locate in the coastal marine area, along with complying with other policies of the proposed regional coastal plan.
Summary of costs	There will be the costs of preparing an application and processing for any coastal permit for occupation under rule 2. If a temporary mooring for research purposes did become necessary for the Kermadecs, a coastal permit would be required.

Effectiveness	These rules are effective in recognising the value of research and the minimal risk of adverse effects, provided the conditions of rule 1 are met, whilst taking a precautionary approach to any other occupation of the coastal marine area of the islands.
Efficiency	It is efficient to provide for current use where the risk of adverse effects will be negligible, provided the conditions are met, whilst taking a precautionary approach to any other, as yet unknown, occupation.
Appropriateness	The rules are appropriate because they provide for the sustainable use and protection of coastal marine area of the islands.

3.2 Structures

Explanation

The risk of a biosecurity breach, as noted already, is a key issue of to be managed. The placement and use of permanent structures presents a biosecurity risk—particularly permanent moorings. Accordingly, as provided for in policies 19 to 21, new structures are to be avoided unless they are absolutely necessary for reasons of health and safety. The rules do, however, provide for maintenance of existing structures, such as the Wharf at Campbell Island/Motu Ihupuku; appropriate temporary structures; and navigational aids and scientific equipment, subject to conditions that provide safeguards against the risks.

Evaluation

Structures: Rule 3: Structures for monitoring—*permitted activity* Rule 4: Re-construction of the landing platforms at Raoul—*permitted activity* Rule 5: Maintenance of cultural and historic heritage structures—*permitted activity* Rule 6: Maintenance of other structures—*permitted activity* Rule 7: Maintenance or conservation of cultural and historic heritage structures listed in policy 34—*permitted activity* Rule 8: Temporary mooring at the Snares Islands/Tini Heke for Mr Stuart Cave—*permitted activity* Rule 9: Any other erection, placement, reconstruction, alteration, extension, removal or demolition of a structure—*discretionary activity*	
Summary of benefits	• Rule 3 provides for scientific monitoring, including monitoring of volcanic and seismic activity, which is in the national interest. These activities will contribute to knowledge and understanding, provide a guide as to the effectiveness of this proposed regional coastal plan, and provide for national health and safety in terms of volcanic and seismic activity. • Rule 4 provides for the upgrading of the landing platforms on Raoul Island—these upgrades are essential for health and safety. • Rules 5, 6, and 7 provide for the maintenance of existing structures, with safeguards included in the conditions of the rules and additional requirements to ensure the protection of sites of cultural and historic heritage. • Rule 8 specifically provides for a temporary mooring structure to be placed and used by Mr Stuart Cave. This rule recognises Mr Cave's current use of the area to catch his crayfish quota and the challenges associated with anchoring at Ho Ho Bay at the Snares Islands/Tini Heke—specifically, lack of shelter and poor anchor holding. This rule provides for Mr Cave's health and safety, but in recognition of the biosecurity risks associated with such structures, it will cease to apply if Mr Cave does not fish in the area for 36 months or more. • Rule 9 recognises that there may be a case for other structures, but given the biosecurity risks associated with structures, a precautionary approach is adopted by requiring a coastal permit to be applied for, enabling the assessment of potential adverse effects on a case-by-case basis.

Summary of costs	There will be costs associated with consent applications and processing for any new, unanticipated structures. There is a risk of significant costs if a biosecurity breach occurs as a result of the use of structures.
Effectiveness	The rules are effective in recognising that there are existing structures that will need to be maintained; that some temporary structures are allowable provided the safeguards contained in the conditions of the rules are met; and that some structures are necessary for health and safety. Adopting a precautionary approach to any other, unanticipated structures will be effective in considering the risks on a case-by-case basis.
Efficiency	It is efficient to provide for existing use, with safeguards included in conditions, and a precautionary approach to unanticipated activities.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.3 Discharges

Explanation

Discharges of contaminants have the potential to adversely affect the coastal marine area of the islands. The threat of an oil spill is a key issue; however, the risk of oil spill is addressed by the surface water activity rules. Other discharges addressed by the proposed regional coastal plan include discharges to land and water, and discharges to air.

The key discharges to air are of artificial noise and light. Given the minimal development of the islands and their remoteness, inclusion of standards in rules was not considered to be a practical approach to control of these discharges.

Discharges from vessels are largely regulated under the Resource Management (Marine Pollution) Regulations 1998, which regulate oil, noxious liquid substances, treated and untreated sewage, garbage, clean or segregated ballast water and discharges as part of normal operations of a ship or offshore installation. The Regulations also control the dumping of waste and other matter into the coastal marine area from ships, offshore installations and aircraft, and the incineration of waste, in a marine incineration facility, in the coastal marine area. Ballast water discharges are managed by an Import Health Standard developed in accordance with provisions of the Biosecurity Act 1993.

It should also be noted that the Marine Reserves Act 1971 further restricts discharges within the Auckland Islands/Motu Maha Marine Reserve and discharges other than sewage in the Kermadec Islands Marine Reserve.

The discharges covered by rules in the proposed regional coastal plan include: storm water; discharges associated with the removal of an existing outfall; discharges of untreated sewage and other discharges.

Evaluation

Discharges: Rule 10: Storm water discharges—*permitted activity* Rule 11: Discharges associated with the removal of an outfall structure—*permitted activity* Rule 12: Discharges of untreated sewage–*prohibited activity* Rule 13: Other discharges—*discretionary activity*	
Summary of benefits	• Rule 10 acknowledges that storm water discharges are unavoidable. They will, however, be minimal from the islands given the minimal development present and the overall policy direction to keep development to a minimum. • Rule 11 recognises that there is an existing outfall structure on Campbell

	Island/Motu Ihupuku and a desire to remove that outfall. To facilitate its removal, discharges associated with this process have been included as a permitted activity, subject to conditions in the rule that are consistent with section 107 of the RMA. • Rule 12 recognises that discharges of untreated sewage are offensive to Māori and the public. It also gives effect to policy 23(2) of the New Zealand Coastal Policy Statement 2010. • Rule 13 provides that any other type of discharge to the coastal marine area will require a coastal permit and be considered on a consent-by-consent basis. Such discharges would include treated sewage and any other discharges, e.g. an accidental discharge associated with pest eradication operations.
Summary of costs	Costs will include those required for consent applications and processing for discharges not provided for in the permitted rules.
Effectiveness	Permitting those activities that are not anticipated to have significant adverse effects (subject to meeting the conditions of the rules) and requiring a permit to be considered on a consent-by-consent basis for other discharges, is an effective way of managing potential adverse effects of discharges on the coastal marine area of the islands.
Efficiency	Considering all discharges that are not either permitted or prohibited on a consent-by-consent basis is an efficient way of managing potential adverse effects of discharges on the coastal marine area of the islands.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan, the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.4 Shipwrecks

Explanation

There are a large number of shipwrecks at both island groups; these comprise a significant component of the islands' cultural and historic heritage.

There are a lot of shipwrecks in and around the Subantarctic Islands. The exact locations of most of these are unknown. One of these—the *General Grant*—had a small quantity of gold bullion on board when it sunk in 1866, and it has attracted much interest from wreck salvagers over the years.

Apart from the sealing vessel *Perseverance*, which was wrecked at Campbell Island/Motu Ihupuku in 1829, and the three ships that were lost at the Antipodes Islands, all other recorded shipwrecks in the New Zealand subantarctic region—at least eight—occurred at the Auckland Islands and involved the loss of over 100 lives. Particularly notable Subantarctic Islands shipwrecks include the *Grafton*, which was driven aground in Carnley Harbour during a storm in 1864; the *Invercauld*, which was wrecked on the western cliffs of Auckland Island in 1864; the previously mentioned *General Grant*, which was also lost on the western cliffs during 1866; the *Derry Castle*, which was driven onto the northern coast of Enderby Island in 1887; and the *Dundonald*, which was wrecked on Disappointment Island during 1907.

There are a number of ships that have been wrecked off the Kermadec Islands. The first documented wreck was that of the *Malmen* in 1902. During World War I, the Kermadecs were briefly used as a based for the German raider *Wolf*, and the *Wairuna* and *Winslow* were captured and scuttled off the northern coast of Raoul Island. The wreck of the *Columbia River* in 1921 is thought to be responsible for the introduction of rats to the islands. More recent wrecks include the *Moeroa* in 1974, *Picton* in 1978, *Michelangelo* in 1979, *Kibei Maru No. 10* in 1981 and *Shiner* in 1984.

These wrecks are an important part of the cultural and historic heritage of the islands and need to be protected from unnecessary disturbance and destruction by individuals for remnants for their private collections, or loot hunters.

Evaluation

Shipwrecks: Rule 14: Salvage of contemporary wrecks—*discretionary activity* Rule 15: Salvage of wrecks in the Auckland Islands/Motu Maha Marine Reserve—*discretionary activity* Rule 16: Salvage of any others shipwrecks—*prohibited activity*	
Summary of benefits	• Rule 14 provides for the recovery of a contemporary shipwreck within 50 years of the wreck, in line with the approach of the Historic Places Trust. The rule recognises that it may be desirable to recover a shipwreck in order to avoid it being a navigational hazard or to avoid the risk of spilling a contaminant. • Rule 15 provides for the fact that the Marine Reserve (Auckland Islands/Motu Maha) Order 2003 contains provision to allow for the salvage and removal of all or any parts of wrecks within the boundaries of that marine reserve. • Rule 16 recognises the importance of protecting cultural and historic heritage by prohibiting the salvage, removal of any part or demolition of shipwrecks anywhere else in both the Subantarctic and Kermadec Islands.
Summary of costs	There will be costs associated with consent applications and processing for the salvage, removal of any part or demolition of shipwrecks anywhere in the Auckland Islands/Motu Maha Marine Reserve; or for salvage of wrecks less than 50 years old.
Effectiveness	Rules 14 to 16 restrict disturbance of shipwrecks to those around Auckland Island and the (particularly the *General Grant*) or salvage of contemporary wrecks, and in doing so will be effective in protecting cultural and historic heritage.
Efficiency	Requiring a coastal permit in those instances where salvage of shipwrecks is not prohibited is efficient because it will allow each application to be considered on its merits.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.5 Disturbance

Explanation

Section 12(1) of the RMA states that no person may, in the coastal marine area:

(c) Disturb any foreshore or seabed (including by excavating, drilling, or tunnelling) in a manner that has or is likely to have an adverse effect on the foreshore or seabed (other than for the purpose of lawfully harvesting any plant or animal); or

(e) Destroy, damage, or disturb any foreshore or seabed (other than for the purpose of lawfully harvesting any plant or animal) in a manner that has or is likely to have an adverse effect on plants or animals or their habitat

unless expressly allowed by a national environmental standard, a rule in a regional coastal plan or a resource consent.

Activities that disturb foreshore and seabed can have a number of potential adverse effects including: degradation of natural character; alteration of landscape; interference with physical coastal processes; and damage or destruction of habitat. Disturbance to the coastal marine areas of both island groups is considered to be generally undesirable and inconsistent with the preservation of natural character.

Evaluation

Disturbance: Rule 17: Inshore minor disturbance for research—*permitted activity* Rule 18: Offshore minor disturbance for research—*permitted activity* Rule 19: Disturbance of sites listed in Appendix 2—*discretionary activity* Rule 20: Other disturbance—*discretionary activity*	
Summary of benefits	• Rule 17 provides for minor disturbance close into shore for research purposes, subject to the limits set in the rule. The low limits recognise that disturbance close in shore will have more significant adverse effects than disturbance offshore. • Rule 18 provides for minor disturbance 300 m or more from shore, subject to limits set in the rule. • Rule 19 recognises that disturbance activities have the potential to damage or destroy sites of cultural and historic heritage and should only be undertaken in accordance with a Conservation Plan or Historic Work Plan. • Rule 20 provides that any other type of disturbance to the coastal marine area will require a coastal permit and be considered on a consent-by-consent basis.
Summary of costs	There will be costs associated with the consent applications and processing for disturbance activities other than minor disturbance associated with research within the limits of rules 17 and 18.
Effectiveness	The conditions included in rules 17 and 18, and the ability to decline applications or include conditions on coastal permits under rules 19 and 20, will be effective in managing the potential for adverse effects in the coastal marine area of the islands from disturbance activities.
Efficiency	Requiring a coast permit in those instances where disturbance activities are other than minor disturbance associated with research is efficient because it will allow each application to be considered on its merits.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.6 Use of water

Explanation

Section 14 of the RMA restricts the taking, using, damming, or diverting of open coastal and other coastal water unless expressly allowed by a national environmental standard, a rule in a regional coastal plan or a resource consent. Coastal water is an abundant resource and the taking or use of water from open coastal areas is likely to have negligible adverse effects. Estuaries and aquifers, however, are more sensitive environments and should be assessed on a case-by-case basis.

Evaluation

Use of water: Rule 21: Taking or use of open coastal water—*permitted activity* Rule 22: Taking or use of coastal water in estuaries or aquifers—*discretionary activity*	
Summary of benefits	• Rule 21 recognises that taking open coastal water, including from embayments, harbours or inlets, will have negligible adverse effects. It does, however, exclude taking water for the purposes of extracting constituents of water, which should be assessed on a case-by-case basis. • Rule 22 provides that taking water in estuaries or aquifers will require a coastal permit and be considered on a consent-by-consent basis.

Summary of costs	There will be costs associated with the consent applications and processing for activities involving taking water in estuaries or aquifers.
Effectiveness	Requiring activities involving taking water from sensitive environments to apply for a coastal permit will be effective in avoiding or minimising potential adverse effects on those environments.
Efficiency	Rules 21 and 22 are efficient because taking of water from water bodies where the adverse effects will be negligible is a permitted activity, and taking water from more sensitive environments such as estuaries and aquifers should be assessed on a case-by-case basis.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.7 Harmful or invasive species

Explanation

The threat of biosecurity breach is a key issue. Introductions of exotic organisms, whether new to New Zealand or new to the coastal marine areas of the islands, are a particular risk that needs to be carefully managed.

Introductions of harmful organisms, to both the marine and terrestrial environments of the islands, could change the structure of communities in both environments: for example, aggressive competition with indigenous species for habitat and food, causing changes in the food chain. If the new organism is an aggressive coloniser that out-competes existing indigenous species, its presence could result in their local extinction or extinction of a species. Alternatively, an introduction of a harmful marine organism that grazes on marine vegetation could change or destroy habitat that is of importance as a nursery area for juvenile marine species.

Introductions of exotic flora and fauna into the coastal marine area can give rise to thefollowing adverse effects, ultimately affecting natural character, life-supporting capacity and intrinsic value of ecosystems:

- Predation on local resident indigenous fauna;
- Competition with indigenous fauna species for the same food supply;
- Loss of habitat of indigenous flora and fauna;
- Destruction of habitats, which can alter coastal processes and increase the risk of erosion;
- Loss of amenity and intrinsic values of ecosystems;
- Genetic pollution; and
- Financial costs resulting from changes to the ecosystems and the values that are important to the eco-tourist/expedition cruise industry.

For these reasons, it is necessary that the risk or potential for introduction of new species to an area be strictly managed. The most common mechanisms of introduction of harmful marine organisms are ballast water discharges and attachments in fouling on vessel hulls. Ballast water discharges are covered by MARPOL[5] regulated by the Resource Management (Marine Pollution) Regulations 1998 and an Import Health Standard developed under the Biosecurity Act 1993. The risk of attachments of harmful

[5] International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 known as 'MARPOL 73/78' or 'MARPOL').

or invasive species in fouling on vessels hulls is addressed in the Temporary rules for hull and niche area fouling (rules A and B) and the Controls on hull and niche area fouling (rules 26 to 28).

It is also critical that users of the coastal marine area do not introduce harmful or invasive terrestrial species such as rodents, and some insects and plants. Introductions to land still have the potential for significant adverse effects on the coastal marine area, given the close interdependence of species in the terrestrial and marine environments of the islands. As noted above in the explanation and evaluation of policies 1, 2 and 3, eradications of pests are very costly.

Evaluation

Harmful or invasive species: Rule 23: Introduction of flora and fauna new to the Subantarctic or Kermadec Islands—*prohibited activity*	
Summary of benefits	This rule seeks to preserve the significant natural character of the islands by minimising the risk of biosecurity breach.
Summary of costs	The preventative measures necessary for users of the coastal marine area will increase costs to those users; however, they are minimal compared with the costs of a biosecurity breach.
Effectiveness	Prohibiting introductions of harmful or invasive species, in combination with the rules regulating fouling on hulls and niche areas (rules A and B and 26 to 28) should be effective in minimising the risk of a biosecurity breach.
Efficiency	Prohibiting the introduction of flora and fauna new to the Subantarctic or Kermadec Islands is an efficient way of minimising the risk of a biosecurity breach.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA.

3.8 Deposits from ships

Explanation

Section 12(1)(d) of the RMA states that no person may, in the coastal marine area, deposit in, on, or under any foreshore or seabed any substance in a manner that has or is likely to have an adverse effect on the foreshore or seabed, unless expressly allowed by a rule in a regional coastal plan or a resource consent.

In addition, the Resource Management (Marine Pollution) Regulations 1998 contain provisions relating to the dumping of waste or other matter in the coastal marine area. Under Section 4 of these regulations the dumping of specific types of waste or other matter is deemed to be a discretionary activity in regional coastal plans. This regulation has been implemented in the rules of the proposed regional coastal plan.

Deposition of material in the coastal marine area affects the natural character of the coastal environment, through effects upon coastal processes, water quality, sediment quality and ecology. The type and scale of any effects are related to the amount and type of material to be disposed of, and its level of contamination. Deposition as a result of cleaning or scraping a vessel has the potential to introduce harmful or invasive species to the environment of the two island groups.

Deposition and associated discharges of contaminants may modify, damage, or destroy cultural heritage.

Evaluation

Deposits from ships: Rule 24: Deposition from scraping or cleaning a vessel hull—*prohibited activity* Rule 25: Other deposits—*discretionary activity*	
Summary of benefits	• Rule 24 prohibits any depositions to the coastal marine area from hull scraping or cleaning. This rule is closely related to rule 23 in terms of seeking to avoid introducing harmful or invasive species. More than that, however, it will also avoid the deposition of any contaminants such as paint flakes or biocides from anti-fouling paint of ships hulls. • Rule 25 provides that any other type of deposit to the coastal marine area will require a coastal permit and be considered on a consent-by-consent basis. This includes deposits from ships or land, or the deposit of a ship itself, i.e. a shipwreck.
Summary of costs	There will be costs associated with the consent applications and processing for activities involving deposition to the coastal marine area not prohibited by either rule 24 or clause 4(1) of Part 2 of the Resource Management (Marine Pollution) Regulations 1998.
Effectiveness	The prohibition on deposits from hull scraping and cleaning and assessment of proposed activities involving any other deposition will be effective in minimising potential adverse effects on the environment.
Efficiency	Rules 24 and 25 are efficient methods of avoiding adverse effects from deposition activities and are both consistent with Part 2 clause 4 of the Resource Management (Marine Pollution) Regulations 1998.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 and the purpose and principles of the RMA. In particular, rule 24 is consistent with clause 4(1) of Part 2 of the Resource Management (Marine Pollution) Regulations 1998.

3.9 Temporary rule for hull and niche are fouling

Explanation

Refer to the explanation in 3.7: Harmful or invasive species above. These rules establish requirements for clean hull and niche areas to minimise the risk of introducing harmful or invasive species. Refer to 3.10 below for further explanation of the approach taken in the rules.

Evaluation

Temporary rules for hull and niche area fouling: Rule A: Access to the coastal marine area of the islands within 1000 m of MHWS—*permitted activity* Rule B: Access to the coastal marine area of the islands within 1000 m of MHWS that does not comply with rule A or rules 26 to 28—*discretionary activity*	
Summary of benefits	• Rule A requires the provision of evidence of an appropriate anti-fouling system and the undertaking of an in-water inspection for the presence of fouling (form provided in Appendix 3 of the proposed regional coastal plan is to be completed). If fouling is detected, then a risk assessment of the fouling present is required. • Rule B requires a discretionary permit if a vessel intends to access the surface waters inside 1000 m of MHWS on the island but has not complied with either rule A or rules 26 to 28. These two rules will apply until 1 year after the plan becomes operative, at which time rules 26 to 28 will apply instead. This is to allow a lead-in time for vessels to accommodate any extra costs, such as increased frequency of dry dock cleaning and anti-fouling, if necessary. The form to be completed in Appendix 3 is the same form that eco-tourist operators going to the Subantarctic Islands have been required to complete for the last 3 years.

Summary of costs	There are costs associated in providing documentation and having an in-water inspection. If rule A is not complied with, or a risk assessment is required (or opted for) under rule 28, then there will be the costs of the risk assessment and application and processing a coastal permit. However, as noted above in relation to rule 23 and policies 2 and 3, the costs of biosecurity breaches are significant and would far outweigh the cost of an in-water inspection and/or a risk assessment.
Effectiveness	These rules will apply to **all** vessels once the plan has been notified, not just eco-tourist operators going to the Subantarctic Islands, as has been the case for the last 3 years. This will provide a more effective safeguard against the risk of marine biosecurity breaches. Refer to the evaluation of rules 26 to 28 for further explanation of the effectiveness of the regulation provided by rules A and B and 26 to 28.
Efficiency	These rules are considered efficient in the short term. They require the in-water inspection and a risk assessment if fouling is detected. Whilst the Minister will not have the ability to prevent a vessel from visiting the islands if a risk assessment indicated the risk was more that negligible, the rules will allow the collection of information for monitoring purposes.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 (policy 12(1) in particular) and the purpose and principles of the RMA.

3.10 Controls on hull and niche area fouling

Explanation

Refer to the explanation in 3.7: Harmful or invasive species above. Rules 26 to 28 establish requirements for clean hull and niche areas to minimise the risk of introducing harmful or invasive species.

In combination, rules 26 to 28 provide a staged approach to regulating clean hull and niche areas of vessels as follows:

i. Improvements in vessel hygiene measures, such as regular antifouling paint renewal.

ii. In-water inspection to demonstrate that hull and niche areas are free of fouling beyond a micro-biofouling, or a microfilm or slime layer.

iii. If an in-water inspection does not demonstrate hull and niche areas are free of fouling beyond a micro-biofouling, a risk assessment will be undertaken to ensure that only those vessels with biofouling that does not pose a biosecurity risk to the islands are allowed to travel to them.

iv. If there is a biosecurity risk, access to the islands is denied.

The greatest emphasis, however, is on vessel hygiene. This involves the application of an anti-fouling system that is appropriate to the vessel and its pattern of use, applied following correct and thorough preparation, in accordance with the manufacturers' directions.

Floerl et al. 2010 note that the age of the antifouling paint on a vessel's hull is the best-known predictor for biofouling extent and the presence of marine harmful or invasive species. Vessels that have very recently received a new coating of antifouling paint will mostly be free of biofouling, on surfaces coated with the paint. Likewise, a vessel that has very recently received *comprehensive* in-water or shore-based cleaning may be clear of biofouling and pose no immediate biosecurity risk. (Floerl et al. 2010: 4).

Evaluation

Controls on hull and niche area fouling: Rule 26: Access to the coastal marine area of the islands within 1000 m of MHWS for vessels except yachts—*permitted activity* Rule 27: Access to the coastal marine area of the islands within 1000 m of MHWS for yachts—*permitted activity* Rule 28: Access to the coastal marine area of the islands within 1000 m of MHWS for vessels that have a risk assessment undertaken—*discretionary activity*	
Summary of benefits	• Rule 26 applies to vessels other than yachts. It requires the provision of evidence of an appropriate anti-fouling system and the undertaking of an in-water inspection for the presence of fouling (form provided in Appendix 4 of the proposed regional coastal plan to be completed). If fouling is detected, then a risk assessment of the fouling present is required (rule 28). • Rule 27 applies to yachts. It requires the provision of evidence of an appropriate anti-fouling system the same as rule 26, but gives yachts the option of either complying with all the conditions of rule 26 or, instead of having an in-water inspection, they could opt to haul out and have a thorough clean. • Rule 28 applies to all vessels that either require or opt for a risk assessment. This is a discretionary activity, thereby giving the Minister the ability to decline the application for access inside 1000 m of MHWS if the risk assessment indicates the fouling presents a risk that is more than negligible. These three rules will not apply until 1 year after the plan becomes operative. In the intervening period, rules A and B will apply. As noted above, this is to allow a lead-in time for vessels to accommodate any extra costs, such as increased frequency of dry dock cleaning and anti-fouling, if necessary.
Summary of costs	There are costs associated in providing documentation and having an in-water inspection. If a risk assessment is required or opted for under rule 28, then there will be the costs of the risk assessment and the coastal permit application and processing. However, as noted above in relation to rule 23 and policies 2 and 3, the costs of a biosecurity breach are significant and would far outweigh the cost of an in-water inspection and/or a risk assessment. The cost of hauling out and cleaning the hull of a yacht varies with the size of the yacht. Based on a quote from a commercial provider, it is currently approximately $170 for an 11-m yacht to $700 for a 20-m yacht.
Effectiveness	These rules will apply to all vessels, from 1 year after the proposed regional coastal plan becomes operative. These rules are effective because they will provide a better safeguard against the risk of a marine biosecurity breach than rules A and B, and the approach prior to the plan being notified.
Efficiency	These rules will be efficient in reducing the risk of a marine biosecurity breach. They require the in-water inspection and a risk assessment if fouling is detected. The Minister will have the ability to prevent a vessel from visiting the islands if a risk assessment indicates the risk is more than negligible. The rules also allow the collection of information for monitoring purposes. The rules regulating hull and niche area fouling are efficient because they allow a staged approach. As noted above, the first check is evidence that the vessel has an appropriate anti-fouling system, followed by an in-water inspection to check for the presence of fouling beyond micro-biofouling. If the vessel does not pass the in-water inspection, it has the option of cleaning or having a risk assessment to be completed in accordance with the protocols developed by NIWA (Floerl et al. 2010). It is recognised, however, that cleaning is not a practical option for large vessels due to limited dry dock facilities being available and time delays. Read together, the rules focus on prevention rather than cure, due to the difficulty and expense of marine pest eradication operations. This focus on vessel hygiene is consistent with: IMO draft guideline to minimise the transfer of invasive aquatic species; MAF Biosecurity New Zealand's (MAFBNZ's) Import Health Standard; the current review of the ANZECC Code of Practice for Antifouling, In-water Hull Cleaning and Maintenance; and a risk assessment to assess the biosecurity risks associated with biofouling organisms on hulls of vessels arriving at New Zealand from international waters that MAFBNZ has recently undertaken (MAFBNZ in prep.).

	In MAFBNZ's risk assessment, it is proposed that any macro-organisms found on the hull of an arriving international vessel are treated as a risk organism. The justification for this is the difficulty in identifying marine organisms in situ, and the association of macro-fouling organisms with the introduction of non-indigenous species, and the need to rapidly clear vessels. As a result, MAFBNZ considers that the presence of macro-fouling organisms indicates a biosecurity risk that needs to be managed. (MAFBNZ, in prep.: 1). MAFBNZ's risk assessment also notes that different vessels have been associated with different levels of risk based on their physical characteristics, maintenance history, voyage characteristics and accumulation of biofouling. For example, recreational vessels have been identified as being high risk due to long lay-up periods, slow and itinerant voyages and the marginal benefit of in-service maintenance to the owner. By contrast, commercial vessels have rapid turn around times and significant efficiency incentives to have clean hulls so they pose a lesser biosecurity risk; however, these vessels also have a large total surface area of niche areas, such as sea chests, that are particularly vulnerable to fouling. (MAFBNZ, in prep.: 3). Residence time of a vessel at any one location is also a factor that affects risk, but one that is difficult to set a limit on. There are many variables that can influence the risk of picking up, or releasing, a harmful or invasive species. For example, the age of anti-fouling treatment. There is consensus in research over the last 5 or so years that the age of anti-fouling treatments is a key factor affecting their effectiveness. (Floerl & Inglis 2005; Floerl et al. 2005; Piola et al. 2009; Piola & Forrest 2009; Floerl et al. 2010; MAFBNZ 2010b). A vessel that has recent anti-fouling (e.g. within the last month) would be less likely to pick up harmful or invasive species than a vessel with old anti-fouling. However, the risk will change depending on a range of factors such as (but not limited to) the species present, seasonality and their reproductive process, water temperature, the number of niche areas on the vessel and anti-fouling treatment they may or may not have been received. There is also a consensus in research that niche areas are at high risk of fouling, because prevention is difficult. (MAFBNZ 2010b: 2; Floerl et al. 2010: 4, 20, 25; IMO 2010, Annex 1: 6). With these uncertainties in mind, a maximum period of 48 hours has been included in the rules for vessels visiting Macquarie Island or any other mainland New Zealand location before returning to the Subantarctic Islands if the vessel has been to the Antarctic and could have sustained ice damage to anti-fouling coatings. The short timeframe of 48 hours is considered precautionary and efficient given the uncertainties. Within the marine environment, ports and harbours are the primary 'hot spots' for the increased occurrence and abundance of non-indigenous marine species, with international shipping being one of the most important vectors responsible for the spread between regions. Furthermore, ports can act as stepping stones for the spread of unwanted species, via domestic vessel traffic between regions or natural dispersal. (Piola et al. 2009: 633). A similar view has been adopted in the proposed regional coastal plan for structures. Any permanent structures such as wharves and jetties are considered to be a higher risk than open coast. It is considered efficient to reduce the risk of a biosecurity breach from vessels that have visited Macquarie Island (an Australian territory that the proposed regional coastal plan has no jurisdiction over) to require that they have anchored or steamed off the coast of the Island no closer than a 100 m from any permanent structures, and for no more than 48 hours. The risk assessment in Appendix 4 will be efficient because it will ensure a consistent approach to in-water inspections. Floerl et al. 2010 note that previous vessel surveys have shown that the biofouling in general hull areas most often occurs in two locations: (i) close to the waterline, where antifouling paint is often damaged during berthing operations or by striking floating debris while sailing, and (ii) in the stern area of the vessel, where hydrodynamic drag is reduced when a vessel moves through the water. General hull areas should therefore be sampled by vertical stern transects and by horizontal transects along the entire waterline of the vessel. (Floerl et al. 2010: 23). See the transects described in Fig. A4.1 of Appendix 4 of the proposed regional coastal plan, together with the niche areas in Fig. A4.2 (Appendix 4 of the proposed plan) will result in consistent and comprehensive in-water inspection each time regardless of different dive service providers undertaking the inspections.

	The Level of Fouling (LOF) scale was developed by NIWA as a quick and effective method of quantifying biofouling on vessel hulls (Floerl et al. 2005). It has since been used in NIWA's own biofouling research projects, as well as in projects commissioned by MAF Biosecurity New Zealand. The LOF rankings provide a measure of the extent and abundance of biofouling across a vessel's hull.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010 (policy 12(1) in particular) and the purpose and principles of the RMA.

3.11 Surface water activities in the Subantarctic Islands—controls on access to zones close into shore

Explanation

The purpose for the rules controlling surface water activities is predominantly to reduce the risk of maritime incident and oil spill, and also the risk of a biosecurity breach, terrestrial and/or marine.

The threat of an oil spill is a key issue for the proposed regional coastal plan. The challenging conditions, particularly the strong winds and currents, and the need for vessels to travel slowly when close to the islands present vessels with navigation safety risks. This is especially the case for large vessels. Accordingly, the risk is managed by restricting vessels' access close into shore, based on the size of the vessel. The larger the vessel, the more restrictive the rules are.

Fuel transfers present a potential oil spill risk. Ship-to-shore fuel transfers need to be provided for to ensure that fuel supplies on the islands are kept stocked up, particularly for use in the event of emergencies. Ship-to-ship fuel transfers at sea, however, are considered to be a significant risk that should be avoided, hence they are prohibited.

The severity of impact of oil spills is closely related to the type of fuel, the amount (the bigger the vessel, the larger the volume of fuel), and the exposure of the area of the spill. Heavy fuel oil would have the most severe impact. While diesel presents a risk to some wildlife (a severe risk to the Campbell Island teal, the world's rarest duck, and to shags), it is the easiest type of fuel spill to manage, as it will disperse and evaporate in a high-energy environment. Similarly, the severity of discharges to air is closely related to fuel type. Marine diesel will burn cleaner than heavy fuel oil, assisting with reducing emissions.

Vessels must comply with the rules requiring clean hull and niche areas to minimise the risk of a marine biosecuirty breach (rules A and B and rules 26 to 28). To reduce the risk of a terrestrial biosecurity breach, the conditions of the permitted rules for access to surface waters all include a condition requiring the vessel to have been thoroughly checked for harmful organisms above the waterline and to be free of harmful plants and animals (including insects). A similar condition will be applied to any coastal permits for access to surface waters.

The explanation for managing the risk of biosecurity breaches—marine or terrestrial—is provided above in the explanation of rule 3.7: Harmful or invasive species.

Evaluation

Surface water activities in the Subantarctic Islands—controls on access to zones close into shore: Rule 29: Access to the coastal marine area (CMA) for management operations—*permitted activity* Rule 30: Access to the CMA for re-supply of fuel stores—*permitted activity* Rule 31: Access to the CMA for management activities and research—*permitted activity* Rule 32: Access to the CMA for vessels 75 m or less in length to Port Ross when southern right whales are breeding—*permitted activity* Rule 33: Access to the CMA for vessels longer than 75 m in length to Port Ross when southern right whales are breeding—*discretionary activity* Rule 34: Access to a zone offshore of the Snares Islands/Tini Heke to observe Tītī—*discretionary activity* Rule 35: Access to the CMA by ancillary craft—*permitted activity* Rule 36: Access but not anchoring to the CMA for vessels up to 75 m in length from MHWS to 300 m seaward of MHWS to launch ancillary craft and passengers—*permitted activity* Rule 37: Access to the CMA by vessels up to 25 m in length from MHWS to 300 m from MHWS—*discretionary activity* Rule 38: Access to the CMA by vessels up to 75 m in length from 300 m from MHWS to the outer limits of the territorial sea—*permitted activity* Rule 39: Access to the CMA by vessels > 25 m in length from MHWS to 300 m from MHWS—prohibited *activity* (exception is those vessels anchoring at the preferred anchoring locations provided in rule 46) Rule 40: Access to the CMA by vessels from 75 m to 125 m in length in the zone 300 m from MHWS to 600 m from MHWS—*discretionary activity* Rule 41: Access to the CMA by vessels from 75 m to 125 m in length in the zone 600 m from MHWS to the outer limits of the territorial sea—*permitted activity* Rule 42: Access to the CMA by vessels > 125 m in length from MHWS to 600 m from MHWS—*prohibited activity* Rule 43: Access to the CMA by vessels > 125 m in length in the zone from 600 m from MHWS to 1000 m from MHWS—*discretionary activity* Rule 44: Access to the CMA by vessels > 125 m in length in the zone from 1000 m from MHWS to the outer limits of the territorial sea—*permitted activity* Rule 45: Anchoring in the CMA at the location listed by vessels up to 25 m in length in the zone MHWS to 300 m from MHWS—*permitted activity* Rule 46: Anchoring in the CMA at the location listed by vessels up to 75 m in length in the zone MHWS to 300 m from MHWS—*permitted activity* Rule 47: Access to the CMA (MHWS to outer limits of the territorial sea) for ship-to-ship fuel transfers—*prohibited activity* Rule 48: Access to the CMA by vessels fuelled by heavy fuel oil, except those with a permit under rule 34 to travel directly to the zone offshore of the Snares Islands/Tini Heke to watch Tītī—*prohibited activity*	
Summary of benefits	• Rules 29 to 31 provide for essential activities to take place without access restrictions, but still subject to the biosecurity measures, similar to all other vessels. • Rules 32 and 33 place restrictions on access to Port Ross to minimise potential adverse effects on southern right whales when they are present in large numbers for breeding and nursing. • Rule 34 provides a compromise to the restrictions on access to the Subantarctic Islands by large cruise ships (> 125 m) fuelled by heavy fuel oil. The rule, combined with an exception in rule 48, allows large cruise ships to obtain a coastal permit to travel to a zone offshore of the Snares Islands/Tini Heke to observe Tītī leaving from or arriving at the islands in their millions. • Rules 35 to 46 provide the access restrictions for vessels, based on vessel length, in order to minimise the risk of navigation safety incident and oil spill. These rules are considerably easier to follow when studied in conjunction with the maps in Appendix 1 of the proposed regional coastal plan. Rules 45 and 46 list the locations where vessels up to the 25 m in length and 75 m in length, respectively, have permitted access to anchor; again, these rules are easier to follow when studied in conjunction with the maps in Appendix 1 of the plan. • Rule 47 prohibits ship-to-ship fuel transfers due to the high risk of incident and oil spill that the activity would present, particularly in the high-energy environment of the islands. • Rule 48 prohibits the use and/or carrying of heavy fuel oil (with an exception for those cruise ships entering the CMA to go directly to the

	Snares Islands/Tini Heke to observe Tītī, as provided for in rule 34). This is in line with the prohibition on using or carrying heavy fuel oil in Antarctica.
Summary of costs	There will be costs associated with the consent applications and processing for some access activities. There will be costs associated with meeting the measures to prevent a biosecurity breach. However, the costs of mitigating an oil spill or biosecurity breach far outweigh those costs.
Effectiveness	Restricting access close into shore and the fuel type used by the vessels will be effective in reducing the risk of navigation safety incidents and oil spills and marine or terrestrial biosecurity breaches. Buckens et al. 2009 note that using a vessel's length as the distinguishing measure for the different zones of restricted access appears to be entirely appropriate for this proposed regional coastal plan. They note that the proposed length classification is simple and acceptable for navigation safety purposes, and that feedback from the tourism/recreational and fisheries industries and research of operator' websites confirm that the current actual use of the area falls well within these classification requirements. The preferred anchorages that have been identified based on expert maritime advice (Buckens et al. 2009), and feedback from current users of the coastal marine areas of the islands. They provide options for all weather conditions.
Efficiency	The rules are considered efficient in that they allow access as a permitted activity (subject to measures to prevent biosecurity breach) where the risk of incident is low or negligible, allow access where the risk is higher but manageable with the imposition of consent conditions on a case-by-case basis, and prohibit access where the risk is considered unacceptable. As noted above in the discussion of Issue 1, the Department of Conservation commissioned expert maritime advice from Captain Kees Buckens (Buckens et al. 2009). Captain Buckens considered the access restrictions to be a pragmatic approach. He also considered the identification of preferred anchorage sites, which did not require a coastal permit to access, to be a pragmatic approach. With respect to rule 47, Buckens et al. (2009) considered that because of the sensitivity of the islands, it is reasonable to prohibit ship-to-ship fuel transfer within the coastal marine areas of both the Kermadec and the Subantarctic Islands. In terms of rule 48 which prohibits the use or carrying of heavy fuel oil (HFO), Buckens et al. (2009) note that the larger commercial vessels that may seek to visit the islands in the future use heavy fuel, typically Intermediate Fuel Oil (IFO) 380 (also IFO 180). Buckens explains that IFO is a blend of gasoil and heavy fuel oil with less gasoil than marine diesel oil. The figures 380 and 180 refer to the maximum viscosity of 380 and 180 centistokes respectively. When fuel oils are cooled down, the viscosity increases and, in the least-blended fuels, this may lead to congealing of the fuel. When spilled, the fuel oil is likely to break down, with the gasoil particles evaporating, leaving the heavy fuel particles, which would be particularly slow to break down in cold, subantarctic marine environment. The prohibition on using or carrying HFO is in line with the prohibition on using or carrying heavy fuel oil in Antarctica. Refer MARPOL ANNEX 1 Chapter 9—Special requirements for the use or carriage of oils in the Antarctic Area.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010; and the purpose and principles of the RMA.

3.12 Surface water activities in the Kermadec Islands—controls on access to zones close into shore

Explanation

Refer to the explanation above in rule 3.11: Surface water activities in the Kermadec Islands—controls on access to zones close into shore, and the explanation for managing the risk of biosecurity breaches—marine or terrestrial—is provided above in the explanation of rule 3.7: Harmful or invasive species.

Evaluation

Surface water activities in the Kermadec Islands—controls on access to zones close into shore: Rule 49: Access to the coastal marine area (CMA) for management operations—*permitted activity* Rule 50: Access to the CMA for re-supply of fuel stores—*permitted activity* Rule 51: Access to the CMA (MHWS to outer limits of the territorial sea) for ship-to-ship fuel transfers—*prohibited activity* Rule 52: Access to the CMA for research activities—*permitted activity* Rule 53: Access to the CMA by ancillary craft—*permitted activity* Rule 54: Access to the CMA of Raoul Island by vessels larger than ancillary craft in the zone from MHWS to 300 m from MHWS—*discretionary activity* Rule 55: Access to the CMA by vessels other than ancillary craft in the zone 300 m from MHWS to the outer limits of the territorial sea—*permitted activity* Rule 56: Access to the CMA of the islets around Raoul Island and the other Kermadec Islands by vessels other than ancillary in the zone from MHWS to 600 m from MHWS—*discretionary activity* Rule 57: Access to the CMA of the islets around Raoul Island and the other Kermadec Islands by vessels other than ancillary in the zone from 600 m from MHWS to the outer limits of the territorial sea—*permitted activity* Rule 58: Anchoring in the CMA of Raoul Island at the locations listed—*permitted activity* Rule 59: Access to the CMA of the Kermadec Islands by vessels fuelled by heavy fuel oil—*prohibited activity*	
Summary of benefits	• Rules 49, 50 and 52 provide for essential activities to take place without access restrictions, but still subject to the biosecurity measures, similar to all other vessels. • Rule 51 prohibits ship-to-ship fuel transfers due to the high risk of incidents and oil spills that the activity would present, particularly in the high energy-environment of the islands. • Rules 53 to 58 provide the access restrictions for vessels, in order to minimise the risk of navigation safety incidents and oil spills. These rules are considerably easier to follow when studied in conjunction with the maps in Appendix 1 of the proposed regional coastal plan. Rule 58 lists the locations where vessels have permitted access to anchor—again, these rules are easier to follow when looked at in conjunction with the maps in Appendix 1 of the plan. • Rule 59 prohibits the use and/or carrying of heavy fuel oil. This is in line with the prohibition on using or carrying heavy fuel oil in Antarctica.
Summary of costs	There will be the costs of consent applications and processing for some access activities. There will be costs associated with meeting the measures to prevent biosecurity breaches. However, the costs of mitigating oil spills or biosecurity breaches far outweigh those costs.
Effectiveness	The rules will be effective in reducing the risk of navigation safety incident and oil spills and terrestrial biosecurity breaches. The preferred anchorages that have been identified based on expert maritime advice from Captain Kees (Buckens et al. 2009), and feedback from current users of the coastal marine areas of the islands. They provide options for all weather conditions.
Efficiency	The rules are considered to be efficient in that they allow access as a permitted activity (subject to measures to prevent biosecurity breach) where the risk of incidents is low or negligible; allow access where the risk is higher but manageable with the imposition of consent conditions on a case-by-case basis; and prohibit access where the risk is considered unacceptable.

	As noted above in the discussion of Issue 1, the Department of Conservation commissioned expert maritime advice from Captain Kees Buckens. Captain Buckens considered the access restrictions to be a pragmatic approach. He also considered the identification of preferred anchorage sites, which did not require a permit to access, to a pragmatic approach. With respect to rule 51, Buckens et al. (2009) considered that because of the sensitivity of the islands, it is reasonable to prohibit ship-to-ship fuel transfer within the coastal marine areas of both the Kermadec and Subantarctic islands. In terms of rule 59, which prohibits the use or carrying of heavy fuel oil (HFO), Buckens et al. (2009) note that the larger commercial vessels that may seek to visit the islands in the future are likely to use heavy fuel, typically Intermediate Fuel Oil (IFO) 380 or IFO 180. Captain Buckens explains that IFO is a blend of gasoil and heavy fuel oil with less gasoil than marine diesel oil. The figures 380 and 180 refer to the maximum viscosity of 380 and 180 centistokes respectively. When fuel oils are cooled down the viscosity increases and in the least-blended fuels, this may lead to congealing of the fuel. When spilled, the fuel oil is likely to break down with the gasoil particles evaporating, leaving the heavy fuel particles. As noted above, the prohibition on using or carrying HFO is in line with the prohibition on using or carrying heavy fuel oil in Antarctica. Refer MARPOL ANNEX 1 Chapter 9—Special requirements for the use or carriage of oils in the Antarctic Area.
Appropriateness	The rules are appropriate because they give effect to the objectives and policies of the proposed regional coastal plan; the New Zealand Coastal Policy Statement 2010; and the purpose and principles of the RMA.

4. Conclusion

This evaluation identifies the key resource management issues for the sustainable management of the coastal marine areas of the Kermadec and Subantarctic Islands. It also evaluates the objectives, policies, rules, and other methods developed to address those issues.

The evaluation concludes that the objectives, policies, rules and other methods are consistent with the purpose of the Resource Management Act 1991 and give effect to the New Zealand Coastal Policy Statement 2010. Taking account of the significant natural character of the islands, their remote location and the high degree of protection they have already under other legislation and conventions, the rules and other methods are considered efficient and effective means of achieving the objectives of the proposed regional coastal plan.

The evaluation identifies that there will be costs imposed on users of the coastal marine areas of the islands. There will be costs of developing applications and processing if coastal permits are required. However, wherever there is confidence that current and anticipated use will have no or minor adverse effects on the environment, those activities have been provided for as permitted activities.

The most significant costs the plan provisions will impose are those associated with the requirements for all vessels to have clean hull and niche areas to minimise the risk of marine biosecurity breaches. Those costs will escalate if fouling is present and a risk assessment is necessary, and would be significant if a vessel was denied access on the basis that fouling of its hull and niche areas was considered an unacceptable risk. The evaluation has identified, however, that the costs of biosecurity breaches far outweigh the costs the plan will impose on users of the coastal marine area. Marine eradications of invasive species are very difficult and very expensive.

Appendix 1: Section 32 of the RMA

32 Consideration of alternatives, benefits, and costs

(1) In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—

(a) the Minister, for a national environmental standard or a national policy statement; or

(b) the Minister of Conservation, for the New Zealand coastal policy statement; or

(c) the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Schedule 1); or

(d) the person who made the request, for plan changes that have been requested and the request accepted under clause 25(2)(b) of the Schedule 1.

(2) A further evaluation must also be made by—

(a) a local authority before making a decision under clause 10 or clause 29(4) of the Schedule 1; and

(b) the relevant Minister before issuing a national policy statement or New Zealand coastal policy statement.

(3) An evaluation must examine—

(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and

(b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

(3A) This subsection applies to a rule that imposes a greater prohibition or restriction on an activity to which a national environmental standard applies than any prohibition or restriction in the standard. The evaluation of such a rule must examine whether the prohibition or restriction it imposes is justified in the circumstances of the region or district.

(4) For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—

(a) the benefits and costs of policies, rules, or other methods; and

(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

(5) The person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for that evaluation.

(6) The report must be available for public inspection at the same time as the document to which the report relates is publicly notified or the regulation is made.

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