REGIONAL COASTAL PLAN

Kermadec and Subantarctic Islands

Operative 15 September 2017

Department of Conservation
Te Papa Atawhai

Regional Coastal Plan: Kermadec and Subantarctic Islands

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Cover photo: *Pleurophyllum speciosum* with Northeast Harbour in background, Campbell Island.
Photo: John Barkla

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The Minister of Conservation approved this Regional Coastal Plan by signing it on 17 August 2017, in accordance with Clause 19 of Schedule 1 of the Resource Management Act 1991.

Honourable Maggie Barry ONZM
Minister of Conservation

Contents

Introduction

The preparation of a regional coastal plan for New Zealand's offshore islands by the Minister of Conservation is a legal requirement under section 31A of the Resource Management Act 1991 (RMA). The offshore islands include the Kermadec Islands and the Subantarctic Islands (Snares Islands/Tini Heke, the Bounty Islands, the Antipodes Islands, the Auckland Islands, Campbell Island/Motu Ihupuku and the islands adjacent to Campbell Island/Motu Ihupuku).

The isolation of these islands (see Fig. 1) is a key reason for the Minister of Conservation being responsible for the preparation and monitoring of this regional coastal plan. Their isolation is also key to the islands' retention of natural features and abundant unique and diverse flora and fauna, as summarised in the values section.

Purpose of the regional coastal plan

This plan aims to give effect to the purpose of the RMA by providing for the sustainable management of the coastal marine areas of the Kermadec and Subantarctic Islands.

Sections 12, 14 and 15 of the RMA restrict certain activities in the coastal marine area unless expressly allowed by a rule in a regional coastal plan or a resource consent. This plan contains objectives, policies and methods including rules, which establish the framework within which certain uses are permitted and proposals for activities can be assessed. This plan provides certainty for existing and potential users of the coastal marine area through the provision of these rules.

Structure of the document

This document is structured as follows:

1. The jurisdiction/extent of this plan and the legal framework that it sits within
2. Summaries of the values of the two groups of islands
3. The issues of concern that threaten the values, and the objectives, polices and methods to address them
4. The rules controlling activities within the coastal marine areas of the two groups of islands
5. Other matters (i.e. administrative charges, integrated management and information to be submitted with a coastal permit application)
6. Appendices with other relevant information

Jurisdiction and legal framework

Statutory requirement for this plan

It is a legal requirement for the Minister of Conservation to prepare this regional coastal plan. Section 31A of the RMA—emphasis added—states:

31A Minister of Conservation to have certain powers of local authority

(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.

Jurisdiction

Section 2(1) of the RMA gives the following definition for the coastal marine area:

> **Coastal marine area** means the foreshore, seabed, and coastal water, and the air space above the water —
>
> (a) of which the seaward boundary is the outer limits of the territorial sea:
>
> (b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of—
>
> (i) 1 kilometre upstream from the mouth of the river; or
>
> (ii) the point upstream that is calculated by multiplying the width of the river mouth by 5

Given the small size of rivers on New Zealand's offshore islands, a simple approach to river mouth boundaries has been adopted—a continuation of the line of mean high water springs (MHWS) straight across the mouth of all rivers.

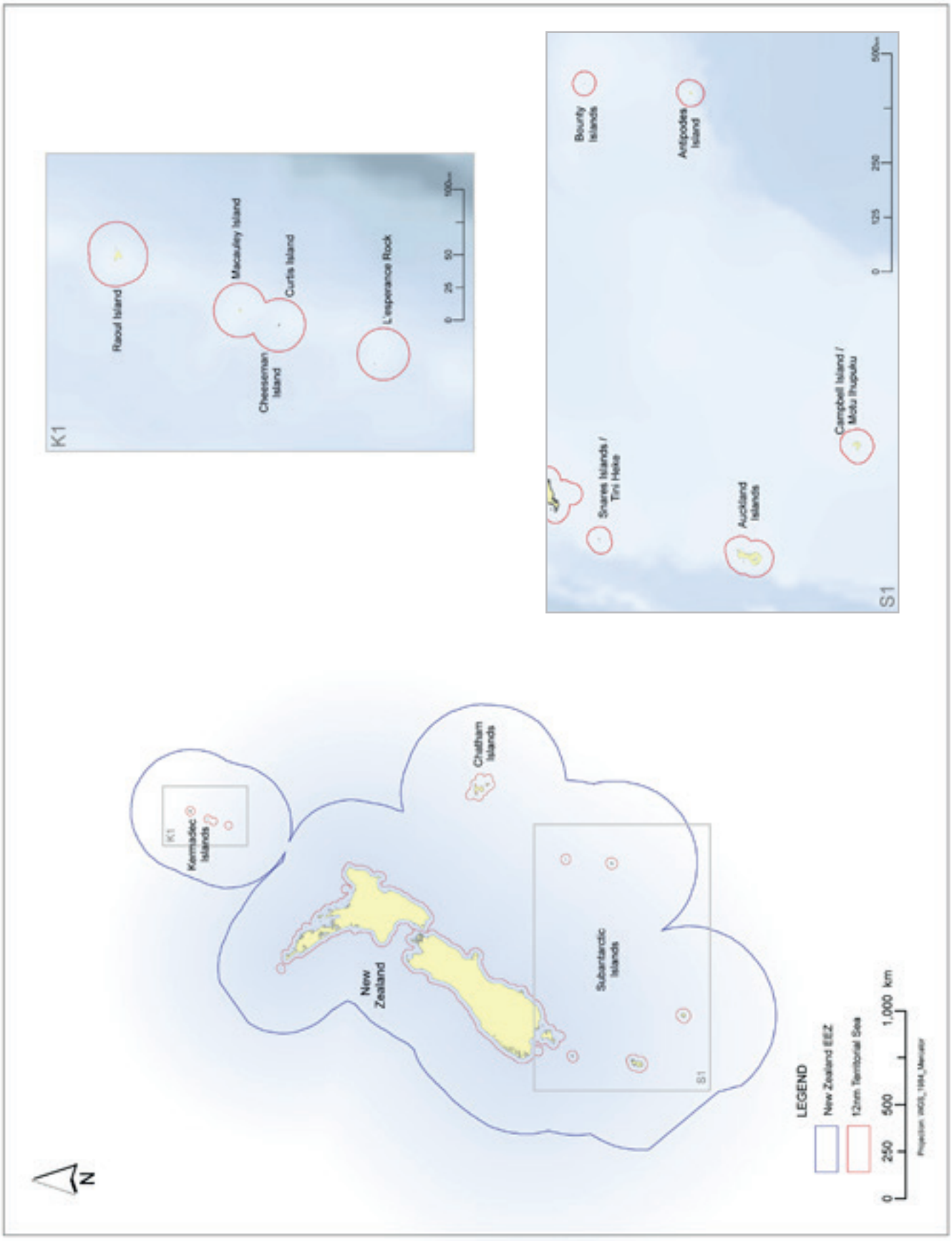

Figure 1. Location of the Kermadec and Subantarctic Islands.

Values of the coastal marine areas of the islands

The Kermadec and Subantarctic Islands and their coastal marine areas are unique. The islands themselves have one of the highest levels of protection in New Zealand statute as nature reserves under the Reserves Act 1977. The Subantarctic Islands are also national reserves under the Reserves Act and are internationally recognised world heritage areas. This world heritage status applies out to 12 nautical miles. For both groups of islands, there is significant land–sea dependency. Hence, an ecosystem-based approach that provides for well-integrated management of the land–sea interface is required, and will be provided by integrated planning with the CMSs for the two groups of islands.

The purpose of this section of this plan is to provide guidance and assist plan users in the application of the objectives, policies and rules. It is acknowledged that this section of the plan is necessary because the islands concerned are remote, and independent research of natural values and use values by individual users would be prohibitive and costly. However, this section does not purport to be a definitive description of the natural values and use values, and each application will need to be considered on its merits in the usual way.

Values of the Subantarctic Islands

Natural character—geology, ecosystems, flora and fauna

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 Subantarctic Islands are located on the Pacific Plate, on two plateaus on the continental shelf that is to the south and east of the bottom of the South Island off mainland New Zealand. Three of the island groups are on the Campbell Plateau to the south-southeast: Snares Islands/Tini Heke, the Auckland Islands and Campbell Island/Motu Ihupuku. The other two groups, the Bounty Islands and the Antipodes Islands, are on the Bounty Plateau to the east-southeast. The two plateaus are sometimes referred to collectively as the Southern Plateau.

There are some key differences in the geological history of the individual island groups. The parent rock of the Southern Plateau is granite and metamorphic rocks more than 100 million years old. These rocks are similar in composition to the western mountains of the South Island of New Zealand and Marie Byrd Land in West Antarctica. Snares Islands/Tini Heke and the Bounty Islands, the two most northerly groups of islands, are made up of granite and metamorphic rocks of this ancient landmass.

Because of the distances between each island group and their different geological ages, each has its own unique assemblage of marine algae, invertebrates and fish. Each marine assemblage has a reasonable level of endemism and is as distinctive as the terrestrial flora and fauna of these islands. Diving surveys around the Bounty and Antipodes Islands in April 2005 showed that these areas support as many species as renowned areas such as Galapagos Island and Puget Sound (Department of Conservation & Ministry of Fisheries 2006: page 11)[1]. Diving surveys in February 2009 showed striking differences in the types of species that

[1] Department of Conservation; Ministry of Fisheries 2006: Marine protection for the New Zealand Subantarctic Islands— a background resource document. Department of Conservation and Ministry of Fisheries, Wellington, New Zealand.

colonised the inshore areas of the Bounty and Antipodes Islands. These differences could be attributable to a range of factors, such as currents and the position of the islands on the Bounty Plateau, but geology is considered a key factor.

The Bounty Islands are composed of smooth outcrops of ancient granite (early Jurassic) about 180 million years old. They are more closely related to the Jurassic granite of West Antarctica than to New Zealand rocks. The islands have virtually no vegetation above the high tide mark, other than Cook's scurvy grass *Lepidium oleraceum*, which was discovered in 2004. The shoreline has a continuous fringe of the common bull kelp *Durvillaea antarctica*. A severe storm can cover the entire island group in salt spray.

Biological diving surveys in February 2009 that investigated the nearshore marine communities of the New Zealand Subantarctic Islands showed that the islands are significantly different from each other, both in terms of their species composition and their potential ecological function. For example, while Antipodes Island rocky reefs support fairly typical subantarctic shallow subtidal marine communities dominated by nongeniculate coralline algae, the rocky reefs of the Bounty Islands are dominated by filter- and suspension-feeding invertebrates, such as encrusting sponges, barnacles and mussels.

There is virtually no soil development on the Bounty Islands. The higher altitude islands carry a film of hard, polished guano deposited by generations of seabirds and enamelled to the rock surfaces, but elsewhere winter rains wash away bird droppings from the previous summer. Hollows become filled with brown organic sludge formed from decaying carcasses, moulted penguin feathers, excreta, food scraps and seaweed washed up by waves or brought ashore by the Bounty Island shags as nesting material. The shags have coped with the lack of terrestrial plant material for nesting by collecting brown seaweed from the sea. The mollymawks use penguin feathers to reinforce their nests. Despite the lack of soil development and vegetation, the Bounty Islands provide a graphic demonstration of the role of these subantarctic islands as breeding grounds.

Campbell Island/Motu Ihupuku and the Auckland Islands have a more diverse range of marine habitats, which include large embayments and sheltered harbours. Contrasting geology, oceanographic conditions, and nutrient input from seabird and pinniped colonies may all contribute to the observed nearshore community structures of the islands. Each of the island groups supports distinct marine assemblages, with their own suite of endemic species and subspecies. Many of these endemic species are conspicuous and common, such as the endemic species of bull kelp found only at Antipodes Island, which grows down to 20 metre depths, with plants up to 5 metres in length.

The terrestrial and marine environments of the Subantarctic Islands are closely linked. Many species that utilise the islands for shelter, nesting or resting are dependent on the surrounding seas for food; and the islands and vegetation they support receive significant nutrient enrichment from the sea via the input of guano. For example, Antipodes Island has soil and supports a diverse terrestrial flora, which includes large tussocks, *Poa litorosa*. The soil and vegetation provides a 'filter' for nutrients brought to the island by pinnipeds and seabirds. The alga *Prasiola crispa* is found around penguin colonies and in seabird nests on Antipodes Island, surviving on marine-derived nutrients provided by birds. In contrast, as noted above, the Bounty Islands have virtually no soil or terrestrial flora. The guano and excrement produced by seabirds and fur seals at the Bounty Islands runs off the steep islands, directly into the nearshore marine environment, without the 'filter' provided by soil and vegetation at Antipodes Island. The entire Bounty Islands nearshore marine environment receives significant enrichment from the rich supply of marine-derived nutrients, which likely helps to support the diverse encrusting communities found there.

The Subantarctic Islands are significant island refuges for a range of plants and animals found nowhere else in the world. They are important breeding grounds for countless seabirds, penguins and marine mammals, and the habitat of some special plants. The Southern Ocean

is equally important as habitat and a vast feeding ground for wildlife. Significant natural features of the New Zealand subantarctic region include:

- The endemic New Zealand sea lion, which has its principal breeding grounds at the Auckland Islands
- Among the greatest diversity of penguin species found in the world, comprising four breeding species (Snares crested, erect crested, the yellow-eyed and rockhopper—three of which are endemic) and seven transient species
- 40 seabird species breed on the islands—11% of all seabird species in the world and 30% of the world's petrels
- The world's only breeding populations of southern royal albatross and Campbell albatross
- The world's largest populations of wandering albatross, white-capped mollymawk and Salvin's mollymawk
- Over five million[2] (estimated) breeding seabirds on the 328-hectare Snares Islands/Tini Heke
- The world's rarest cormorant, duck, snipe and penguin species (Bounty Island shag, Campbell Island teal, Campbell Island snipe and yellow-eyed penguin, respectively)
- The main breeding ground for southern right whales in the southwest Pacific (Port Ross on Auckland Island)—formerly endangered
- 14 endemic species or sub-species of land birds
- 120 species of birds and 200 species of indigenous vascular plants
- A high level of endemic species of vascular plants (including some that are otherwise only found on Macquarie Island)
- The spectacular subantarctic megaherbs, including the daisy genus *Pleurophyllum*, which is endemic to the New Zealand subantarctic biological region
- The colourful rātā forests and the southernmost tree ferns in the world on the Auckland Islands
- One of the world's largest near-pristine islands (outside the Antarctic and Arctic)—Adams Island at 9896 hectares has never had an introduced mammal become established
- 11 geological sites and landforms of national and regional importance, including granite features (Tertiary dikes and sills), and volcanic features (columnar jointing, lava flows, an intrusive plug, a gabbro, scoria cones and a rare occurrence of peralkaline rhyolite)
- A fascinating human history of exploration, shipwrecks, sealing, whaling, farming and early scientific expeditions

Despite their small size, these islands are very important—largely because of their isolation. This isolation has enabled the retention of their many natural features and abundant wildlife, which has not been the case for so much of the remainder of New Zealand.

The islands were listed as a world heritage area in 1998. The extent of that world heritage status extends out to 12 nautical miles, in recognition of the dependence of the islands' biota on the sea. Each of the inter-connected land–sea ecosystems are crucial to the survival of a large number of endemic, threatened or endangered species.

The New Zealand subantarctic waters are on the migratory path of several whale species, including southern right, minke, sei, fin, blue and humpback baleen whales. The islands are

[2] This is a drop of around 1 million from the estimate of over 6 million seabirds on the Snares Islands/Tini Heke given in the CMS in 1998, reflective of the significant decline of sooty shearwaters (or tītī)—refer Scott et al. 2008: Decline of sooty shearwaters, *Puffinus griseus*, on the Snares, New Zealand. *Papers and Proceedings of the Royal Society of Tasmania 142(1)*: 185–196.

also an important breeding site for southern right whales. Sperm whales, orca and dusky dolphins (toothed whales) are sometimes seen around the New Zealand Subantarctic Islands. Two small cetaceans, the hourglass dolphin and the very rare spectacled porpoise, are restricted to these latitudes and are occasionally seen in New Zealand subantarctic waters.

Māori values of the Subantarctic Islands

Three principal tribes of Te Waipounamu (South Island) and Stewart Island/Rakiura—Waitaha, Kāti Māmoe and Ngāi Tahu—occupied those lands in succession before the arrival of Europeans. Ngāi Tahu established their control of the rohe (tribal area) by intermarriage, diplomacy and warfare with Waitaha and Kāti Māmoe, so that today Ngāi Tahu holds mana whenua in southern New Zealand.

Ngāi Tahu also claims mana whenua for the southern islands including the Subantarctic Islands, which are said to have been known to and used by expeditions seeking food and other natural resources prior to the arrival of Europeans. Ngāi Tahu has established its right under the Treaty of Waitangi to a reasonable share of the sea fisheries off its rohe within the 200 mile exclusive economic zone.

The Ngāti Mutunga iwi and the Mōriori people of the Chatham Islands have links with the Auckland Islands (known to iwi as both Motu Maha and Maungahuka), specifically through the attempt to settle the Port Ross area in the period 1842–56. Separate claims concerning the Auckland Islands have been lodged with the Waitangi Tribunal. Mōriori (Te Iwi Moriori Trust Board and Takat Henu Association of Rekohau Trust, Chatham Islands) have lodged a claim based on Whanaungatanga—an ancestral relationship to Maungahuka; and Te Rununga O Wharekauri (Ngāti Mutunga, Chatham Islands) has lodged a claim for recognition of mana whenua, based on the Port Ross occupation. Another group of Ngāti Mutunga people on the Chatham Islands, who also have strong links to the Auckland Islands, do not support any claim to Maungahuka by their iwi— instead, this group supports the Ngāi Tahu claim.

The Department of Conservation is required to consult with tangata whenua, and it does so willingly and will continue to do so to ensure that iwi interests are taken into account in the Department's decision-making processes for the Subantarctic Islands and surrounding ocean.

The Ngāi Tahu Claims Settlement Act 1998 (the Settlement Act) gives effect to the Deed of Settlement signed by the Crown and Te Runanga o Ngāi Tahu on 21 November 1997 to achieve a final settlement of Ngāi Tahu's historical claims against the Crown.

The Settlement Act acknowledges the special association of Ngāi Tahu with taonga species found in the Southern Ocean, including hoiho (yellow-eyed penguin), tītī (petrels), toroa (albatrosses and mollymawks), rimurapa (bull kelp) and marine mammals.

As a part of the Crown's settlement with Ngāi Tahu, protocols have been developed on how the Department and Ngāi Tahu will work together on specified matters of cultural significance to Ngāi Tahu.

Ngāi Tahu ki Murihiku are kaitiaki of the Southland region, including the Subantarctic Islands and other southern islands. They have prepared a management plan: Te Tangi a Tauira—The Cry of the People, which consolidates Ngāi Tahu ki Murihiku values, knowledge and perspectives on natural resource and environmental management issues.

Historic or Cultural heritage values of the Subantarctic Islands

Archaeological and historical sites in the New Zealand Subantarctic Islands range from small archaeological deposits through to complete original buildings, and include introduced plants (such as flax at the Auckland Islands) and modifications of the natural environment (such as sections of beach cleared of large stones to form boat runs). They represent a range

of human history of local, national and international significance; from the southernmost recorded extent of Polynesian settlement, to sites where the transit of Venus was observed by international scientific expeditions.

Many sites span the boundary between land and marine environments, and almost all have a maritime landscape context. Some sites and site complexes combine to form historic landscapes. For example, in Port Ross at the Auckland Islands, more sheltered anchorages are the hub for a number of sites, including the Enderby Company settlement and outlying farmsteads; the Erebus cove cemetery; castaway provision depots, boatsheds and fingerposts; sealing bases; coastwatcher base and lookout; and sites of scientific observations, including the transit of Venus. There is a similar hub around the more sheltered waters at the head of Perseverance Harbour at Campbell Island/Motu Ihupuku around Camp and Tucker Coves. Because of the way in which heritage values cross between land and sea, many of the sites, buildings, places or areas extend landward of MHWS. To achieve integrated management of these areas, they also need to be given appropriate recognition and protection in the CMS for the Subantarctic Islands.

The islands were notorious for shipwrecks in the second half of the nineteenth century. Shipping traffic in the Southern Ocean around the Great Circle Route was at a peak, serving immigration and the gold rushes at this time, and an increasing number of wrecks occurred throughout the colonies. Reliance upon celestial navigation methods in overcast conditions, a strong southerly drift and a failure to carry up-to-date charts all increased the likelihood of being wrecked on subantarctic shores.

There are eight confirmed wrecks at the Auckland Islands, one at Campbell and two at the Antipodes. Given the number of vessels that were lost in the Southern Ocean, it is likely that more were wrecked on these islands, but without survivors to tell the tales. For most of the wrecks, only very approximate locations are known. The locations of the *Grafton*, *Anjou*, *Derry Castle*, and *Dundonald* at the Auckland Islands, and the *Spirit of the Dawn* and *President Felix Faure* at Antipodes Island can all be estimated with some certainty from historical records, but no underwater archaeological survey has been undertaken. Survey in these environments is extremely difficult and expensive, and the only investigations have been undertaken in association with attempted salvage operations searching for the reputed cargo of gold on the *General Grant* at the Auckland Islands.

In addition to the wrecks themselves, a number of sites associated with the activities of shipwreck survivors remain in the coastal marine area and coastal environment. These include the boat run at the *Grafton* wreck site and the campsite of the *Anjou* survivors in Carnley Harbour, Auckland Islands; and the *Derry Castle* grave site on Enderby Island. Other survivor campsites are also in close proximity to the shore, as it was vital to survival to attract the attention of any passing ships.

Government relief for shipwreck victims from the 1860s until the 1920s took the form of the release of live animals and planting of vegetable crops; the provision of dried foods, clothes and equipment; the construction of depots to house provisions and provide limited shelter; the construction of castaway boatsheds and boats to provide transport to depots; and the installation of fingerposts to guide the way. Most boatsheds were located at the very edge of the tide to enable easy launching of the boats. Archaeological remains associated with the boatsheds on Adams, Ewing, Rose and Disappointment Islands, and at Camp Cove in the Auckland Islands group are all in the coastal environment, and some spill over into the coastal marine area. They largely consist of foundation timbers, rusted iron fragments and boat runs. The depots and fingerposts that remain are also located very close to the shore.

The need to monitor for enemy shipping during World War II provided the next opportunity for scientists to spend time in the Subantarctic Islands, and has also left a range of historical buildings and archaeological features. Many of these are again in the coastal environment, but only a small handful of them span into the coastal marine area, such as the wharf piles

at the base in Ranui Cove at the Auckland Islands. Coastwatching in the subantarctic was initiated because of concerns about enemy ships using the islands for shelter. The only record of the islands being used in this way is by a German vessel called the *Erlangen*, which spent around 2 months in Carnley Harbour collecting firewood. Stone arrangements used as jetties during this stay can be seen at low tide, and it is possible that additional features lie unrecorded below the low tide mark.

Current use values

Given the remote location, challenging environmental conditions and national nature reserve status of the islands themselves, the current uses of the Subantarctic Islands are limited to:

- Conservation management
- Scientific research and monitoring
- Tourism
- Fishing
- Wreck exploration and salvage

It should also be noted that the distinction between conservation management and scientific research and monitoring is an arbitrary one: conservation work includes both management and research, and research can be for conservation purposes.

Conservation management on the Subantarctic Islands

The Department of Conservation manages the islands themselves, on behalf of the Government and the people of New Zealand, via the Southland Murihiku Conservation Management Strategy September 2016[3] (the Southland Murihiku CMS). Every year, scientific and conservation management expeditions visit the Subantarctic Islands either to work with the flora and fauna or to maintain facilities and historic sites.

Part or all of the marine environments of Auckland Islands, Campbell Island/Motu Ihupuku, Antipodes Island and Bounty Islands are marine reserves. The Auckland Island—Motu Maha Marine Reserve was established under the Marine Reserves Act 1971[4] in 2003, and extends to the outer limits of the territorial sea. The Subantarctic Islands Marine Reserves Act 2014 created the remaining marine reserves: Moutere Mahue/Antipodes Island Marine Reserve (the entire territorial sea of the island), Moutere Hauriri/Bounty Islands Marine Reserve (58% of the islands' territorial sea), and Moutere Ihupuku/Campbell Island Marine Reserve (39% of the island's territorial sea). The marine environment of the Auckland Islands is also a marine mammal sanctuary under the Marine Mammals Protection Act 1978, out to the outer limits of the territorial sea (12 nautical miles).

A priority for management is the eradication of animal and plant pests, and the re-introduction of species lost in the past. The Campbell Island snipe and teal are both successful recovery stories following successful rat eradication.

Scientific research in the Subantarctic Islands

The Department of Conservation first prepared a Subantarctic Islands Research Strategy[5] in September 2003, and it was updated in 2005[6], as a guide to applicants who want to

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[3] http://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutory-plan-publications/conservation-management-strategies/southland-murihiku/

[4] Declared to be such under the Marine Reserve (Auckland Islands—Motu Maha) Order 2003.

[5] West, C.J. 2003: New Zealand Subantarctic Islands Research Strategy. Department of Conservation, Invercargill.

[6] West, C.J. 2005: New Zealand Subantarctic Islands Research Strategy. Department of Conservation, Invercargill

undertake research in the subantarctic region and to assist the Department of Conservation's assessment of the proposals. This strategy is reviewed from time to time.

The current research strategy describes four research themes:

- Natural ecosystems (including ocean dynamics, food webs and foraging behaviour);
- Effects of introduced biota;
- Human impacts; and
- Non-biological sciences (geology, climatology, oceanography, atmospheric research).

Research projects require a research and collection permit, which can range from a few days to up to 5 years, and an entry permit for each trip to the islands. As with all visitors to the islands, researchers must comply with a minimum impact code and quarantine requirements.

The Metservice has automated weather stations on Campbell Island/Motu Ihupuku and Enderby Island.

Tourism

The Subantarctic Islands have attracted visitors since 1788, when William Bligh mapped the Bounty Islands. Throughout the 1900s there were various visits to the islands from tourists en route to the Ross Sea area of Antarctica. But interest in the Subantarctic Islands as a destination themselves soon grew. The first New Zealand based tours were initiated in 1988, operating out of Dunedin and Bluff. The number and frequency of tours has grown since then.

The Department believes there has been a growth in tourism interest in the Subantarctic Islands over the last 5 years, compared to the previous 20 years. This is from both small-scale ecotourist operators (mostly small to medium sized vessels carrying up to 150 passengers) and the large cruise ships carrying 2000 plus passengers. Cruise New Zealand (representative of 95% of cruise ships visiting New Zealand) generally deters the large cruise ships from attempting to go too close or visiting the Subantarctic islands, and instead suggests they steam offshore of the Snares Islands/Tini Heke at dawn or dusk to watch the tītī (sooty shearwater) leaving or returning in their millions from food foraging, and then to carry on to other mainland destinations.

The remoteness of these rugged windswept islands, set amongst some of the wildest oceans in the world, combined with superb wildlife viewing opportunities make these islands key attractions for ecotourists or tourists seeking remote destinations with a focus on nature tourism. However, the wild oceans, remoteness and associated operational requirements make the islands a challenging environment to visit. As noted above, subantarctic tourism, offering an ecotourism experience, has mostly been limited to small to medium-sized vessels carrying up to 150 passengers to date. The current trend for visits from the smaller ecotourist operators seems to be in decline. This could be for a variety of reasons, such as world economic conditions or changes to the requirements to be met by ships as required by international maritime regulations. There has, however, been sustained tourism by one ecotourism operator over the last 25 years.

Tourists are not permitted to land on any of the Subantarctic Islands except for the main Auckland Island, Enderby Island and Campbell Island/Motu Ihupuku (which can be accessed with an entry permit) because of their highly vulnerable nature. However, tourist vessels will sometimes let visitors view the islands from the sea and may let tourists get closer to the islands using inflatable zodiacs (ancillary craft). This activity is known as 'zodiac cruising', where a cruise ship anchors or steams off the islands and passengers observe the islands' seabirds and marine mammals closer to shore from zodiacs rather than actually landing on

the islands. This allows passengers to experience the marine life, still obtaining a wilderness and wildlife experience, without actually landing on the islands. This activity is most common at the Snares Islands/Tini Heke since they are close to the route between the New Zealand mainland and the Auckland Islands.

Yachts will visit the islands on occasion. As noted above, tourists are not permitted to land on any of the Subantarctic Islands except for the main Auckland Island, Enderby Island and Campbell Island/Motu Ihupuku. All landing requires an entry permit.

Fishing

Commercial fishing in the Southern Ocean is a major industry. However, customary and recreational fishing is uncommon because of the remoteness and extreme weather conditions, and a lack of suitable fish species—there is just the occasional fishing visits by small boats.

There are limitations on commercial fishing within the territorial sea, including:

- Fisheries Regulations prohibit all trawlers greater than 46 metres and any foreign charter vessels from fishing in the territorial sea.
- Benthic Protection Areas established by Fisheries Regulations prohibit bottom trawling and dredging within the territorial seas of the Bounty, Campbell and Antipodes Islands.
- The territorial sea of the Auckland Islands is both a marine reserve and a marine mammal sanctuary out to 12 nautical miles.
- The territorial sea of Antipodes Island is a marine reserve out to 12 nautical miles.
- Parts of the territorial sea of both Campbell Island/Motu Ihupuku and Bounty Island are marine reserves.

Within these constraints, the bulk of the fishing activity within the territorial sea is bottom longlining for ling around the Bounty Islands. Ling is primarily a bottom-dwelling, eel-like species occurring mainly at a depth of 200 to 700 metres over the Campbell and Bounty Plateaus. Deep sea bottom longline fishing for ling can occur at any time of the year but is most likely to happen between August and December around the Snares Islands/Tini Heke and Bounty Islands. This targets the spawning concentrations in spring.

There is a small rock lobster fishery around the Snares Islands/Tini Heke. There is also potential for a deep sea crab fishery off Campbell Island/Motu Ihupuku, with quota allocated under the quota management system.

Although there is a marine reserve around all the Auckland Islands out to 12 nautical miles, and as such fishing is prohibited, there is significant fishing effort in the waters immediately outside this zone. This is primarily bottom trawling for scampi. These vessels tend to be less than 45 metres in length—smaller than most other commercial fishing vessels in the Southern Ocean. Although the fishery is beyond the territorial sea boundary, there is a history of scampi vessels regularly coming close in to shore within the territorial sea of Auckland Island for shelter during rough weather, which in winter can be up to 3 to 4 weeks at a time. Fishing vessels of all sizes up to 105 metres in length may seek shelter near the coast of Auckland and Campbell Islands in severe weather systems.

Wreck exploration and salvage

There have been expeditions to hunt for shipwrecks in the past. In particular, there is considerable interest in searching for the *General Grant* off the main Auckland Island. Although the Auckland Islands are a marine reserve out to 12 nautical miles, there is express provision in the Marine Reserve (Auckland Islands – Motu Maha) Order 2003 to allow for

continued exploration for the *General Grant*. To do so, however, requires the approval of the Director-General of Conservation, as well as authorisation from Heritage New Zealand Pouhere Taonga and a coastal permit under this plan.

Values of the Kermadec Islands

The Kermadec Ridge is an active volcanic arc with a string of volcanoes along its entire length. The Kermadec Islands are the summits of these volcanoes, rising from a sub-oceanic ridge that extends from New Zealand to Tonga. The islands themselves are relatively young with a terrestrial history of no more than two million years, which is reflected in the low levels of faunal and floral endemism.

The 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 jurisdiction section).

The Kermadec Islands Marine Reserve is the largest no-take marine reserve in New Zealand waters. Covering 748,000 hectares, it surrounds the entire coastal marine area of the island group. Lying between latitude 29°S and 32°S, the coastal marine area is New Zealand's only subtropical marine habitat. The islands were sufficiently far away from the mainland to escape heavy fishing pressure before being declared a marine reserve in 1990, so are thought to be one of the world's most unmodified marine habitats.

The Kermadec Islands are biogeographically isolated and surrounded by vast expanses of low-nutrient oceanic waters. The islands have a high degree of endemism within the shallow-water fauna. The giant Kermadec limpet (*Patella kermadecensis*) is an endemic, mid-intertidal herbivore that is highly significant in influencing intertidal ecology.

The reef communities reflect a transition between tropical and temperate reefs, and are characterised by a distinctive mix of endemic, tropical, subtropical and temperate species. Rock faces and boulders are covered in a blend of short, turf-forming algae and hard and soft corals. Dense kelp forests found elsewhere in New Zealand are absent. The Kermadec region is the only place in New Zealand where hermatypic (reef-building) corals are found in subtidal areas. Water temperatures are too low for reefs to develop, but individual coral colonies up to 2.4 metres in diameter are common. Further out, the continental slope is steep and narrow comprising extensive areas of fine sand and mud slopes.

Many of the plants and animals are wide-ranging tropical species that occur throughout the Indian and western Pacific Oceans. Few are common and populations of these species are probably replenished by larvae from Norfolk Island or even the Australian Great Barrier Reef, making their presence precarious. Species diversity is relatively low in many plant and animal groups due to the geographical isolation and the lack of some habitat types such as sheltered bays, fringing reefs, lagoons and estuaries. Through the Kermadec chain there is latitudinal variation in the presence and abundance of some groups, and tropical species decline in diversity and abundance southwards, whereas temperate species decline northwards. Overall, the flora and fauna are more similar to that of Norfolk and Lord Howe Islands. Endemic fauna includes one coral, six fish and 68 molluscs. There is insufficient information about other animal groups at the Kermadecs to determine their degree of endemism.

Species of significance in the Kermadec Islands coastal marine area include:

- More than 165 species of algae.
- 17 species of reef corals and 7 soft coral species. The Kermadecs is the only place in New Zealand where reef-building corals are found in subtidal areas. Although water

temperatures are too low for reefs to develop, individual corals can grow up to 2.4 metres in diameter.

- Herbivorous fish, a distinctive feature of Kermadec reefs, including the caramel drummer (*Girella fimbriata*), Kermadec scalyfin (*Parma kermadecensis*) and Kermadec triplefin (*Enneapterygius kermadecensis*).
- The only major unexploited population of spotted black grouper (*Epinephelus daemelii*) in the world. These fish grow up to 2 metres long and play a major role in reef dynamics, probably feeding on large crustaceans and fish.

Seabirds

The Kermadec Islands form a seabird refuge of major international importance. Most recent estimates place the total Kermadec seabird population at 10–15 million seabirds[7]. Seabirds breed on the islands but spend most of their lives at sea: a seamless activity from land to air to sea. All seabirds utilise the coastal marine area, and birds are an integral part of the natural character of the islands.

Thirty-five bird species are known on the islands, five of which are found nowhere else in the world. Most Kermadec seabirds are tropical or sub-tropical taxa, a major point of difference with the rest of New Zealand's seabird fauna (Gaskin 2009). Significant species include 'tropical' birds such as the red-tailed tropic bird, the masked booby, two species of noddy, terns and the grey ternlet.

The Kermadec Islands are the key breeding site for a number of New Zealand's endemic seabirds, including the white-naped petrel, Kermadec little shearwater, Kermadec storm petrel and New Zealand sooty tern, and hold the world' largest population of black-winged petrels (Gaskin 2009). Furthermore, 99.9% of the world's population of black-winged petrels breed on Macauley Island.

Kermadec waters are also utilised by seabirds that breed outside the region. To date, 40 seabird taxa have been recorded for the Kermadec region and in seas north and northeast of the New Zealand mainland. Of these, six are tropical seabirds and the remainder are southern-breeding seabirds (Gaskin 2009).

Cetaceans in the Kermadec region

Seven cetacean species (bottlenose dolphin, killer whale and five great whales) have been recorded from the Kermadec Islands. Of these the blue whale (*Balaenoptera musculus*) is only known from a single stranded specimen. A further 28 species may be present based upon extrapolation from their known ranges.

Very little scientific research has been conducted on the cetaceans inhabiting the Kermadec archipelago however a considerable amount of information on commercially hunted species is contained in American whaling log books and journals[8]. The Kermadec Islands and surrounding waters were one of three main locations for hunting sperm whales (*Physeter macrocephalus*) in the New Zealand region, beginning in 1792 and continuing into the 1880s. Sperm whales are thought to aggregate in the region to feed on squid and although present

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[7] Gaskin, C. 2009: Terrestrial marine linkages for Kermadec Islands coastal marine area – avifauna section. Prepared for the Aquatic and Threats Unit, Department of Conservation, Wellington.

[8] Richards, R. 2010: Towards an estimate of whale stocks in Kermadec waters before sail whaling began. Pp. 85–88 in Deep: talks and thoughts celebrating diversity in New Zealand's untouched Kermadecs. Pew Environment Group.

throughout the year whaling data indicate they are most abundant from January to May, with numbers peaking in May as individuals and groups migrate through the region to tropical waters further north[8].

Although whaling vessels took very few humpback whales (*Megaptera novaeangliae*) around the Kermadec Islands, the region is an important migratory corridor for the endangered Oceania subpopulation[9, 10]. These whales feed in Antarctic areas V and VI and migrate south through the Kermadec archipelago from September to November[9, 11, 12, 13, 14]. DOC staff counted 112 humpback whales (3.2% of the estimated Oceania population) in the coastal waters of Raoul Island on one day during the peak of the migration in October 2009[9]. While satellite tagging has shown that some New Caledonian humpback whales migrate through the Kermadecs it is not known where the bulk of them come from, however it is likely they include whales originating from Fiji, Tonga, Niue and French Polynesia[9, 10, 15]. Humpback whales probably do not feed in the waters around the Kermadec Islands but cows and calves have been observed lingering in Denham Bay, Raoul Island, suggesting the islands may function as a relatively sheltered stop-over allowing cows with dependent calves to rest before continuing on to Antarctica.

The only resident or semi-resident species in the waters surrounding the islands is a small form of bottlenose dolphin (*Tursiops* cf. *truncatus*). The relatively small size of the Kermadec dolphins is unusual for bottlenose dolphins inhabiting oceanic habitats and suggests they may be genetically distinct. They probably feed on a variety of small benthic and pelagic fishes and squids. Anecdotal observations of staff stationed on Raoul Island suggest a seasonal habitat shift, possibly to offshore waters or another part of the ridge, with sightings of dolphins being less frequent around the island during winter. Population size and connectivity are unknown, as are all other aspects of this species' biology.

There has been no systematic survey of cetaceans occurring on the north Kermadec Ridge, including the coastal waters of the Kermadec Islands.

Historic or cultural heritage in the Kermadec Islands

Polynesian settlement

Polynesians were the first to discover and settle in the Kermadecs. Radiocarbon dates from archaeological deposits at Low Flat on the northern coast of Raoul Island suggest that the island was first settled during the late 13th or early 14th centuries AD. The settlement appears to have been of relatively short duration, as acceptable dates from both above and below the intermediary ash and pumice layer fall within a narrow age range. The presence of Pacific rat (*Rattus exulans*) and possible artefact finds at Sandy Bay on Macauley Island suggest it was also visited by Polynesians, but Macaulay's lack of fresh water, and a failure to report any more conclusive archaeological deposits, suggest it was unlikely to have been occupied for any significant length of time. The presence of obsidian from Mayor Island (Tuhua), found

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9 Constantine, R., Garrigue, C., Baird, K. 2010: The Kermadec Islands and the endangered humpback whales of Oceania. Pp. 89–91 in Deep: talks and thoughts celebrating diversity in New Zealand's untouched Kermadecs. Pew Environment Group.

10 Garrigue, C., Zerbini, A.N., Geyer, Y., Heide-Jorgensen, M., Hanaoka, W. and Clapham, P. 2010: Movements of satellite- monitored humpback whales from New Caledonia. *Journal of Mammalogy, 91(1)*: 109–115.

11 Chilton, C. 1911: The crustacea of the Kermadec Islands. *Transactions of the New Zealand Institute 43*: 544–573.

12 Morton, E. K. 1957: Crusoes of Sunday Island. G. Bell & Sons Ltd., London. 189 p.

13 Gaskin, D. E. 1968: The New Zealand Cetacea. F*isheries Research Bulletin No. 1 (New Series)*. Fisheries Research Division, New Zealand Marine Department, Wellington. 92 p.

14 Gaskin, D.E. 1973: Sperm whales in the western South Pacific. *New Zealand Journal of Marine and Freshwater Research 7(1&2)*: 1–20.

15 Garrigue, C.; Aguayo, A.; Amante-Helweg, V.L.U.; Baker, C.S.; Caballero, S.; Clapham, P.; Constantine, R.; Denkinger, J.; Donoghue, M.; Flórez-González, L.; Greaves, J.; Hauser, N.; Olavarría, C.; Pairoa, C.; Peckham, H.; Poole, M. 2002: Movements of humpback whales in Oceania, South Pacific. *Journal of Cetacean Research and Management 4(3)*: 255–260.

on Raoul Island during 1978 archaeological excavations, confirms that Raoul was visited on a return voyage from New Zealand, although this does not preclude settlement from the tropical Pacific. Interestingly, in spite of its poor flaking attributes making it a low-quality raw material for flake tools, Raoul Island obsidian has been reported in archaeological context on Norfolk Island, which suggests that the people who visited in prehistory were actively exploring the subtropical latitudes of the Pacific. Botanical remnants associated with the Polynesian settlement most notably include the candlenut (*Aleurites moluccana*), cabbage tree (*Cordyline fruticosa*), karaka (*Corynocarpus laevigatus*) and taro (*Colocasia esculenta*).

The Kurahaupō is one of the principal waka from which the iwi of Te Aupōuri descend. Oral tradition as told by Te Aupōuri kaumātua and kuia is that on its way to Aotearoa the lashings of Kurahaupō were loosened and the canoe damaged, and the vessel was nearly wrecked at Rangitāhua (Kermadec Islands). Most of the crew were later brought on to Aotearoa by the larger Aotea and Mataatua canoe, but a few of the crew remained at Rangitāhua where they repaired the Kurahaupō before continuing their journey to Aotearoa. After much hardship those who had remained at Rangitāhua made landfall and the circumstances of that event are well ingrained in oral tradition. The captain of the Kurahaupō from Rangitāhua to Aotearoa was a man named Pōhurihanga. On arrival in Aotearoa Pōhurihanga married a woman named Maieke. Their descendants include well known ancestors like Tōhē and Te Kura who are in turn tupuna of Te Ikanui and his wives, Tihe and Kohine, from whom the iwi of Te Aupōuri descend.

Many of the traditional accounts of the settlement of New Zealand refer to Raoul Island. Unfortunately, these accounts appear to have been influenced by early 20th century 'ethnographic conjecture', namely the equating of the island with the Rangitāhua of Māori Pacific voyaging tradition. Lieutenant Colonel Gudgeon first made the case for equating Raoul Island with Rangitāhua in 1903. It was on that basis that the Kermadecs were known as Rangitāhua in the Cook Islands, and on the basis of his acceptance of the belief that the karaka had been introduced from Raoul to New Zealand. Sir George Grey's account of 'The emigration of Turi' published in 1854 in *Polynesian Mythology* had referred to the *Aotea* stopping for repairs at Rangitāhua, and S. Percy-Smith's translation of Tautahi's *Ko Aotea Waka* referred to the introduction of karaka from a place known as Rangitāhua, but neither equated this place with Raoul Island. Gudgeon's assertion was compounded by the later works of Elsdon Best and Sir Peter Buck, who appear to have accepted Gudgeon's belief that Raoul Island was the Rangitāhua in Māori traditions. A fuller account of earlier ethnographic speculation is contained in Leigh Johnson's *In the Midst of a Prodigious Ocean*[16].

European discovery

European discovery of Raoul Island occurred on three separate occasions. The first of these was Captain Sever's visit to the Kermadecs aboard the convict transport *Lady Penrhyn* in 1788. After discovering Curtis and Macauley on 31 May and 1 June, respectively, the surgeon's diary of 2 June reports sighting 'land of a very considerable extent' to the north of Macauley. However, as the island was windward of the *Lady Penrhyn*, which was bound for Tahiti, it was decided not to make the detour. The French explorer D'Entrecasteaux in command of the vessels *Recherche* and *Esperance* was the next to sight Raoul in 1793. Unaware of Sever's sighting, D'Entrecasteaux claimed discovery of Raoul and named the island chain Kermadecs after the captain of the *Recherche*. Raoul is believed to have been named after the quarter-master Joseph Raoul. The third European discovery of Raoul was made by Captain Raven of the *Brittania*. While aware of Sever's discovery of Macaulay, Raven was not aware of his

[16] Johnson, L. 1995: In the midst of a prodigious ocean. Archaeological investigations of Polynesian settlement of the Kermadec Islands. Auckland Conservancy Historic Resource Series II. Department of Conservation, Auckland, New Zealand.

discovery of Raoul, or its subsequent discovery and naming by D'Entrecasteaux. Raven accordingly gave his discovery the well-considered name Sunday Island on the basis that he visited it that particular day of the week.

Whaling

French and American whaling vessels frequented the Kermadec Islands during the 19th century, and the waters around the Kermadec Islands were commonly known as the French Rock whaling grounds. A study of the logs of over 1600 American whaling vessels documented the catches of sperm and southern right whales, and in doing so demonstrated that the Kermadecs were a significant whaling ground, both as a point where concentrations of sperm whales were found to be at their greatest, and as an area that could be exploited twice a year. At its height in the 1830s, up to 30 vessels might be seen in a single day in the vicinity of L'Esperance Rock. The whaling fleet was predominantly ship-based, but Raoul was exploited as a source of fresh water and of wood to fuel the fires for trying whales at sea. The discovery of a whalers' try pot on the beach at Denham Bay, recalled by Alf Bacon, is not inconsistent with this activity, but remains unsubstantiated. It was during this period that goats and pigs were liberated on Raoul and Macauley to establish a population that might provide a source of fresh meat for whalers.

European settlement

It was also during the 19th century that the first attempts by Europeans were made to settle on Raoul Island. The first of these appears to have been by James Reed, his family and deserters from the whaling vessel *Cheviot*, who established a settlement at Denham Bay from 1836. Reed established cultivations and on occasion was able to supply provision to visiting ships until his departure from the island in 1845. Other early settlements were made by the Bakers (1837–48); Vincennes (1840s); Halsteads (c. 1840–63); Cooks (1851–53); Peters (1840s–63); Coverts (c. 1857–70); and Johnsons (c. 1957–60s). The most enduring settlement was that of the Bell family, who lived both at Denham Bay and Low Flat between 1878 and 1914. The Bells were an industrious family and established plantations of a wide variety of produce including taro, yams, kumara, beans, maize, oranges, lemons, limes, citrons, shaddocks, cherimoya, pawpaw, bananas, guavas, sugar cane, peanuts, figs, grapes, tobacco, tea and coffee, as well as 'ordinary vegetables' besides. Bell had employed Niuean labourers for a limited time in the 1880s to help clear bush and speed his cultivations.

Slave traffic

In March 1863, Denham Bay was visited by the Portuguese slave ship *Rosa Y Carmen*. On board were 271 Pacific Islanders, captured for indentured labour in Peruvian plantations. While at sea, infectious disease spread on board the ship and ravaged the captured islanders. Captain Marutani put into Denham Bay to allow the islanders to recover. By the time he departed, over 150 of the islanders had died as a result of an infectious disease, including the settler Halstead and his son, who were resident in Denham Bay at the time.

Annexation

Raoul Island was first charted for the British Admiralty by Captain Denham of the *Herald* in 1854. Denham's son Fleetwood fell ill and died during this expedition, and was subsequently buried above the beach at Denham Bay. The first annexation of Raoul occurred in July 1886 when Captain Clayton of the HMS *Diamond* erected a flagstaff with a proclamation of sovereignty attached at the northern end of Denham Bay. The first the Bells knew of this was when they came across the flagstaff some time after the departure of Clayton. The New Zealand Government annexed the Kermadecs the following year in August 1887. Disregarding the protests of Thomas Bell, the island was subsequently divided into lease runs to be disposed of at auction from 1889. Thomas Bell was awarded title to 275 acres on the northern side of the island. Two of the runs were leased by Hovell and Ellisore, who established the Kermadec Islands Fruit and Produce Association settlement. Members arrived in late 1889 but soon found

that the picture painted of their new home in New Zealand did not match up with the reality of Denham Bay. Half of the new settlers returned within 6 months of their arrival; among those who stayed were the Hovells, Robsons and Carvers.

Following on from the departure of the Bells and World War I, several other attempts were made to settle the island. Alf Bacon, Charles Parker and Jim Ashworth settled briefly on the island from 1926, but left following the death of Parker in 1927. Bacon was involved in a subsequent settlement from 1929 as part of a syndicate known as the Sunday Island Settlement Association. Bacon's third and final attempt at settlement was in 1935 with Bruce Robertson.

Castaway depots

Following the annexation, castaway depots were established on Macauley Island, Curtis Island and L'Esperance Rock. The Macauley depot was sited above the Lava Cascade, and the Curtis depot near the landing in McDonald's Cove. Two goats were also liberated on the top of Curtis as a fresh food source for castaways. These were serviced on an annual basis, but appear never to have been required by legitimate shipwreck survivors. The L'Esperance depot itself was wrecked within a year of being established and a pragmatic decision was made not to replace it. The Curtis Island castaway depot was raided in 1917 by the German naval captain Count Felix Von Luckner, following his escape from Motuihe Island.

WWI

During World War I, Raoul Island was briefly used as a haven by Captain Nerger and the crew of the German commerce raider *Wolf*. Forced to seek a temporary anchorage to suppress a fire in the coal hold, Nerger anchored the *Wolf* off Sunshine Cove in May 1917.

While repairs were being affected to the damaged boilers, Nerger was fortunate enough to encounter the cargo steamer *Wairuna* en route from Auckland to San Francisco with stores on board including 1500 tons of coal, fresh produce and 42 live sheep. On account of the recent fire, the *Wolf* was hardly in a state to give chase, but despite this Nerger dispatched his sea plane *Wolfchen* to order the captain of the *Wairuna* to surrender his vessel or be bombed. Captain Saunders of the *Wairuna* complied with this request, and the steamer was taken back to Raoul so that the much-needed supplies could be transferred to the raider. On 16 June, Saunders and his crew were taken on board the *Wolf* and the *Wairuna* was taken out to sea to be scuttled.

On leaving Raoul, the four-masted schooner *Winslow* was sighted, destined for Samoa. Nerger ordered the *Wolfchen* up to order the surrender of the schooner, which was also captured and taken back to Raoul. While the supplies from the *Winslow* were being transferred to the *Wolf*, the *Wairuna* was towed out a second time to be scuttled. The *Winslow* was towed out to sea to be scuttled five days later and was eventually left burning and drifting towards the shore as the *Wolf* continued on its way to New Zealand to lay mines off North Cape.

Meteorological station

During the 1930s, remote islands such as Midway and Wake Islands in the north Pacific were being developed for long-distance ocean air services. Raoul's topography and exposed coasts made it unsuitable for this purpose, so it was decided to reserve the island only for meteorological and aeradio facilities. Meteorological records were first kept on Raoul by the Carver family from 1889 and subsequently during Oliver's 9-month scientific expedition in 1908. A meteorological station was first established in 1937 and data were conveyed by radio for aviation and south Pacific meteorological services. In August 1939, a second expedition left Auckland in the auxiliary ketch *Miena* to establish a more permanent meteorological facility. Landing facilities were established at Fishing Rock in 1939 and at Boat Cove in 1940. The first buildings to be erected were the hostel, hospital and store, and a series of six single-accommodation huts were located to the east of the hostel in the location of the

present-day annex building. The new complex was largely completed by 1940, and a further grant of funding allowed for the construction of the meteorological station office. At the same time, 100 acres of oranges were planted behind the hostel intended to supply the New Zealand market. A 30-acre farm was established to the west of the station to provide the meteorological station staff with fresh produce.

WWII

From 1942 to 1945, a coastwatchers station was maintained on Raoul, no doubt anxious to avoid a repeat of the losses to allied shipping sustained there during WWI. By 1940, there were 62 coastwatching stations around New Zealand, and towards the end of the war stations had been established on Norfolk Island, the Chathams, and the subantarctic Auckland and Campbell Islands. Despite these precautions, the German commerce raiders *Orion* and *Komet* used the southern end of the Kermadecs as a rendezvous after sinking the *Rangitane* in 1940, and Japanese submarines operated in the Kermadecs without success.

Heritage in the coastal marine area

Historic heritage in the coastal marine area is limited to the shipwrecks and vessels scuttled during WWI. As no shipwrecks are known to have occurred in the Kermadecs prior to 1900, these wrecks are not protected under the archaeological provisions of the Heritage New Zealand Pouhere Taonga Act 2014, but several do have significant heritage values, most notably the *Wairuna* (1904–17) and the *Winslow* (1899–1917), due to their WWI association. Losses to New Zealand coastal shipping were limited due to the fact that German raiders seldom had opportunity to venture into the south Pacific. The rarity of such losses, combined with the fact that the locations for many remain unknown, elevates the potential significance of the *Winslow* and *Wairuna*. Reports of divers relocating the *Wairuna* have been published in Sid Marsh's book *Divers Tales*, but the location of the vessel remains undisclosed.

Of the remaining wrecks, the barque *Malmen* (1892–1902) and the schooner *Petrel* (1898–1935) are also potentially archaeologically significant as vessels of 19th century construction, but on the basis of available information the chances of these vessels being located are remote. They are noted as 'lost off' and 'wrecked near' the Kermadecs, suggesting their loss some distance out to sea. The wreck of the MV *Picton* (1917–78) in Sunshine Cove is interesting in that timbers bearing the official number are still visible on the foreshore.

The remaining wrecks have interesting stories but are of limited archaeological value or historic consequence. The *Columbia River* (1916–21) has been blamed for the introduction of Norway rats and cats on Raoul. Wrecks for which locations can be reliably confirmed include the remains of the yacht *Shiner* below the landing platform at Boat Cove, the yacht *Salano* near Hutchinsons Bluff, and the Japanese trawler *Kinei Maru* (1980–86), which dominates the beach at Denham Bay. The no-take provisions of the marine reserve and nature reserve, while not intended for the benefit of historic heritage, probably have the indirect benefit of ensuring that these wrecks and those that are yet to be rediscovered remain undisturbed and able to be appreciated by those fortunate enough to visit the islands.

Current use values

Conservation and restoration

The Department of Conservation has a permanent base on Raoul Island. The major work being undertaken on Raoul is the restoration of the island's ecosystem. The Department also undertakes a contract for the Metservice, which involves the releasing of a daily weather balloon. The Department changes permanent staff every 12 months and volunteers every 3–6 months.

All mammalian pests have been eradicated from Raoul Island. Goats were eradicated from Raoul Island in 1984 by the Forest Service, rats in 2002 and cats in 2004. The Department of Conservation undertook an operation to rid Macauley of rats in 2006, the success of which has yet to be confirmed.

Fishing Rock landing was originally established in 1939 for the meteorological station and is still the main location for landing personnel and supplies by tender today. The landing is located close to a dangerous rocky surf beach. In good conditions, the landings can be easy, but at any time it is easy to slip and risk injury or, at worst, be crushed between the boat and rocks, as the large swell leaves little room for boats to manoeuvre.

The Boat Cove landing was constructed in 1940, and the landing and wall, like that of Fishing Rock, have significant historic values. The Boat Cove landing is not currently usable as both temporary wooden bridges have been destroyed and there is no access to the landing platform. However, the site does provide an alternative landing to Fishing Rock when weather conditions make the latter site unusable.

Research

Research to date has focussed on the marine area of depths of about 2500 metres, particularly in the vicinity of active hydrothermal venting and seamounts[17]. There has not been a lot of scientific research undertaken at depths greater than 30 metres, even though such depths can be close to the islands because of the steepness of the island structures.

As the coastal marine area of the Kermadec Islands has been subjected to a very low level of human-induced disturbance, the islands provide researchers with a unique opportunity to assess a subtropical marine ecosystem with a relatively high level of naturalness.

Future research is needed to document the biodiversity of coastal marine areas of the islands. Considering the sensitivity of some of the habitats in the region, particularly hydrothermal vents, non-destructive sampling techniques should be used where possible; that is, seabed imagery, obtained by towed cameras, submersibles and ROVs, should be considered the primary means by which to determine the composition of seabed assemblages. Direct sampling will be necessary to determine the identity of some species and to collect material for genetic and microbial studies, but this should be kept to a minimum in the vicinity of hydrothermal vents.

Being volcanically active, there are a number of sensors on the islands and GNS Science has recently installed tsunami monitoring equipment on Fishing Rock.

Archaeological research to date has been limited to non-systematic survey and has focussed on seeking an understanding of a small number of sites. No archaeological research has been undertaken since the 1990s. However, future research is needed to gain a better understanding of the role the Kermadecs played in settlement within the Pacific zone and when this occurred. This is particularly pertinent given the vulnerability of archaeological sites in the active coastal zone.

Tourism

Given the islands' isolation and difficult landings, they represent a fairly limited niche tourism market—mainly centred on wildlife and diving. Raoul Island is the only island in the group on which recreational tourists are able to land. Yachts that wish to land on Raoul Island must obtain an entry permit, which is countersigned by Customs New Zealand before leaving

[17] Beaumont, J.; Rowden, A.A.; Clark, M.R. in press: Deepwater biodiversity of the Kermadec Islands Coastal Marine Area. *Science for Conservation Series*, Department of Conservation, Wellington.

New Zealand. If yachts turn up at Raoul from the Pacific without a permit, they are not legally allowed to stop at Raoul—customs regulations require that they make their way directly to a port in New Zealand to clear customs.

Ships and yachts present a biosecurity risk of introducing non-indigenous species via both hull fouling and pests that could be on board above the water line, particularly rodents. The introduction of a competitively dominant, sessile organism into the marine environment could result.

Issues, objectives, policies and methods of implementation

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 they are preserved, by restricting activities with the potential for adverse effects on natural character and minimising the risk of oil spills and biosecurity breaches.

All of the Kermadec and Subantarctic Islands and their marine environments have significant natural character values—they are remote and unique, and have a high degree of endemism. In recognition of these values, the islands themselves (the land parts) are nature reserves, and the Subantarctic Islands are also national reserves, under the Reserves Act, the highest form of protection under New Zealand statute. The Subantarctic Islands also have world heritage status out to 12 nautical miles. Accordingly, development is not considered appropriate, and use of the coastal marine area needs to be considered in light of its capacity to support activities without adversely affecting the natural character.

Natural character includes the natural processes, elements and patterns that are present in an area. Natural character can be considered as comprising both the 'biophysical' and the 'experiential' elements. Biophysical elements of the coast include elements such as geology, climate, and natural communities and ecosystems. Experiential values cover those that are experienced by humans, such as recreational or visual amenity, but also historical and/or cultural elements.

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.

The planning boundary between the terrestrial and marine parts of the islands is an arbitrary one for the ecosystems. For both groups of islands, the biota depends heavily on the coastal marine area. Each inter-connected land–sea ecosystem is crucial to the survival of a large number of endemic, threatened or endangered species.

Achieving the natural character objectives 1.1, 1.2 and 1.3 (below) is pivotal to achieving the purpose of the RMA for the islands—sustainable management of the natural and physical resources of the Kermadec and Subantarctic Islands. These are the overarching objectives of this plan and seek to preserve the significant natural character values of the islands while providing for the increasing interest in the use of the coastal waters of the islands.

Activities undertaken in the coastal marine area can give rise to adverse effects in three ways:

- Directly
- Indirectly—by facilitating activities that then give rise to other adverse effects (e.g. the presence of a vessel in a bay will create noise and light effects)
- Cumulatively—in conjunction with other similar or different activities in the area (e.g. the presence of more than one vessel in a bay will increase the impact of noise and light)

These adverse effects can occur over both short and long timeframes. Individual activities by themselves may have a minimal impact, but the combined influence of all activities in any given area may give rise to adverse effects. The ability of areas to absorb or assimilate use is limited, and at some point the intensity of use will give rise to unacceptable impacts. Natural character and amenity values of remote coastal marine areas are easily adversely

affected by the number and types of activities that may occur there. A significant component of the ecotourist expeditions is the remoteness and wilderness values of the islands. Multiple vessels in a bay will diminish this value.

Natural character objectives

1.1 To preserve natural character.

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 all of the nationally significant indigenous flora and fauna communities present.

Natural character policies

A range of activities have 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 (access and anchoring)
- Control of discharges of contaminants
- Avoiding and reducing the impacts of accidental discharges of contaminants
- Controls on structures, disturbance, deposition and reclamation

Maintenance of biodiversity and biosecurity

Marine biodiversity refers to the variety of all biological life, including plants, animals and micro-organisms, the genes they contain and the ecosystems in which they live in the marine environment. Many New Zealanders value our coastal waters and oceans in a non-material, spiritual way. Māori have a special affinity with the oceans, and this is recognised in the Treaty of Waitangi. Many New Zealand industries depend on biological resources and healthy ecosystems, such as New Zealand's significant commercial fishing industry and ecotourism. As noted above in the values section of this plan, the Subantarctic Islands and their marine environment are valued for tourism, and commercial fishing in the Southern Ocean is a major industry.

Many of our native species are found nowhere else on earth. There is a high degree of endemism on all the island groups. The New Zealand sea lion is a prime example, with its principal breeding ground at the Auckland Islands. Huge numbers of seabirds also breed at the islands, a number of which are endemic to individual islands.

There is a strong interdependence between the terrestrial island habitats and the nearshore and offshore marine environments—the islands are vital for species such as marine mammals and seabirds that need to return to land to feed, breed and moult, etc.

There is broad scientific agreement that marine biodiversity is seriously threatened by human activities. The most serious threats to marine biodiversity are:

- Fishing operations
- Chemical pollution and eutrophication
- Alteration of physical habitat by invasions of exotic species
- Global climate change

The threat of biosecurity breach is a key issue. Introductions of exotic organisms, whether new to New Zealand or just new to the coastal marine areas of the islands, are a particular

risk that needs to be carefully managed. The most common mechanisms of introduction of harmful marine organisms are ballast water discharges and attachments of fouling on vessel hulls.

Introductions of harmful organisms to both the marine and terrestrial environments could change the structure of communities in both environments; for example, an introduced species could aggressively compete 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. 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 the following 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
- Financial costs resulting from changes to the ecosystems and the values that are important to the ecotourist/expedition cruise industry

For these reasons, it is necessary that the risk or potential for the introduction of new species to an area be strictly managed.

POLICIES

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.
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:
    a) Pest animals (particularly rodents and insects);
    b) Exotic plants; or
    c) Fouling of equipment that is used in the water but stored on deck.
3. To maintain and protect biodiversity and the intrinsic values of ecosystems by reducing the risk of introductions of harmful or invasive species via hull fouling by restricting access inside 0.54nm (1000m) from MHWS of the islands to those vessels that can:
    a) 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
    b) Demonstrate that they present a low risk of introducing organisms not native to the islands by an in-water diver inspection and certification; or
    c) Obtain a discretionary coastal permit—for which the application must include an independent risk assessment by a qualified contractor. The coastal permit will specify the time period for which it, and therefore the risk assessment, is valid.

4. To maintain records of inspections and samples taken from vessel hulls and niche areas during inspections and/or risk assessments.
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 on a non-notified basis.
6. To provide for and encourage research that builds knowledge and understanding of the intrinsic values of the ecosystems[18].

OTHER METHODS

1. The Department of Conservation will, in consultation with users of the coastal marine area of the islands, develop a guideline for the inspection of the dry parts of vessels to check for harmful organisms and how to deal appropriately with any found.

Control of surface water activities (access and anchoring)

Users of the surface waters of the islands include commercial fishing interests in the Subantarctic Islands—for passage, shelter, and fishing, tourists from both commercial ecotourist operators and cruise ships, scientists and other researchers, operational management staff, individuals involved in interpretation (i.e. photographers or documentary makers), and recreational yachts.

Both the Kermadec and the Subantarctic Islands are nature reserves (and the Subantarctics are also national reserves). As such, public access above mean low water springs

is controlled under the Reserves Act, within CMSs, and an entry permit is required to land on the islands.

Access to the coastal marine area is difficult given the isolation of the islands from mainland New Zealand, and is usually by boat—helicopter access is generally just for emergency evacuations. The policies and rules of this plan seek to provide for public access in a way that addresses the risk of oil spills and biosecurity breaches—and also in a way that protects and promotes the wilderness experience. Given the severe weather conditions in the area, in addition to the remoteness, it is recognised there may be certain situations where it is necessary for vessels to access the coastal marine area to seek refuge or to avoid serious risk to life or health or prevent serious damage to vessels.

In the Subantarctic Islands, there is demand to increase the number of permits to land on the islands (as noted above, this is managed in the CMS under the Reserves Act). There is also interest from tourist operators wanting to visit the Subantarctic Islands without landing but by viewing them from the water by zodiac (ancillary craft).

Surface water activities around the islands need to be managed to maintain a high quality environment that preserves natural character, landscape and amenity and preserves remoteness and wilderness values. Some areas are more at risk than others. Those areas that have landing sites for those with entry permits and areas identified as preferred anchorages are likely to be more at risk, as are those harbours and bays that are suitable for sight-seeing tourist vessels exploring by zodiac. The sustainable management of the natural

[18] For the Subantarctic Islands, there is a research strategy in place called 'The New Zealand Subantarctic Islands Research Strategy 2005' which identifies research priorities for those islands. This strategy is reviewed from time to time by the Department of Conservation and the relevant strategy for consideration is that current at the time of consideration.

character, landscape and amenity values of the islands, including remoteness, requires some restrictions on activities, such as only one cruise ship visiting a bay or harbour at any one time.

The control of surface water activities is based on zones of access relative to vessel length. Vessel length is used as a broad brush proxy for numerous factors that can influence risk of oil spill and/or biosecurity breach, such as: vessel length; propulsion system; number, type and location of propellers; number, type and position of rudders; presence and power of bow and/or stern thrusters; windage of the vessel relative to its power; age of vessel; fuel type, duration of access, etc. A provision that encompassed all of these factors would almost certainly be unworkably complex and hence the preference for the broad brush proxy of vessel length. The zone inside 300 metres from MHWS, as the closest to shore, is the zone of highest risk. The 300 metres is selected on the basis that it is the generally accepted limit the Norwegian rat can swim. The rationale for the zones is that they attempt to provide an accepted level of risk for existing use as a permitted activity where possible, based on vessel length as a proxy for the numerous variables noted above that would contribute to a vessel's risk assessment. The degree of risk is further exacerbated by the remoteness of the islands and the environmental conditions that would hamper any response efforts.

POLICIES

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 a biosecurity breach, by restricting vessel access close in to shore relative to vessel size.
8. To allow access to the coastal marine areas of the Kermadec and Subantarctic Islands in the following circumstances:
    a) emergency or other force majeure;
    b) distress or danger, or assisting others in distress or danger; or
    c) where in the reasonable judgment of the captain of the vessel it is required to:
        i) avoid serious risk to life or health; or
        ii) repair or prevent serious damage to the vessel.
9. To avoid adverse effects on southern right whales when they are breeding and nursing in Port Ross by restricting vessel access.
10. To identify preferred anchorages as exceptions to the access restrictions to allow for safe anchorage for vessels that need to be close in to shore for safe anchorage because of their size.
11. 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.
12. 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 islands.
13. To provide for unrestricted public access to the surface waters of the coastal marine area of the islands by ancillary craft.

OTHER METHODS

2. 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.

Control of discharges of contaminants

(See the following section for accidental oil spills from maritime incidents and ship-to-ship fuel transfers.)

Control of discharges of contaminants to the coastal marine area should be managed to ensure the high water quality and air quality is maintained. Discharges of contaminants in the coastal marine area of the islands will chiefly be from vessels, with some additional discharges from land. These discharges could be to the air, including discharges of noise and light, or to the sea.

Discharges from vessels are largely regulated under the Resource Management (Marine Pollution) Regulations 1998 (the Marine Pollution Regulations), 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.

Vessel owners/operators need to be aware of potential risks of what may seem like harmless discharges, such as kitchen waste. Kitchen waste could contain listeria, for example, which could have significant adverse effects on wildlife. Anyone using the waters in the coastal marine area of the islands is urged to be very cautious with discharges, to avoid potential adverse effects on wildlife, ecosystems and habitats.

Discharges from land to the coastal marine areas of the islands are minimal. Storm water discharges are negligible and there are no reticulated storm water or waste water systems. This is not expected to change. In the interests of preserving the significant natural character values of the islands and their coastal marine areas, further development will be avoided other than what is necessary to maintain health and safety.

Discharges of sewage from land can be difficult issues—as noted, there are no reticulated waste water systems. Sewage management is generally very basic, such as digging long drops where soil type is suitable or individuals containing and removing it in 'honey pots' if visits are short. Any form of sewage discharge to water is particularly offensive to tangata whenua and should be avoided where possible.

The noise in many parts of the coastal marine area of the islands will predominantly comprise noise generated by natural sources (e.g. the surf breaking on the shore, and the sea lapping against rocks). Given the high-energy environments of the Kermadec and Subantarctic Islands, the background noise will be substantial most of the time. Artificial noise (excluding bird calls played from loud speakers to attract birds back to Raoul Island), however, generated from within the coastal marine area has the potential to adversely affect the health and wellbeing of fauna, amenity values and natural character both within and adjacent to the coastal marine area.

Artificial light in the coastal marine area also has the potential to adversely affect the health and wellbeing of flora and fauna, natural character and amenity values. Seabirds in particular are vulnerable to lights at night—they have a tendency to be attracted to artificial lights on vessels at night, resulting in deck strike injuries or mortalities. Artificial light can also adversely affect insects.

POLICIES

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:
    a) There has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and
    b) The action is informed by an understanding of tangata whenua values and the effects on them.
15. To acknowledge that:
    a) 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;
    b) 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; and
    c) Options and/or alternatives to treat or remove the current discharge will be investigated and implemented within 5 years of this plan becoming operative.
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[19].
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.
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.

OTHER METHODS

3. The Department of Conservation will encourage all users of the coastal marine areas of the islands to minimise the use and generation of artificial light and generation of artificial noise. This may be in the form of guidelines.

Avoiding and reducing the impacts of accidental discharges of contaminants

The threat of an oil spill (an accidental discharge of hydrocarbons and contaminants) is a key issue. The challenging conditions of strong winds and currents present navigation safety risks, particularly when vessels are close to shore. This is especially the case for large vessels. The threat of an oil spill from any one of the vessels that visit the islands is ever present, and as the number and/or the size of vessels interested in visiting the islands increases, so does the risk of maritime incidents and oil spills. Incidents and oil spills can also result from poor management and/or maintenance.

Severity of impact from oil spills is closely related to the type of fuel, the amount of fuel (the bigger the vessel, the larger the total capacity and potential volume of fuel), and the exposure of the area to the spill. Heavier grade fuel oils (and fuel oil components) would have the most severe impact because the heavy grade oil components could persist in the environment for many years, and also because the heavier grade fuel oils (the 'residual oils' that are left after the refining process distils off diesel and other products) also contain a range of contaminants that were present in the crude oil. While diesel still presents a risk to some wildlife (a severe risk to the Campbell Island teal, the world's rarest duck, and shags),

[19] Most discharges from ships and offshore installations are regulated by the Marine Pollution Regulations. In particular, refer to regulation 4.

it is the easiest type of fuel spill to manage, as it will disperse and evaporate in a high-energy environment (see the New Zealand National Oil Spill Contingency Plan—Annex 9—Subantarctic Islands). Similarly, the severity of discharges to air is closely related to fuel type. Marine diesel will burn cleaner than a heavier fuel oil, assisting with reducing emissions.

This plan introduces a policy of avoidance in respect of the carriage and use of heavy fuel oil as fuel or the carriage of heavy fuel oil as cargo in the coastal marine areas of the Kermadec and Subantarctic Islands. The definition of what constitutes a heavy fuel oil (HFO) is the same as for the Antarctic Area HFO provisions that came into force under MARPOL Annex 1 Chapter 9 in August 2011. Apart from some large HFO-fuelled cruise ships that may enter the Snares Islands/Tini Heke coastal marine area briefly in order to observe tītī, it is only some fishing vessels in operation around the Subantarctic Islands that currently use heavier grade oils as fuel.

The use of the coastal marine area by larger fishing boats powered by HFO has to date been largely limited to the need for those fishing boats to seek shelter from storms or to address vessel and crew care issues. This mainly occurs at least 2 nautical miles from MHWS in the lee of Auckland Islands or 1.5 nautical miles from MHWS in the lee of Campbell Island. Smaller fishing vessels that are not powered by HFO do regularly come closer to the coast and enter harbour areas to shelter during rough weather, which in winter can be up to 3-4 weeks at a time.

These activities may continue in a limited manner under this plan with an increased emphasis on minimising the time spent in the coastal marine area.

Fuel transfers are also a potential oil spill risk. Ship-to-shore fuel transfers need to be provided for to ensure the 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. Provision is made for small scale or emergency transfers (such as if a vessel's fuel becomes contaminated), subject to conditions to reduce the risk of a spill or the impact of any spill.

POLICIES

19. To prohibit the carriage and use of heavy fuel oil as fuel or the carriage of heavy fuel oil as cargo in the coastal marine areas of the Kermadec and Subantarctic Islands, except:
    a) where access is provided by coastal permit for a cruise ship carrying and/or using heavy fuel oil as fuel to steam offshore of the East Coast of Snares Island for the purpose of viewing tītī leaving or returning; or
    b) where necessary for the purposes set out in Policy 8, Rule 1 and Rule 34, which permit access and anchoring in certain circumstances.
20. To immediately prohibit all ship-to-ship transfers of heavy fuel oil.
21. To allow ship-to-ship transfers between vessels of clean distillate fuels such as Marine Gas Oil or Marine Diesel Oil, provided that they are undertaken using best practice and in such a way as to avoid or greatly reduce the likelihood of, and consequences from, any oil spills.

OTHER METHODS

4. The Department of Conservation will work with stakeholders to develop best practice guidelines for the undertaking of ship-to-ship fuel transfers, where they are allowed, in order to reduce the risk of potential incidents.

Controls on structures, disturbance, deposition and reclamation

Given the significant natural values of the islands, activities that involve placement of new structures, disturbance, deposition and reclamation should be restricted to that which is

necessary and unavoidable. Such activities may include disturbance as a result of approved wreck salvage operations (refer to 'Issue 3: Historic and cultural heritage' for management approach to shipwrecks); localised disturbance to the seabed by anchoring; maintenance of existing structures; and placement of equipment to monitor volcanic or seismic activity, such as tsunami warning devices.

The existing landing platforms at Fishing Rock and Boat Cove (including the adjacent rock wall) on Raoul Island, however, need to be upgraded. These are the best locations for the landing of people and supplies. Upgrading these two facilities will involve more than maintenance of the existing structures because they have fallen into such a state of disrepair that they are difficult to use. In the interests of addressing the risks of both navigation safety incidents and oil spills, the provisions of this plan should enable upgrade of these facilities to take place.

POLICIES

22. 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 or for other scientific monitoring.
23. 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: Historic and cultural heritage', where the working structure is also a historic structure.)
24. As an exception to policies 22 and 23, 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.
25. 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.
26. 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.
27. To allow minor disturbance associated with approved research when non-invasive methods are not practicable and/or samples are needed.
28. 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.

Issue 2 Kaitiakitanga of the coastal marine area

The broad issue to be addressed is to provide for kaitiakitanga of the natural and physical resources of the coastal marine area of the islands, and ensure that the relationship and values of the tangata whenua for both groups of islands are maintained. Given the different circumstances and histories of the two groups of islands, they are considered separately in this issue.

Kaitiakitanga of the coastal marine area of the Kermadec Islands

Under section 6 of the RMA 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 taonga. Section 7 of the RMA also requires the Minister of Conservation when carrying out his/her functions and powers under the RMA to have particular regard to kaitiakitanga.

Section 2 of the RMA defines kaitiakitanga as the 'exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship'. In relation to the Kermadec Islands the Minister of Conservation will consult with Ngāti Kurī and Te Aupōuri as both iwi have expressed an association with the Islands.

OBJECTIVE

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

POLICIES

29. To liaise and consult with tangata whenua with regard to the management of the Kermadec Islands coastal marine area.

30. 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 plan.

Kaitiakitanga of the coastal marine area of the Subantarctic Islands

Ngāi Tahu ki Murihiku are kaitiaki of the Southland region, including the Subantarctic Islands and other southern islands. They have prepared a management plan Te Tangi a Tauira—The Cry of the People 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; and
- Articulate Ngāi Tahu ki Murihiku policies and management guidelines for natural resource and environmental management, wāhi tapu and wāhi taonga.

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, 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.

OBJECTIVE

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 Māori.

POLICIES

31. 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.

32. 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.

33. To provide copies of all coastal permit applications for activities in the coastal marine area of the Subantarctic Islands to Ngāi Tahu ki Murihiku[20].

34. To recognise and provide for the protection of taonga species, including the following:

- Hoiho
- Miromiro
- Pokotiwha
- Tītī
- Toroa
- Tutukiwi
- Ihupuku
- Kekeno
- Paikea
- Parāoa
- Tohorā

35. To consult with Ngāi Tahu ki Murihiku when monitoring or reviewing this plan.

[20] This policy does not include coastal permit applications for a risk assessment of fouling on a vessel's hull or niche areas, which, as provided in policy 5, will be processed on a non-notified basis and assessed as expeditiously as possible.

Issue 3 Historic and cultural heritage

The issue to be addressed is to recognise and provide for the protection of historic heritage from inappropriate use and development.

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

The historic and cultural heritage of the Kermadec and Subantarctic Islands provides us with evidence of past human activity. Sites of historic and/or cultural heritage in the coastal marine area of both groups of islands need to be protected from activities that have the potential to adversely affect them.

The management of historic and cultural heritage in the coastal marine area is more difficult than on land because of the harsh effects of the coastal environment—even more so in the coastal marine area of the Kermadec and Subantarctic Islands. The Subantarctic Islands are subject to an extreme climate and high-energy environment, being located in the 'Roaring Forties and Furious Fifties'. The Kermadec Islands are located in a highly dynamic volcanic environment. For both groups of islands, many historic sites are of an extremely delicate nature and more susceptible to human, animal and natural impacts than sites in other types of environments.

It follows that active conservation (or preservation) of historic and cultural heritage in the Kermadec and Subantarctic Islands is also more difficult because of the climate, environment, the delicate nature of many sites, and the difficulty and expense involved in undertaking such work because of the isolation of the islands. The isolation of the islands also means that it is difficult to monitor natural deterioration and human impacts on historic and cultural sites.

OBJECTIVES

3.1 To protect and, where appropriate, conserve historic and cultural 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.

POLICIES

36. To protect the sites of historic or cultural heritage listed in Appendix 3.

37. To conserve the following sites of historic or cultural heritage, which are a subset of Appendix 3:
    - Grafton Wreck, Auckland Island; and
    - Northeast Harbour Whaling Station[21], Campbell Island/Motu Ihupuku.

38. To allow activities at any of the sites listed in policy 36 where those activities will be carried out in accordance with the provisions of a heritage assessment prepared in accordance with national best practice standards and to the standards of the ICOMOS NZ Charter; and at the sites listed in policy 37 where those activities will be carried out in accordance with the provisions of a Conservation Plan prepared in accordance with Other Method 5.

39. To identify sites of special spiritual, historical or cultural significance to tangata whenua and record in Appendix 3 if tangata whenua wish to do so.

40. To protect all sites with historic or cultural heritage value, whether previously identified as

[21] This site was a whaling station between 1911 and 1914. Jetty remains and ringbolts are evident in the inter-tidal area, and there is a sea wall around most of the point. A significant part of the site, however, is on terrace above, above MHWS.

significant and/or included in Appendix 3 or not. Activities that would modify or destroy the sites with historic or cultural heritage value should be avoided. However, where complete avoidance is not possible, remedying or mitigating the adverse effects of activities that would modify or destroy the sites or their values shall be undertaken.

41. To protect sites of historic or cultural heritage value, whether previously identified as significant and/or included in Appendix 3 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.

42. 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 modify or destroy the site, subject to tangata whenua concerns for Māori sites.

43. To potentially consider appropriate an activity involving archaeological excavation of sites of historic or cultural heritage value when alternative, less destructive methods cannot be used. Under such circumstances, excavation will be kept to a minimum[22].

44. In assessing an application for an activity that has the potential to affect historic or cultural 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 site, 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 any existing operational facility; and

    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 Kermadec or Subantarctic Islands).

45. In respect of any application for an activity that has the potential to affect heritage sites, the applicant shall make provision for the recording of details of the site, including shipwreck salvage, 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; and

    e) Provision of information to the Minister of Conservation.

46. 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.

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[22] Note: Archaeological sites associated with human activity that occurred before 1900 are protected by the Heritage New Zealand Pouhere Taonga Act. An archaeological Authority will be required from Heritage New Zealand Pouhere Taonga to modify or destroy these sites.

47. To generally consider appropriate activities that promote awareness and understanding of the value and significance of historic and cultural heritage.

48. To generally consider appropriate the salvage or removal of any part (including cargo or other artefacts) or demolition of a shipwreck, and related disturbance of the foreshore and seabed in any of the following circumstances:

    a) the salvage, removal or demolition is necessary to avoid a navigation safety risk;

    b) the salvage, removal or demolition is necessary or desirable to prevent the discharge of a contaminant;

    c) the salvage, removal or demolition is undertaken by, or on behalf of, the owner and is within 50 years of the shipwreck;

    d) the primary purpose of recovery of material is for research and scientific investigation of archaeological shipwreck deposits; or

    e) the salvage, removal or demolition is provided for by the Marine Reserve (Auckland Islands/Motu Maha) Order 2003.

OTHER METHODS

5. The Department of Conservation will prepare, update and implement Conservation Plans for the sites of historic and cultural heritage value defined in Policy 37, to national best practice standards and to the standards of the ICOMOS NZ Charter.

6. To achieve integrated management for historic and cultural heritage sites both above and below MHWS, the Department of Conservation and the New Zealand Conservation Authority will endeavour to ensure consistency between the policies in this plan and the approach taken in Conservation Management Strategies for both the Kermadec Islands and Subantarctic Islands when they are reviewed.

7. The Department of Conservation will maintain and contribute to updating inventory systems, such as the NZ Archaeological Association Site Recording Scheme (ArchSite).

8. The Department of Conservation will encourage a greater public awareness and understanding of historic and cultural heritage sites in the coastal marine area to foster support for their preservation and protection by:

    a) Providing advice and information on historic and cultural heritage resources in the coastal marine area where appropriate, including at locations away from the islands; and

    b) Advocating the conservation of historic and cultural heritage resources in the coastal marine area where appropriate.

9. The Department of Conservation will review and update Appendix 3 as necessary.

Note:

Many sites of historic and cultural heritage, including shipwrecks, are archaeological sites that are subject to the provisions of the Heritage New Zealand Pouhere Taonga Act. Authority is required from Heritage New Zealand Pouhere Taonga prior to any activity being undertaken that would modify or destroy any archaeological site as defined by the Heritage New Zealand Pouhere Taonga Act, whether recorded or not. The Heritage New Zealand Pouhere Taonga Act definition for archaeological sites refers to cultural and historic heritage sites associated with human activity that occurred before 1900, including buildings, structures and shipwrecks that occurred before 1900.

Further authorisations are likely to be required if the site is located in a marine reserve. Approval of the Director-General of the Department of Conservation may need to be obtained for salvage or removal of all or parts of shipwrecks within the coastal marine area of the Auckland Islands, in accordance with the Marine Reserve (Auckland Islands—Motu Maha) Order. An authorisation from the Director-General of the Department of Conservation may need to be obtained for salvage or removal of all or parts of shipwrecks within the coastal marine area of any other marine reserve in accordance with the Marine Reserves Act.

Rules

Note:

All conditions listed for any activity are cumulative unless the conditions provide otherwise.

General rule

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Notwithstanding other rules in this plan, access and anchoring in the coastal marine area: a) for refuge in the event of an emergency or any other force majeure or when in distress or danger; or the purpose of assisting others in distress or danger[23]; or b) where in the reasonable judgment of the captain of the vessel it is required to: i) avoid serious risk to life or health; or ii) repair or prevent serious damage to the vessel.	1	A) If access or anchoring occurs, it shall only occur for the duration necessary to respond to the event. B) The Captain of the vessel shall report to the relevant Department of Conservation Director within 14 days of access to the coastal marine area, including advising the date of access, duration of access, and reasons for access.	Permitted

[23] Note that Rule 1(a) is consistent with UNCLOS article 18(2) as far as that relates to the territorial sea. UNCLOS is the United Nations Convention on the Law of the Sea, also called the Law of the Sea Convention or the Law of the Sea treaty. It is an international agreement that defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.

Occupation

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Temporary occupation of the common marine and coastal area[24] in the coastal marine area of the Subantarctic Islands for research purposes	2	A) Research is consistent with the current New Zealand Subantarctic Islands Research. Strategy, and any required permits under the Reserves Act have been obtained. B) Occupation is for a period of no more than 6 months. C) The mooring is removed at the end of the research season. D) The mooring will not be located within any heritage site as listed in Appendix 3. E) Prior to placing the mooring, the area of foreshore and seabed shall be checked to the extent practicable to ensure the placement will not adversely affect any historic or cultural heritage values. F) Prior to placing the mooring, the area of foreshore and seabed shall be checked to the extent practicable to ensure that any potential adverse effects on ecological values are minimised. G) Advice of location and duration of occupation is to be provided to the Department of Conservation at least 2 weeks in advance of placing the mooring. H) Any ropes or chains used are either new each season or have only been used at the same location in the Subantarctic Islands. I) The mooring is clearly visible to other vessels in the vicinity.	Permitted
Other occupation of the common marine and coastal area[2] in the coastal marine area of the Kermadec and Subantarctic Islands that is not permitted by rule 2 above	3	Excludes occupation related to structures when there is a rule relating to structure placement that specifically provides for occupation.	Discretionary

[24] Section 12(2) of the RMA was amended by the Marine and Coastal Area (Takutai Moana) Act 2011.

Structures

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Erection or placement of a structure for the purposes of scientific monitoring, research or monitoring of volcanic or seismic activity, and related occupation of the common marine and coastal area and related disturbance of the foreshore and seabed	4	A) The monitoring of the effectiveness of this plan is to be carried out by either Department of Conservation staff or individuals on behalf of the Department. B) Disturbance will not affect any site of historic or cultural heritage listed in Appendix 3. C) Advice of location is to be provided to the Department of Conservation, at least 4 weeks in advance of undertaking the activity. D) Sediment disturbance at the time of construction will not reduce the visual clarity of water by more than 50% outside a 50-metre-radius zone of mixing. E) With respect to the coastal marine area in and around the entrance to Port Ross, construction dates are limited to the period of 1 November to 31 March. F) With respect to the coastal marine area in and around Adams, Dundas and Figure of Eight Islands, construction dates are limited to the period of 1 April to 30 September. G) Structure does not create a navigational hazard.	Permitted
Reconstruction, alteration or extension of the landing platforms at Fishing Rock and Boat Cove, and the rock wall at Boat Cove on Raoul Island, and related occupation of the common marine and coastal area, related disturbance of the foreshore and seabed, and any reclamation required	5	A) The works will be undertaken by or on behalf of the Department of Conservation. B) Prior to undertaking any works, a heritage assessment will be developed that recognises the heritage value of the original platform and, where practicable, retains its heritage values, and the works will be undertaken in accordance with that assessment. C) Reclamation is kept to the minimum required to ensure that a safe landing platform is provided. D) Materials to be used in the works have had a full biosecurity inspection.	Permitted

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Reconstruction or alteration of a structure listed in Appendix 3 for maintenance and related occupation of the common marine and coastal area and related disturbance of the foreshore and seabed, other than those structures provided for in rule 8	6	A) Activity is for the purpose of maintaining the structure in good repair. B) Prior to undertaking any works, a heritage assessment will be developed that recognises the heritage value of the site or structure and, where practicable, retains its heritage values, and the works will be undertaken in accordance with that assessment. C) Size of the structure will not increase beyond original size, except as provided for in rule 5 above. D) Sediment disturbance at the time of construction will not reduce the visual clarity of water by more than 50% outside a 50-metre-radius zone of mixing at any time. E) Advice of location and duration of works is to be provided to the Department of Conservation at least 4 weeks in advance of the activity occurring. F) Materials to be used in the works have had a full biosecurity inspection.	Permitted
Reconstruction, alteration or replacement of an existing structure for maintenance, and related occupation of the common marine and coastal area and related disturbance of the foreshore and seabed	7	A) Activity is for the purpose of maintaining the structure in good repair. B) The structure is not listed in Appendix 3. C) Size of the structure will not increase beyond original size. D) Sediment disturbance at the time of construction will not reduce the visual clarity of water by more than 50% outside a 50-metre-radius zone of mixing at any time. E) Advice of location and duration of works is to be provided to the Department of Conservation at least 4 weeks in advance of the activity occurring. F) Materials to be used in the works have had a full biosecurity inspection.	Permitted
Alteration or removal of an existing heritage structure for maintenance and/or conservation	8	A) The structure is listed in Policy 37. B) The works are undertaken according to the requirements of a heritage assessment or a Conservation Plan as approved by the Department of Conservation and Heritage New Zealand Pouhere Taonga. C) The work is undertaken by or on behalf of the Department of Conservation. D) No use of explosives.	Permitted

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Erection or placement of a temporary structure for safe mooring purposes, and related occupation of the common marine and coastal marine area and related disturbance of the foreshore and seabed and access within 0.16nm (300m) of MHWS at Ho Ho Bay on Snares Islands/Tini Heke[3]	9	A) The mooring structure is placed and used by Mr Stuart Cave to moor a vessel for the purposes of obtaining crayfish as per Mr Stuart Cave's quota allocation in CRA8. B) This rule will only continue to apply if Mr Stuart Cave continues to hold quota in CRA8 and continues to fish for crayfish in the area around the Snares Islands/Tini Heke with a gap of no more than 36 months. C) All structures and equipment used to secure the mooring must be removed if Mr Stuart Cave is going to be absent from the Snares Islands/Tini Heke for 4 weeks or more. D) Any ropes or chains used are either new each season or have only been used at the same location in the Subantarctic Islands.	Permitted
Erection, placement, reconstruction, alteration, extension, removal or demolition of any structure and any related occupation of the common marine and coastal area, and the activity or structure does not come within and/or comply with any of rules 4 to 9	10		Discretionary

[25] The restrictions on access and anchoring do not apply to this activity other than the prohibition on carrying or using heavy fuel oil (rule 33).

Discharges

Note 1:

Discharges from ships and offshore installations in the coastal marine area are controlled by the Marine Pollution Regulations, pursuant to section 360(1)(a) and (ha) to (hh) of the RMA. The Marine Pollution Regulations control discharges from ships, aircraft and offshore installations into the coastal marine area, including 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 Marine Pollution 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. (Beyond 12 nautical miles, discharges from ships and offshore installations are controlled by Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012) Activities authorised by the Marine Pollution Regulations are exempt from the rules of this plan, unless the Regulations specifically deem an activity to be a discretionary activity in a regional coastal plan.

Note 2:

Marine Reserves Act further restricts discharges

Note 3:

These rules do not restrict noise and light discharges associated with search and rescue/medivac missions by helicopter.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Discharge of uncontaminated water or storm water from land into water or onto land in the coastal marine area	11	The activity will not involve: a) the discharge of a contaminant or water into water; or b) a discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water that, after reasonable mixing, (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters: c) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials: d) Any conspicuous change in the colour or visual clarity: e) Any emission of objectionable odour: or f) Any significant adverse effects on aquatic life.	Permitted

Removal of an existing outfall structure and associated disturbance	12	The activity will not involve: a) the discharge of a contaminant or water into water; or b) a discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water that, after reasonable mixing, (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters: c) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials: d) Any conspicuous change in the colour or visual clarity: e) Any emission of objectionable odour: or f) Any significant adverse effects on aquatic life.	Permitted
Discharge of untreated sewage from land into water or onto land in the coastal marine area of Campbell Island/Motu Ihupuku	13	The discharge of untreated sewage until 5 years after the date this plan becomes operative	Permitted
Discharge of untreated sewage from land into water or onto land in the coastal marine area, except as provided for in rule 13	14		Prohibited
Other discharges of contaminants to water or air in the coastal marine area, where the discharge does not come within rule 13 or comply with rules 11 to 13. Activities authorised by the Resource Management (Marine Pollution) Regulations 1998 are exempt from this rule.	15		Discretionary

Shipwrecks

Note 1:

Approval of the Director-General of Conservation may need to be obtained for salvage or removal of all or parts of shipwrecks within the coastal marine area of the Auckland Islands, in accordance with the Marine Reserve (Auckland Islands—Motu Maha) Order. An authorisation from the Director-General of the Department of Conservation may need to be obtained for salvage or removal of all or parts of shipwrecks within the coastal marine area of any other marine reserve in accordance with the Marine Reserves Act.

Note 2:

Many sites of historic and cultural heritage, including shipwrecks, are archaeological sites that are subject to the provisions of the Heritage New Zealand Pouhere Taonga Act, and may be recorded on the New Zealand Heritage List as historic places, historic areas, wāhi tūpūna, wāhi tapu and wāhi tapu areas. Authority is required from Heritage New Zealand Pouhere Taonga prior to any activity being undertaken that would modify, damage or destroy any archaeological site whether recorded or not, if the site was associated with human activity pre-1900 or the wreck occurred before 1900.

Note 3:

Any contemporary shipwrecked vessels will be considered a deposit to the foreshore and seabed and regulated as such under rule 28.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Salvage, removal of any part (including cargo or other artefacts) or demolition of a shipwreck, and related disturbance of the foreshore and seabed in the coastal marine area of the Kermadec and Subantarctic Islands	16		Discretionary
Salvage, removal of any part or demolition of a shipwreck, and related disturbance of the foreshore and seabed in the coastal marine area of the Auckland Islands/Motu Maha Marine Reserve	17		Discretionary
Salvage, removal of any part or demolition of a shipwreck, and related disturbance of the foreshore and seabed in the coastal marine area of the Kermadec and Subantarctic Islands unless the activity comes within rules 16 or 17 above	18		Prohibited

Disturbance

Note 1:

Any disturbance activities in a marine reserve will require a separate authorisation from the Director-General of Conservation in accordance with the Marine Reserves Act, under the Marine Reserves Regulations 1993.

Note 2:

Archaeological sites associated with human activity that occurred before 1900 are protected by the Heritage New Zealand Pouhere Taonga Act. An archaeological authority will be required from Heritage New Zealand Pouhere Taonga to modify or destroy these sites.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Minor disturbance, damage or destruction of foreshore and seabed, including any removal of sand, shell, shingle or other natural material for research	19	A) In any 12-month period, disturbance of material does not: a) Exceed 5 cubic metres; or b) Exceed 10 square metres B) Works do not involve the disturbance of a site listed in Appendix 3	Permitted
Minor disturbance, damage or destruction of seabed, including any removal of sand, shell, shingle or other natural material for research	20	A) Disturbance is more than 300 metres from MHWS and 100 metres deep. B) In any 12-month period, disturbance of material does not: a) Exceed 300 cubic metres; or b) Exceed 6000 square metres. C) Works do not involve the disturbance of a site listed in Appendix 3.	Permitted
Disturbance, damage or destruction of foreshore and seabed involving a site listed in Appendix 3	21		Discretionary
Other disturbance, or damage or destruction of foreshore and seabed, including any removal of sand, shell, shingle or other natural material, where the disturbance, damage or destruction is restricted by sections 12(1)(c) or 12(1)(e) of the Resource Management Act 1991, or removal of sand, shell, shingle or other natural material is restricted by section 12(2) of the Resource Management Act 1991	22		Discretionary

Use of water

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Taking or use of open coastal water or water in embayments, harbours or inlets	23		Permitted
Taking, use, damming or diversion of coastal water in estuaries, or water from an aquifer, excluding the taking or use of water that is allowed by sections 14(3)(d) or (e) of the Resource Management Act 1991; or from any water for the purpose of extracting constituents of water	24		Discretionary

Harmful or invasive species

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Introduction of any species of flora and/or fauna new to the coastal marine areas of the Kermadec and Subantarctic Islands	25		Prohibited

Deposition

Note 1:

The Marine Pollution Regulations (pursuant to section 360(1)(a) and (ha) to (hh) of the RMA) as referred to above in relation to discharges, also regulate dumping from ships and offshore installations. Part 2 clause 4(2) of those Regulations lists waste or other matter that are deemed to be discretionary activities for dumping in regional coastal plans.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Deposit of a contaminant that is incidental to, or derived from, or generated during the normal operations of a ship as listed in schedule 4 of the Resource Management (Marine Pollution) Regulations 1998	26		Permitted
Deposit of a substance from the scraping and/or cleaning of a ship (whether above or below the water surface) to the foreshore and seabed, if not permitted by Rule 26[26]. Activities authorised by the Resource Management (Marine Pollution) Regulations 1998 are exempt from this rule.	27		Discretionary
Other deposits of a substance on the foreshore and seabed, including any shipwrecked vessel, that is restricted by Section 12(1)(d) of the Resource Management Act 1991. Activities authorised by the Resource Management (Marine Pollution) Regulations 1998 are exempt from this rule.	28		Discretionary

[26] Refer to regulation 4(2)(f) of the Marine Pollution Regulations.

Controls on hull and niche area fouling

Note 1:

Rules 29 to 32 set out the requirements for clean hull and niche area maintenance to manage the risk of introducing harmful and/or invasive organisms. These rules are in addition to the access and anchoring rules and all other rules in this plan.

Note 2:

Performance Standards to be complied with for these rules are set out in Table 1.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Access within 0.54nm (1000m) of MHWS of any of the Kermadec and/or Subantarctic Islands by vessels except yachts	29	A) All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 1). B) All vessels must also comply with either (a) or (b), below: a) At all times a vessel is within 0.54nm (1000m) of MHWS of any of the islands: i. That vessel's anti-fouling system must be no more than 6 months old; OR ii. Where that vessel's anti-fouling system is more than 6 months old and no more than 12 months old, that vessel must have demonstrated compliance with Performance Standard 1.1 (in Table 1) by inspection in accordance with Performance Standard 2 (in Table 1) within the previous 6 months; OR iii. Where that vessel's anti-fouling system is more than 12 months old, that vessel must have demonstrated compliance with Performance Standard 1.1 (in Table 1) by inspection in accordance with Performance Standard 2 (in Table 1) within the previous 3 months. b) At all times a vessel is within 0.54nm (1000m) of MHWS of any of the islands: i. That vessel's anti-fouling system must be no more than 12 months old; AND ii. That vessel must have a Biofouling Management Plan ("BMP") and a Biofouling Record Book ("BRB") that are in accordance with Appendix 7, and that demonstrate how compliance with Performance Standard 1 (in Table 1) will be achieved; AND iii. The BMP and the BRB must be provided to the relevant Department of Conservation Director by 7 days prior to the vessel's first voyage to any of the islands after the application of the anti-fouling system; AND iv. There must be an inspection between 4 and 8 months from the date of application of the anti-fouling system that demonstrates compliance with Performance Standard 1.1 (in Table 1) by inspection in accordance with Performance Standard 2 (in Table 1).	Permitted

Access within 0.54nm (1000m) of MHWS of any of the Kermadec and/or Subantarctic Islands by yachts	30	A) All yachts must comply with Performance Standards 1, 2, 3 and 4 (in Table 1). B) All yachts must also comply with the following: a) At all times a yacht is within 0.54nm (1000m) of MHWS of any of the islands, that yacht's anti-fouling system must be no more than 12 months old; AND b) At all times a yacht is within 0.54nm (1000m) of MHWS of any of the islands, that yacht must also have demonstrated compliance with Performance Standard 1.1 (in Table 1) by inspection in accordance with Performance Standard 2 (in Table 1) prior to departure for the islands and within the previous 3 months; AND c) This inspection may be completed after the yacht has had a thorough water blast.	Permitted
Access within 0.54nm (1000m) of MHWS of any of the Kermadec and/or Subantarctic Islands by any vessel (including yachts) which: a) has been shown to breach Performance Standard 1.1 (in Table 1) by a failed inspection under Performance Standard 2 (in Table 1) in accordance with Appendix 4, or b) opts to have a risk assessment instead of a hull inspection pursuant to rules 29 or 30.	31	A) All vessels must comply with Performance Standards 3 and 4 (in Table 1). B) A risk assessment must accompany the application. The risk assessment must be undertaken in accordance with the protocol and using the template as set out in Appendix 6, and must have a result of negligible or low according to the risk assessment decision support tool as set out in Appendix 6. C) All applications under this Rule will be on a non-notified basis. Matters over which control will be limited: a) Duration of consent b) Age of anti-fouling system c) The results of vessel hull and niche area inspections using Appendix 4 form and protocols (as relevant) d) Monitoring and reporting e) Vessel's destinations - both prior to application and post application, and duration of stay at those destinations f) Review of conditions g) Administrative charges	Controlled
Access within 0.54nm (1000m) of MHWS of any of the Kermadec and/or Subantarctic Islands by any vessel that does not comply with rules 29 to 31	32	All applications under this Rule will be on a non-notified basis	Discretionary

Access and anchoring within the coastal marine area of the Subantarctic Islands

Note 1:

The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Note 2:

Refer to the planning maps (Appendix 1) for a visual explanation and areal extent of the following rules, and the chartlets (Appendix 2) for detail of anchorages.

Note 3:

These rules do not apply to vessels of the New Zealand Navy when involved in activities for any of the purposes listed in section 5 of the Defence Act 1990.

Note 4:

These rules are in addition to the rules controlling and managing hull and niche area fouling and all other rules in this plan.

Note 5:

Speed is restricted to 5 knots within 200 metres of MHWS in accordance with maritime rules under the Maritime Transport Act.

Note 6:

Vessels must not go within 200 metres of any marine mammal in accordance with regulations under the Marine Mammals Protection Act.

Note 7:

Performance Standards to be complied with for these rules are set out in Table 2 below.

Provisions applicable to all vessels (irrespective of vessel length)

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Heavy fuel oil			
Except as provided for in Rules 1 and 34 and by any consent granted under Rule 35, access to the coastal marine area of the Subantarctic Islands by vessels using or carrying heavy fuel oil as a fuel or carrying heavy fuel oil as a cargo	33		Prohibited
Notwithstanding Rule 1[27], access to the coastal marine area of Auckland Island and Campbell Island/Motu Ihupuku by fishing vessels fuelled with heavy fuel oil in the lee of Auckland Island (no closer than 2nm from MHWS) and in the lee of Campbell Island/Motu Ihupuku (no closer than 1.5nm from MHWS)	34	A) All vessels must comply with Performance Standards 1, 2, 3 and 5 (in Table 2). B) Access may only occur where, in the reasonable judgment of the captain of the vessel, such access is required to: a) avoid serious risk to life or health; OR b) repair or prevent serious damage to the vessel. C) If access occurs: a) it shall only occur for the duration necessary to respond to the event, AND b) the captain of the vessel shall report to the relevant Department of Conservation Director within 14 days of access to the coastal marine area, including advising the date of access, duration of access, and reasons for access.	Permitted
Access (but not anchoring) 0.54nm (1000m) or more from MHWS and in the exemption zone on Map 6 of the Snares Islands/Tini Heke by cruise ships using or carrying heavy fuel oil as a fuel for the purpose of allowing passengers to watch tītī leaving or returning to Snares Island.	35		Discretionary
Ship-to-ship fuel transfers			
Except as provided for in Rule 37, ship-to-ship fuel transfers in the coastal marine area of the Subantarctic Islands	36		Prohibited

[27] Note: Nothing in Rule 34 is intended to limit the ability of a fishing vessel fuelled with heavy fuel oil to separately rely on Rule 1.

Without derogating from all other rules applicable to a vessel regarding access and anchoring, ship-to-ship fuel transfers of Marine Gas Oil (MGO) or Marine Diesel Oil (MDO) in the coastal marine area of the Subantarctic Islands[28]	37	A) All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2). B) Transfers may only be undertaken in the following circumstances: a) Emergency fuel transfers in the event a vessel's fuel becomes contaminated; OR b) From one fishing vessel to another if the former is returning to port early and wishes to transfer excess fuel to another vessel remaining at the islands[29]. C) All vessels must also comply with the following: a) The transfer of fuel takes place on the leeward open coastline; AND b) The location and timing of the fuel transfer is chosen so that local winds and currents will not carry any fuel spillage: onto the shoreline; or onto offshore rocks used by wildlife; or into areas of the coastal marine area likely to be used by large numbers of birds or marine mammals for congregation or feeding; AND c) A record is kept by each fishing company or, if the vessel is not a fishing vessel, the relevant vessel operator, of all fuel transfers involving its vessels and, if any fuel transfer takes place in any calendar month, an email or facsimile is sent to the relevant Department of Conservation Director during the following month which details the types of vessels involved, the fuel type transferred, and the approximate quantity of fuel; AND d) Any spillage is reported to the relevant Department of Conservation Director immediately.	Permitted
Research and management			
Access and anchoring within the coastal marine area of any of the Subantarctic Islands by vessels involved in management activities and/or research for the Department of Conservation, including vessels of the New Zealand Navy	38	All vessels must comply with Performance Standards 1, 2 and 4 (in Table 2).	Permitted
Access and anchoring within the coastal marine area of any of the Subantarctic Islands by vessels involved in research not commissioned by the Department of Conservation	39	A) All vessels must comply with Performance Standards 1, 2 and 4 (in Table 2). B) The research must be consistent with the current New Zealand Subantarctic Islands Research Strategy. C) Any permits that are required under other legislation and/or regulations, including the Reserves Act 1977 and Marine Reserves Act 1971, must be obtained.	Permitted

[28] Note: For best practice guidance, see Other Method 4 in the Issue 1 section of this plan.

[29] Note: For the avoidance of doubt, this does not include a tanker or other fishing vessel used for the purpose of carrying fuel to the fishing fleet.

Provisions specific to vessel length

Note 1:

In any locality where a vessel operator is permitted to access or anchor (or has a consent to do so), that vessel operator is also permitted to launch and collect ancillary craft and passengers in that locality.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Ancillary craft			
Access to the coastal marine area of the Subantarctic Islands by ancillary craft, subject to there being no scientific research being undertaken in a particular location which requires isolation at the time the vessel accesses that location and where vessel operators have been notified of these requirements by the relevant Department of Conservation Director	40	All vessels must comply with Performance Standards 2, 4 and 5 (in Table 2).	Permitted
Vessels 0 metres to 30 metres in length			
Access to, and/or anchoring at, specified locations within 0.16nm (300m) of MHWS at Auckland Island, Enderby Island or Campbell Island/Motu Ihupuku by vessels up to 30 metres in length	41	A) All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2). B) Vessels may access and/or anchor at the following locations together with those locations listed in Rules 42 and 43 which the captain of the vessel considers appropriate: a) Sandy Bay (in Port Ross), Enderby Island (chartlet 3) b) Erebus Cove (in Port Ross), Auckland Island (chartlet 4) c) Terror Cove (in Port Ross), Auckland Island (chartlet 4) d) Waterfall Inlet (east coast), Auckland Island (chartlet 10) e) Camp Cove (in Carnley Harbour), Auckland Island (chartlet 9) f) Raynal Point (South) (in Carnley Harbour), Auckland Island (chartlet 6)	Permitted

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Vessels 0 metres to 42 metres in length			
Access to, and/or anchoring at, specified locations within 0.16nm (300m) of MHWS at Auckland Island, Enderby Island or Campbell Island/Motu Ihupuku by vessels up to 42 metres in length	42	A) All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2). B) Vessels may access and/or anchor at the following locations together with those locations listed in Rule 43 which the captain of the vessel considers appropriate: a) Sandy Bay (in Port Ross), Auckland Island – but no closer than the 10 metre contour (chartlet 3) b) Musgrave Harbour (North) (in Carnley Harbour), Auckland Island (chartlet 8) c) Musgrave Harbour (South) (in Carnley Harbour), Auckland Island (chartlet 8)	Permitted
Vessels 0 metres to 75 metres in length			
Access to, and/or anchoring at, specified locations within 0.16nm (300m) of MHWS at Auckland Island, Enderby Island or Campbell Island/Motu Ihupuku by vessels up to 75 metres in length	43	A) All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2). B) Vessels may only access and/or anchor at the following locations: a) Tagua Bay (in Carnley harbour), Auckland Island (chartlet 7) b) Shoe Island, Auckland Island (chartlet 4) c) Perseverance Harbour, Campbell Island/Motu Ihupuku (chartlet 12) d) Ranui Cove (east coast), Auckland Island (chartlet 5) e) Musgrave Inlet (east coast), Auckland Island (chartlet 1) f) Norman Inlet (east coast), Auckland Island (chartlet 2) g) Hanfield Inlet (east coast), Auckland Island (chartlet 2) h) Raynal Point (North) (in Carnley Harbour), Auckland Island (chartlet 6) i) Coleridge Bay, (North of Mask Island, Carnley Harbour), Auckland Island (chartlet 8) j) Western Arm (Carnley Harbour), Auckland Island - provided wind speed is < 35 knots, and not within the 0.05nm (100m) buffer between the anchorage and the predator free Adams Island (chartlet 11)	Permitted

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Access (but not anchoring) at specified locations within 0.16nm (300m) of MHWS of the Subantarctic Islands by vessels up to 75 metres in length for the purpose of launching and collecting ancillary craft and passengers	44	A) All vessels must comply with Performance Standards 3 and 4 (in Table 2). B) Vessels may only launch and collect ancillary craft and passengers at the following locations: a) Bradley Cove, Bounty Islands b) Anchorage Bay, Antipodes Island c) Ring Dove Bay, Antipodes Island d) North East Island, Snares Islands/Tini Heke	Permitted
Vessel 0 metres to 125 metres in length			
Access and anchoring within 0.16nm (300m) of MHWS of the Subantarctic Islands by vessels up to 125 metres in length, other than as provided in Rules 38, 39, 40, 41, 42, 43 or 44.	45		Discretionary
Access and anchoring in the zone from 0.16nm (300m) from MHWS out to the outer limits of the Territorial Sea of the Subantarctic Islands by vessels up to 125 metres in length	46	All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2).	Permitted
Vessels longer than 125 metres			
Access and anchoring within 0.32nm (600m) of MHWS of the Subantarctic Islands by vessels longer than 125 metres in length	47		Prohibited
Access and anchoring in the zone from 0.32nm (600m) from MHWS to 0.54nm (1000m) from MHWS at the Subantarctic Islands by vessels longer than 125 metres in length	48		Discretionary

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Access and anchoring in the zone from 0.54nm (1000m) from MHWS out to the outer limits of the Territorial Sea of the Subantarctic Islands by vessels longer than 125 metres in length	49	All vessels must comply with Performance Standards 1, 2, 3, 4 and 5 (in Table 2).	Permitted
General discretionary activity provision			
Access (to any location) and anchoring (at any location) within the marine coastal area of the Subantarctic Islands by vessels of any length which do not comply with Rules 38, 39, 40, 41, 42, 43, 44, 46, 49 and if not otherwise prohibited	50		Discretionary

Access and anchoring within the coastal marine area of the Kermadec Islands

Note 1:

The Master of any vessel entering any of the waters of the Kermadec Islands needs to be aware of the risks – such as age and nature of hydrographic survey data coupled with the continuous active volcanic activity with the potential to alter seabed depth and features - and be mindful that rapid and severe changes in weather conditions can occur.

Note 2

Refer to the planning maps (Appendix 1) for a visual explanation and areal extent of the following rules, and the chartlets (Appendix 2) for detail of anchorages.

Note 3:

These rules do not apply to vessels of the New Zealand Navy when involved in activities for any of the purposes listed in section 5 of the Defence Act.

Note 4:

These rules are in addition to the rules controlling and managing hull and niche area fouling and all other rules in this plan.

Note 5:

Speed is restricted to 5 knots within 200 metres of MHWS in accordance with maritime rules under the Maritime Transport Act.

Note 6:

Vessels must not go within 200 metres of any marine mammal in accordance with regulations under the Marine Mammals Protection Act.

Note 7:

Performance Standards to be complied with for these rules are set out in Table 2 below.

Provisions specific to fuel, research and management

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Heavy fuel oil			
Except as provided for in Rule 1, access to the coastal marine area of the Kermadec Islands by vessels using or carrying heavy fuel oil as a fuel or carrying heavy fuel oil as a cargo	51		Prohibited

Ship-to-ship fuel transfers			
Except as provided for in Rule 53, ship-to-ship fuel transfers in the coastal marine area of the Kermadec Islands	52		Prohibited
Without derogating from all other rules applicable to a vessel regarding access and anchoring, ship-to-ship fuel transfers of Marine Gas Oil (MGO) or Marine Diesel Oil (MDO) in the coastal marine area of the Kermadec Islands[30]	53	A) All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 2). B) Transfers may only be undertaken in the event a vessel's fuel becomes contaminated. C) All vessels must also comply with the following: a) The transfer of fuel takes place on the leeward open coastline; AND b) The location and timing of the fuel transfer is chosen so that local winds and currents will not carry any fuel spillage: onto the shoreline; or onto offshore rocks used by wildlife; or into areas of the coastal marine area likely to be used by large numbers of birds or marine mammals for congregation or feeding; AND c) A record is kept by each vessel operator of all fuel transfers involving its vessel and, if any fuel transfer takes place in any calendar month, an email or facsimile is sent to the relevant Department of Conservation Director during the following month which details the types of vessels involved, the fuel type transferred, and the approximate quantity of fuel; AND d) Any spillage is reported to the relevant Department of Conservation Director immediately.	Permitted
Research and management			
Access and anchoring within the coastal marine area of any of the Kermadec Islands by vessels involved in management activities and/or research for the Department of Conservation, including vessels of the New Zealand Navy	54	All vessels must comply with Performance Standards 1, 2, and 4 (in Table 2).	Permitted
Access and anchoring within the coastal marine area of any of the Kermadec Islands by vessels involved in research not commissioned by the Department of Conservation	55	A) All vessels must comply with Performance Standards 1, 2, and 4 (in Table 2). B) All permits that are required under other legislation including the Reserves Act 1977 and Marine Reserves Act 1971 must be obtained.	Permitted

[30] Note: For best practice guidance, see Other Method 4 in the Issue 1 section of this plan.

Provisions specific to vessel length

Note 1:

In any locality where a vessel operator is permitted to access or anchor (or has a consent to do so), that vessel operator is also permitted to launch and collect ancillary craft and passengers in that locality.

ACTIVITY	RULE	CONDITIONS	CLASSIFICATION
Access to the coastal marine area of any of the Kermadec Islands by ancillary craft	56	All ancillary craft must comply with Performance Standards 2 and 4 (in Table 2).	Permitted
Access to, and/or anchoring at, specified locations within 0.16nm (300m) of MHWS at Raoul Island[31]; and within 0.32nm (600m) of MHWS at Meyer and Chanter Islands	57	A) All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 2). B) Vessels may only access and/or anchor at the following locations: a) Boat Cove, Raoul Island (*chartlet 14*) b) Western side of Meyer Islands (*chartlet 15*) c) Western side of Chanter Islands (*chartlet 16*)	Permitted
Access and anchoring within 0.16nm (300m) of MHWS at Fishing Rock, Raoul Island[32] (and as more particularly defined on chartlet 13) by vessels up to 30 metres in length	58	All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 2).	Permitted
Access and anchoring in the zone from 0.16nm (300m) from MHWS to the outer limits of the Territorial Sea of Raoul Island	59	All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 2).	Permitted
Access and anchoring in the zone from 0.32nm (600nm) from MHWS to the outer limits of the Territorial Sea of the islets around Raoul Island and the other Kermadec Islands	60	All vessels must comply with Performance Standards 1, 2, 3 and 4 (in Table 2).	Permitted

[31] Note: Two additional anchorages are shown on the planning maps (Appendix 1) for Raoul Island at Denham Bay and Fishing Rock. Theses anchorages are both seaward of 0.16nm (300m) from MHWS. Anchoring by a vessel of any size seaward of 0.16nm (300m) from MHWS is unrestricted, i.e. it is already a permitted activity (refer rule 59). The anchorages are included on the map as a recommendation for the best location to anchor in Denham Bay and at Fishing Rock outside 0.16nm (300m), depending on the wind conditions.

[32] Note: Vessels choosing to rely on this rule and access and anchor closer than 0.16nm (300m) from MHWS at Fishing Rock need to be cognisant of the risks – age and nature of hydrographic survey data and continuous active volcanic activity with potential to alter seabed depth and features. Vessel masters also need to be mindful that the rapid and severe changes in weather conditions experienced at the Kermadec Islands can quickly make an apparently sheltered anchorage a lee shore situation with little sea room available. The coast along the north side of Raoul Island offers no headlands or outcrops to provide shelter.

Access and anchoring within 0.16nm (300m) of MHWS of Raoul Island, except as provided for in Rules 54, 55, 56, 57 and 58.	61		Discretionary
Access and anchoring within 0.32 (600m) of MHWS of the islets around Raoul Island and the other Kermadec Islands except as provided for in Rules 54, 55, 56, 57 and 63.	62		Discretionary
Access (but not anchoring) Northeast of Macauley Island within 0.32nm (600m) of MHWS of Macauley Island by vessels up to 75 metres in length for the purpose of launching and collecting ancillary craft and passengers	63	All vessels must comply with Performance Standards 3 and 4 (in Table 2).	Permitted
Access (to any location) and anchoring (at any location) within the coastal marine area of any of the Kermadec Islands by vessels of any length which do not comply with Rules 54, 55, 56, 57, 58, 59, 60 or 63 and is not otherwise prohibited.	64		Discretionary

TABLE 1

Standard number	Performance Standards referred to in Rules 29 to 32
1	**FOULING THRESHOLDS** **1.1 Fouling threshold for inspections** For any inspection conducted in accordance with Performance Standard 2 the degree of vessel biofouling must not exceed micro-fouling (slime layer) and/or goose barnacles. **1.2 Fouling threshold at other times** Prior to each departure from port to the Kermadec or Subantarctic Islands the vessel operator must be satisfied on the basis of all the available information required by Performance Standards 1.3 and 2.3, that for the areas included in the table in this performance standard, the biofouling will not exceed the following threshold while that vessel is within 0.54nm (1000m) of MHWS of any of the Islands:

Area of vessel	Biofouling threshold
Hull area	a) Micro-fouling (slime layer) and/or goose barnacles b) Incidental (maximum of 1%) coverage of one organism type of either tubeworms, bryozoans or barnacles, occurring as: i. isolated individuals or small clusters that have no algal overgrowth; and ii. a single species, or what appears to be the same species.
Niche areas (as identified on Figure A4.2 in Appendix 4)	a) Micro-fouling (slime layer) and/or goose barnacles b) Scattered (maximum of 5%) coverage of one organism type of either tubeworms, bryozoans or barnacles, occurring as: i) widely spaced individuals and/or infrequent, patchy clusters that have no algal overgrowth; and ii) a single species, or what appears to be the same species; and c) Incidental (maximum of 1%) coverage of a second organism type of either tubeworms, bryozoans or barnacles, occurring as: i) isolated individuals or small clusters that have no algal overgrowth; and ii) a single species, or what appears to be the same species.

Note 1: Where it is not practicable to access a niche area, the assessment for the purpose of Performance Standard 1.2 is to be done on the basis of information that is available for that niche area, without requiring any access beyond what is practicable.

Note 2: For the purpose of Performance Standard 1.2, the information which the vessel operator will consider is that previously obtained pursuant to Performance Standard 2.3, following completed inspections which have been required by Rule 29B. This information does not require any inspections in addition to those previously undertaken pursuant to Rule 29B.

	1.3 Record keeping (for Performance Standard 1.2) a) The vessel operator must maintain records of measures undertaken and information on which they have relied when determining compliance with Performance Standard 1.2. Where requested, the record is to be provided to the relevant Department of Conservation Director as soon as practicable but no later than 7 days after the date(s) requested. b) Where a vessel is operating pursuant to Rule 29B(b) with a BMP and a BRB, provision of the BMP and BRB will constitute compliance with Performance Standard 1.3.
2	**INSPECTION REQUIREMENTS (relating to Performance Standard 1.1)** **2.1 Appendix 4** All inspections of vessels which are undertaken to demonstrate compliance with Performance Standard 1.1 must be undertaken in accordance with Appendix 4. **2.2 Approved Persons** Inspections must be undertaken by a person approved by the Minister of Conservation pursuant to Appendix 5. **2.3 Reporting** Where an approved person undertakes an inspection, the vessel operator is to provide the completed inspection forms and information required by Appendix 4 to the relevant Department of Conservation Director as soon as practicable after completion of the inspection, but in all circumstances before access within 0.54nm (1000m) of MHWS of any of the Islands.
3	**ANTI-FOULING SYSTEM** **3.1 Anti-fouling system** Vessels must have an anti-fouling system applied in accordance with the manufacturer's instructions, and the anti-fouling system must be within the manufacturer's timeframe of effectiveness at all times the vessel is within 0.54nm (1000m) of MHWS of any of the Islands. **3.2 Evidence of an anti-fouling system less than 6 months old** Where a vessel's anti-fouling system is less than 6 months old, evidence of that vessel's anti-fouling system and date of application must be provided to the relevant Department of Conservation Director before that vessel accesses within 0.54nm (1000m) of MHWS of any of the Islands.
4	**BERTHING, ANCHORING OR MOORING (MORE THAN 7 DAYS)** **4.1 Berthing, anchoring or mooring for more than 7 consecutive days** Where any vessel's anti-fouling system is more than 3 months old and that vessel berths, anchors or moors in any locality, domestic or international, other than any of the islands, for more than 7 consecutive days: a) for the 56 days following departure from that locality, that vessel may access within 0.54nm (1000m) of MHWS of any of the islands; AND b) after the expiration of that 56 day period, that vessel must demonstrate compliance with Performance Standard 1.1 by inspection in accordance with Performance Standard 2 before that vessel next accesses within 0.54nm (1000m) of MHWS of any of the islands. Note: For the avoidance of doubt, notwithstanding this Performance Standard, Performance Standards 1.2, 1.3 and Rule 1 continue to apply.

TABLE 2

Standard number	Performance Standards referred to in the permitted rules relating to access and anchoring at the Kermadec Islands and the Subantarctic Islands[33]
1	Sufficient qualified personnel to move the vessel if needed are to remain on board the vessel at all times.
2	No activity shall disturb or destroy any site of historic or cultural heritage listed in Appendix 3. The exact location of the Wairuna ship wreck is unknown. Refer to the zone on the northern coast of Raoul Island as shown in Appendix 3. Activities in this zone should be aware of its potential location in this zone and avoid any disturbance or destruction of the wreck of the Wairuna if any part of it is found.
3	No more than one cruise ship in any bay or in any harbour at any one time.
4	Vessels must not use or carry heavy fuel oil as a fuel or carry heavy fuel as a cargo.
5	Vessels (including ancillary craft) may only enter the zone shown on Map 2 around Port Ross and Enderby Island between 1 April and 31 October inclusive each year (when southern right whales are breeding and nursing) provided that the following requirements are met at all times: a) No vessel can be longer than 75 metres in length; AND b) Access must not be for the purpose of commercial marine mammal watching; AND c) Access must only be for the purpose of shelter (in addition to the emergency permission provided for in Rule 1); AND d) The movement of any vessel (including ancillary craft) is limited to transiting between sheltering vessels; AND e) A bow watch for whales is kept on vessels entering, transiting and departing Port Ross between 1 April and 31 October inclusive, except where in the reasonable judgment of the captain of the vessel, it is unsafe to do so.

[33] Note: Performance Standard 4 does not apply where Rule 1 or Rule 34 are being relied on.

Other matters

Administrative charges

Administrative charges will be charged under the Resource Management Act 1991 and the Conservation Act 1987 as appropriate.

Coastal occupation charges

Section 64A of the RMA requires the Minister of Conservation to consider whether or not a coastal occupation charging regime applying to persons who occupy any part of the common marine and coastal area is to be included in a regional coastal plan. Having considered the criteria in section 64A(1), the Minister has decided not to include a coastal occupation charging regime in this plan.

Financial contributions

Where the Minister of Conservation grants a coastal permit, the Minister may impose a condition requiring that a financial contribution be made for the purposes specified in the coastal plan.

The term 'financial contribution' is defined in section 108(9) of the RMA to mean:

... a contribution of:

(a) money; or

(b) land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Māori land within the meaning of Te Ture Whenua Māori Act 1993 unless that Act provides otherwise; or

(c) a combination of money and land.

The coastal plan must specify the purposes of financial contributions, including the purpose of ensuring positive effects on the environment to offset any adverse effect, and must set out how the level of contribution would be determined. The Minister can only include a condition in a resource consent requiring a financial contribution if it is consistent with the purposes set out in the plan and determined in the manner described (s.108(10)).

All monies collected under the financial contributions regime of the plan are collected by the Minister of Conservation for use in such a manner as the Minister deems fit in order to avoid, remedy or mitigate the adverse effects of the activity on the coastal environment.

The provisions that follow reflect the requirements of the RMA and set out:

- The circumstances when such contributions may be imposed.
- The purposes for which such contributions may be required and used.
- The manner in which the amount of the contribution will be determined.
- Matters that the Minister will have regard to when deciding whether to impose a financial contribution, the type or types of contribution, and the amount of any contribution.

Provisions relating to financial contributions

(a) **Protection, maintenance or restoration of sites of historic or cultural heritage**

Circumstances: Where the activity for which consent is granted will adversely affect a site of historic or cultural significance.

Purposes: To mitigate or offset such effects by requiring a contribution to protect, maintain or restore an alternative historic or cultural site within the coastal environment.

Determination of amount: To be determined as noted in the method below.

(b) **Protection, restoration or enhancement of seabed and foreshore**

Circumstances: Where the activity for which consent is granted is likely to cause or contribute to adverse effects on the seabed or foreshore.

Purposes: To mitigate or offset the adverse effects of the activity by protecting, restoring or enhancing the seabed or foreshore, including maintenance and planting of vegetation.

Determination of amount: To be determined as noted in the method below.

(c) **Environmental compensation**

Circumstances: Where the activity for which consent is granted will have adverse effects that will not be adequately avoided, remedied or mitigated and those effects can be offset by practicably positive effects elsewhere in the coastal marine area.

Purposes: To provide positive effects by way of environmental compensation by protecting, restoring and/or enhancing natural and physical resources.

Determination of amount: To be determined as noted in the method below.

Method to determine amount of contribution

The amount of contribution must be an amount determined on a case-by-case basis by the Minister of Conservation to be fair and reasonable. The amount must not exceed the reasonable cost of funding positive environmental effects required to offset the net adverse effects caused directly by the activity. 'Net adverse effects' means a reasonable assessment of the level of adverse effects after taking into account:

(a) The extent to which significant adverse effects will be avoided, remedied or mitigated by other consent conditions;
(b) The extent to which there will be positive environmental effects of the activity that may offset any or all adverse effects; and
(c) The extent to which other environmental compensation is offered as part of the activity that may offset any or all adverse effects.

Integrated management

Integrated management is required with the following management responsibilities:

- DOC's role under the Reserves Act and the relevant CMSs
- DOC's role under the Marine Reserves Act and the Subantarctic Islands Marine Reserves Act
- Te Tangi a Tauira—The Cry of the People: iwi management plan of Ngāi Tahu ki Murihiku and Ngāi Tahu Statutory Acknowledgements
- Biosecurity requirements
- The Environmental Protection Authority, in its role of managing the marine environment beyond 12 nautical miles

Conservation management strategies

All of the Kermadec and Subantarctic Islands are nature reserves under the Reserves Act, and the Subantarctic Islands are also national reserves under the Reserves Act. Both groups of islands are managed by CMSs. The Kermadec Islands are managed under the Auckland Conservation Management Strategy[34] (Auckland CMS) and the Subantarctic Islands are managed under the Southland Murihiku CMS[35]. There is an overlap in the jurisdiction of this plan, for which the inland boundary is MHWS, and the CMSs, for which the seaward boundary is mean low water springs.

CMSs are reviewed every 10 years. The review process of the CMSs for both the Kermadec and Subantarctic Islands are one method of achieving the sustainable integrated management of the adjoining coastal marine area.

The Conservation Act and the RMA establish distinct decision-making processes to achieve different purposes. The purpose of the Conservation Act is about the preservation, conservation and protection of natural and historic resources; while the RMA is about the sustainable management of natural and physical resources. Where there is an overlap e.g. in relation to the foreshore associated with the Kermadec and Subantarctic Islands, which is administered under the Reserves Act, then authority under both this plan and the conservation legislation (which would be guided by the CMS) will be required.

Integrating the management of this plan and the CMSs for the two groups of islands will allow a consistent approach to be taken across the land and sea. It will allow the close interdependence of ecosystems on the land and in the sea in the regions of both groups of islands to be managed in a way that takes account of this interdependence. It will also allow integrated management of sites of historic and cultural heritage that span the line of MHWS. Refer Method 6 of 'Other methods' under 'Issue 3: Historic and cultural heritage'.

Marine reserves

All the islands have marine reserves (covering all or part of their coastal marine areas) except the Snares Islands/Tini Heke.

The Subantarctic Islands Marine Reserves Act established marine reserves at Antipodes Island, Moutere Mahue/Antipodes Island Marine Reserve, for the entire territorial sea; the Moutere Hauriri/Bounty Islands Marine Reserve and Moutere Ihupuku/Campbell Island Marine Reserve, covering 58% and 39% of those islands' territorial seas respectively. Regulations under the Fisheries Act 1993 also introduced prohibitions on Danish seining in the remaining territorial sea around the Campbell Island/Motu Ihupuku and Bounty Island groups.

The boundaries of the marine reserves allow for the continuation of long-lining for ling in some areas around the Bounty Islands, as this method is targeted and has a limited by-catch. The Subantarctic Islands Marine Reserves Act also set a 5-year window to allow for a potential deep-water crab fishery to be explored in the territorial sea beyond the marine reserve around Campbell Island. A review must be started three years and completed within five years from the date of commencement of the Subantarctic Islands Marine Reserves Act to decide whether a crab fishery can be established or whether the entire territorial sea should become a marine reserve. That review is due to be completed by 2 March 2019.

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[34] http://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutory-plan-publications/conservation-management-strategies/auckland/

[35] http://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutory-plan-publications/conservation-management-strategies/southland-murihiku/

Te Tangi a Tauira—The Cry of the People: Ngāi Tahu ki Murihiku's iwi management plan

Te Tangi a Tauira—The Cry of the People was specifically taken into account when drafting this plan, and Kaitiaki Rōpū were consulted during its preparation.

Tangata whenua consultation

The policies of this plan, and particularly the policies of Issue 2, will ensure ongoing involvement of tangata whenua of the Kermadec and Subantarctic Islands in the planning, consenting and monitoring of the islands on an ongoing basis.

Biosecurity

The Ministry for Primary Industries (MPI) is charged with leadership of the New Zealand biosecurity system, under the Biosecurity Act. It encompasses facilitating international trade, protecting the health of New Zealanders and ensuring the welfare of our environment, flora and fauna, marine life and Māori resources.

In April 2014 MPI introduced the *Craft Risk Management Standard (CRMS) for Biofouling on Vessels Arriving to New Zealand*, as a voluntary measure. The requirements of the CRMS will become mandatory on 1 May 2018.[36] The requirements of this CRMS are aligned with guidelines on biofouling management developed by the International Maritime Organization (IMO) and adopted by the IMO's Marine Environment Protection Committee in July 2011[37].

In June 2013 the Australian and New Zealand Governments released the *Anti-fouling and in-water cleaning guidelines*[38]. These guidelines provide guidance on the best-practice approaches for the application, maintenance, removal and disposal of anti-fouling coatings and the management of biofouling and invasive aquatic species on vessels and movable structures in Australian and New Zealand waters. These guidelines are also intended to assist authorities to decide on the appropriateness of in-water cleaning operations in general and on a case-by-case basis. In achieving this purpose, it is the aim of the guidelines to minimise contamination and biosecurity risks associated with shore-based and in-water maintenance of vessels and movable structures.

The policies and rules of this plan are consistent with both these initiatives.

Environmental Protection Authority

The Environmental Protection Authority (EPA) is a statutory office housed within the Ministry for the Environment under the Secretary for the Environment. One of its key functions is to streamline the decision-making process for nationally significant proposals. Any proposals of national significance that overlap or are adjacent to the boundary of the coastal marine areas of the islands will present opportunities for integrated management.

The EPA is also responsible for administering the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012. Any applications for marine consents under that Act

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[36] http://www.mpi.govt.nz/importing/border-clearance/vessels/biofouling-management/

[37] IMO Guidelines 2011: Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. http://www.imo.org/blast/blastDataHelper.asp?data_id=30766

[38] http://agriculture.gov.au/SiteCollectionDocuments/animal-plant/pests-diseases/marine-pests/antifouling-consultation/antifouling-guidelines.pdf

that overlap or are adjacent to the boundary of the coastal marine areas of the islands will present opportunities for integrated management.

Monitoring efficiency and effectiveness

Section 35 of the RMA requires the Minister of Conservation to monitor the efficiency and effectiveness of the policies, rules or other methods in this plan.

Ongoing monitoring will be required to assess the impacts of surface water activities on visitor experiences and the physical characteristics of the environment itself. The physical characteristics of the coastal marine areas of the Kermadec and Subantarctic Islands include significant natural character, landscape and amenity values, flora and fauna values, remoteness, and the intrinsic values of ecosystems.

The information collected during hull inspections will be used to monitor the efficiency and effectiveness of policies and rules of this plan, particularly the policies of Issue 1 and the rules controlling hull and niche area fouling.

Information to be submitted with a coastal permit application

Applicants are referred to section 88 and Schedule 4 of the RMA. Section 88 requires the application to be 'in the prescribed form and manner' and to include, in accordance with Schedule 4 of the RMA, an assessment of environmental effects in such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

An application form can be obtained from:

http://www.legislation.govt.nz/regulation/public/2003/0153/latest/DLM195878.html?search=ts_act%40bill%40regulation%40deemedreg_resource+management+regulations_resel_25_a&p=1

The form is also available from the Department's website: www.doc.govt.nz/offshoreislandsrcp

Completed applications should be sent to the relevant Department of Conservation Director.

Access to the coastal marine area inside 0.54nm (1000 m) from MHWS for vessels with hull and niche area fouling

An application for a coastal permit under rule 31 to access the waters inside 0.54nm (1000 m) from MHWS must include a risk assessment, undertaken in accordance with Appendix 6. The risk assessment will provide the assessment of actual and potential effects on the environment for the purposes of Schedule 4 of the RMA.

Glossary

Note: When preparing this Glossary, many of the definitions were drawn from the current IMO definitions at the time.

ancillary craft	Tenders, dinghies, zodiacs, canoes, rigid hull inflatable boats and landing craft medium.
anti-fouling coating	Any paint or other coating specifically designed to prevent or deter the attachment and growth of aquatic organisms on a surface. Includes biocidal coatings and biocide-free coatings, such as foul release coatings.
anti-fouling coating system	The combination of all component coatings, surface treatments (including primer, sealer, binder, anti-corrosive and anti-fouling coatings) or other surface treatments used on a ship to control or prevent attachment of harmful aquatic organisms.
anti-fouling system	A coating, paint, surface treatment, surface, or device that is used on a ship to control or prevent attachment of harmful organisms.
approved research	Approved by the Department of Conservation as being consistent with the research goals for the particular islands group. For the Subantarctic Islands, research needs to be consistent with the Department of Conservation's Research Strategy for the Subantarctic Islands, September 2003.
archaeological site	Archaeological site has the same meaning as in section 6 of the Heritage New Zealand Pouhere Taonga Act 2014.
ballast water	Water, including its associated constituents (biological or otherwise), placed in a ship to increase the draft, change the trim or regulate stability. It includes associated sediments, whether within the water column or settled out in tanks, sea-chests, anchor lockers, plumbing, etc. For the purposes of this plan, it includes ballast water loaded in New Zealand waters.
benthic	Of or living on the seabed.
biofouling	The undesirable accumulation of aquatic organisms such as micro-organisms, plants, and animals on surfaces and structures immersed in or exposed to the aquatic environment.
biodiversity	An abbreviation of 'biological diversity', which means the number and variety of all biological life—plants, animals, fungi and micro-organisms—the genes they contain and the ecosystems on land or in water where they live. In other words, biodiversity is the variety of life on Earth.
biofouling management plan	Refer to Appendix 7.
biofouling record book	Refer to Appendix 7.

coastal marine area	Coastal marine area means the foreshore, seabed, and coastal water, and the air space above the water — of which the seaward boundary is the outer limits of the territorial sea: (b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be a continuation of the line of mean high water springs straight across the mouth of all rivers.
conservation plan	An objective report which documents the history, fabric, and cultural heritage value of a place, assessing its cultural heritage significance, describes the condition of the place, outlines conservation policies for managing the place, and makes recommendations for the conservation of the place.
construction diver[39]	Construction Diver Part 2: A person who holds a current ADAS accreditation as having met the standard of training for AS 2815 Part 2. SSBA diving to 30 metres including the use of certain underwater equipment. This certification may include specific restrictions as identified by the ADAS accreditation. Within this part there is provision for a restricted category, which would exclude the use of some underwater equipment and tools. Construction Diver Part 3: A person who holds a current ADAS accreditation as having met the standard of training for AS 2815 Part 3. SSBA diving to 50 metres.
cruise ship	Vessel involved in providing a tour experience for passengers for commercial gain.
day	A twenty four hour period.
Department of Conservation Director	The Officer within the Department of Conservation who has responsibility for the management of the Kermadec Islands or the Officer within the Department of Conservation who has responsibility for the management of the Subantarctic Islands.
Director	Refer to “Department of Conservation Director”
endemism	The ecological state of being unique to a defined geographic location, such as an island, nation or other defined zone, or habitat type, and found only there.
exotic plant	Any plant that is not native to New Zealand, i.e. not indigenous.
fishing	Fishing has the same meaning as in section 2(1) of the Fisheries Act 1996.
fishing vessel	Any vessel engaged in the legal activity of fishing.
fuel oil	Any oil delivered to an engine and intended for combustion purposes for propulsion. It is a fraction obtained from petroleum distillation, either as a distillate or a residue.
hapū	Sub-tribe; usually a number of whānau with a common ancestor.

[39] As defined in New Zealand’s Health and Safety in Employment Regulations 1995 and applicable to in-water cleaning undertaken by a diver in New Zealand. Refer Appendix 5 – Approval of Inspectors paragraph 8 regarding in-water cleaning undertaken by a diver outside New Zealand.

harmful organism	Any organism not indigenous to the islands, including any terrestrial or marine animal, insect or plant, excluding self-introduced species[40].
heavy fuel oil (HFO)	1. Crude oils with a density greater than 900 kg/cubic metre at 15 degrees Celsius; 2. Oils, other than crude oils, with a density greater than 900 kg/cubic metre at 15 degrees Celsius or a kinematic viscosity higher than 180 square mm/second at 50 degrees Celsius; or 3. bitumen, tar and their emulsions.
heritage assessment	An assessment of heritage values and impacts Which includes mitigation, etc. carried out by a suitably qualified heritage as approved by the Department of Conservation
historic heritage	Those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities: Archaeological Architectural Cultural Historic Scientific Technological Includes: Historic sites, structures, places and areas Archaeological sites Sites of significance to Māori, including wāhi tapu Surroundings associated with the natural and physical resources
hoiho	Yellow-eyed penguin.
ihupuku	Southern elephant seal.
internal waters	Harbours, estuaries and other areas of the sea that are on the landward side of the baseline of the territorial sea of a coastal state; and rivers and other inland waters that are navigable by ships.
invasive aquatic species	A species that may pose threats to human, animal and plant life, economic and cultural activities, and the marine environment.
in-water cleaning	The physical removal of biofouling from a ship while in the water.
iwi	Māori tribe; usually a number of hapū with a common ancestor.
kaitiaki	The tangata whenua guardian who exercises the ancestral responsibilities of Kaitiakitanga.
kekeno	New Zealand fur seal.
length overall	The maximum length of a vessel's hull measured at the Plimsoll line.
macro-fouling (macro biofouling)	Any biofouling in excess of micro-fouling.

[40] The definition of 'harmful organism' is not intended to include meat and plants carried as normal ship provisions. However, ship operators need to be aware that some items carried as normal ship provisions can be high risk to the marine environment—for example, chicken or smoked chicken could carry listeria

marine diesel (MDO)	Distillate marine fuel with possible residual fuel traces. It is a blend of distillate product, heavier than marine gas oil. Also referred to as MDO or marine diesel oil.
marine gas oil (MGO)	Distillate marine fuel similar to the diesel used by cars and trucks.
Marine growth prevention system (MGPS)	The prevention of biofouling accumulation in internal seawater systems and sea chests. Can include the use of anodes, injection systems and electrolysis.
Marine Pollution Regulations	Resource Management (Marine Pollution) Regulations 1998.
MARPOL	International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (known as 'MARPOL 73/78' or 'MARPOL').
mean high water springs (MHWS)	The highest level to which spring tides reach on average over a period of time (often 19 years). This level is generally close to being the 'high water mark' where debris accumulates on the shore annually.
Micro-fouling (micro biofouling)	A layer of microscopic organisms such as bacteria and diatoms and the slimy substances (usually extracellular polysaccharides) that they produce. Also known as the slime layer.
miromiro	Snares Island tomtit.
mooring	Any weight, pile or article placed in or on the foreshore or seabed for the purpose of securing a vessel, raft, aircraft or floating structure. Includes any float, wire, rope or other device attached or connected to such weight, pile or article, but does not include an anchor that is normally removed with a vessel, raft, aircraft or floating structure when it leaves a site or anchorage, or the non-permanent laying and relaying of buoys. A mooring is not defined as a structure (refer "structure").
New Zealand waters	(a) The territorial sea of New Zealand; and (b) The internal waters of New Zealand; and (c) All rivers and other inland waters of New Zealand.
niche areas	Areas on a ship that are more susceptible to biofouling due to different hydrodynamic forces, susceptibility to coating system wear or damage, or being inadequately, or not, painted, e.g. sea chests, bow thrusters, propeller shafts, inlet gratings, dry-dock support strips.
paikea	Humpback whale.
parāoa	Sperm whale.
pinniped	A group of semi-aquatic marine mammals—the seals and their relatives. There are three pinniped families: walruses, eared seals (including sea lions and fur seals) and true seals.
pokotiwha	Snares crested penguin.

reclamation	Any permanent filling of an area previously inundated by coastal water either at or above mean high water spring mark, whether or not it is contiguous with the land, so that the filled surface is raised above the natural level of MHWS, and thus creates dry land, removed from the ebb and flow of the tide. For the purposes of this plan, reclamations do not include piles, pylons, ramps, rubble mound breakwaters or filling behind seawalls (unless the purpose of the seawall and filling is primarily for the purpose of creating land).
research	Refer 'Approved research' above.
ROV	Remotely operated vehicle—in the context of this plan, for underwater use.
season	Typically 1 October to 31 March for the summer season and 1 April to 30 September for the winter season. However, these dates are not absolute and may slide earlier or later for any given user.
ship	A vessel of any type whatsoever operating in the marine environment. Includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft, fixed or floating platforms, floating storage units, and floating production storage and off-loading units. (IMO definition) Refer definition of yacht for recreational vessels under 24 metres in length.
slime layer	Refer to 'micro-fouling'.
stormwater	Surface water runoff (and any contaminants contained therein) from land or the external surface of any structure which is discharged to a water body or land as a result of rainfall.
structure	Any building, equipment, device or other facility made by people that is fixed to land (including land covered by water and the air space above land). Includes any raft. A mooring is not a structure (refer "mooring").
taonga	Treasured possession, material or abstract (e.g. language). Māori interest in these is protected by the Treaty of Waitangi and New Zealand statute and common law/lore.
territorial Sea	Territorial sea means the territorial sea of New Zealand as defined by section 3 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977.
tītī	Sooty shearwater. Also known as 'mutton birds'.
tohorā	Southern right whale.
toroa	Albatrosses and mollymawks.
tutukiwi	Snares Island snipe.
vessel	Refer to 'ship'.
vessel length	For registered vessels, this means the registered length. For non-registered vessels, this means "length overall".
wāhi tapu	Sacred places.

whānau	Family (extended). Several whānau may constitute a hapū, and several hapū constitute an iwi (tribe); further, several iwi of related descent may comprise a waka (canoe) grouping. Such groupings based on whakapapa (descent) and waka (migratory) relationships are significant in modern New Zealand Māori life and politics, evolving over time.
yacht	Small, recreational sailing craft less than 24 metres in length.
zodiac	Refer to 'ancillary craft'.

Appendix 1

Maps

Subantarctic Islands:

Map 1 **Vessel access restrictions, Auckland Islands**

Anchoring zones (see chartlets 1 and 2):

Musgrave Inlet
Norman Inlet
Hanfield Inlet

Map 2 **Vessel access restrictions, Port Ross, Auckland Island**

Anchoring zones (see chartlets 3 and 4):

Sandy Bay
Shoe Island
Terror Cove
Erebus Cove
Ranui Cove

Map 3 **Vessel access restrictions, Carnley Harbour, Auckland Island**

Anchoring zones (see chartlets 6, 7, 8, 9, 10 and 11):

Raynal Point (North)
Raynal Point (South)
Tagua Bay
Coleridge Bay
Musgrave Harbour (North)
Musgrave Harbour (South)
Camp Cove
Waterfall Inlet
Western Arm

Map 4 **Vessel access restrictions, Antipodes Islands**

No anchorage zones

Map 5 **Vessel access restrictions, Campbell Island/Motu Ihupuku**

Anchorage zone (see chartlet 12):

Perseverance Harbour

Map 6 **Vessel access restrictions, Snares Islands/Tini Heke**

No anchorage zones

Map 7 **Vessel access restrictions, Bounty Islands**

No anchorage zones

Kermadec Islands:

Map 8 **Vessel access restrictions, Raoul Island and outlying islands**

Anchorage zones (see chartlets 13, 14, 15 and 16):

Fishing Rock

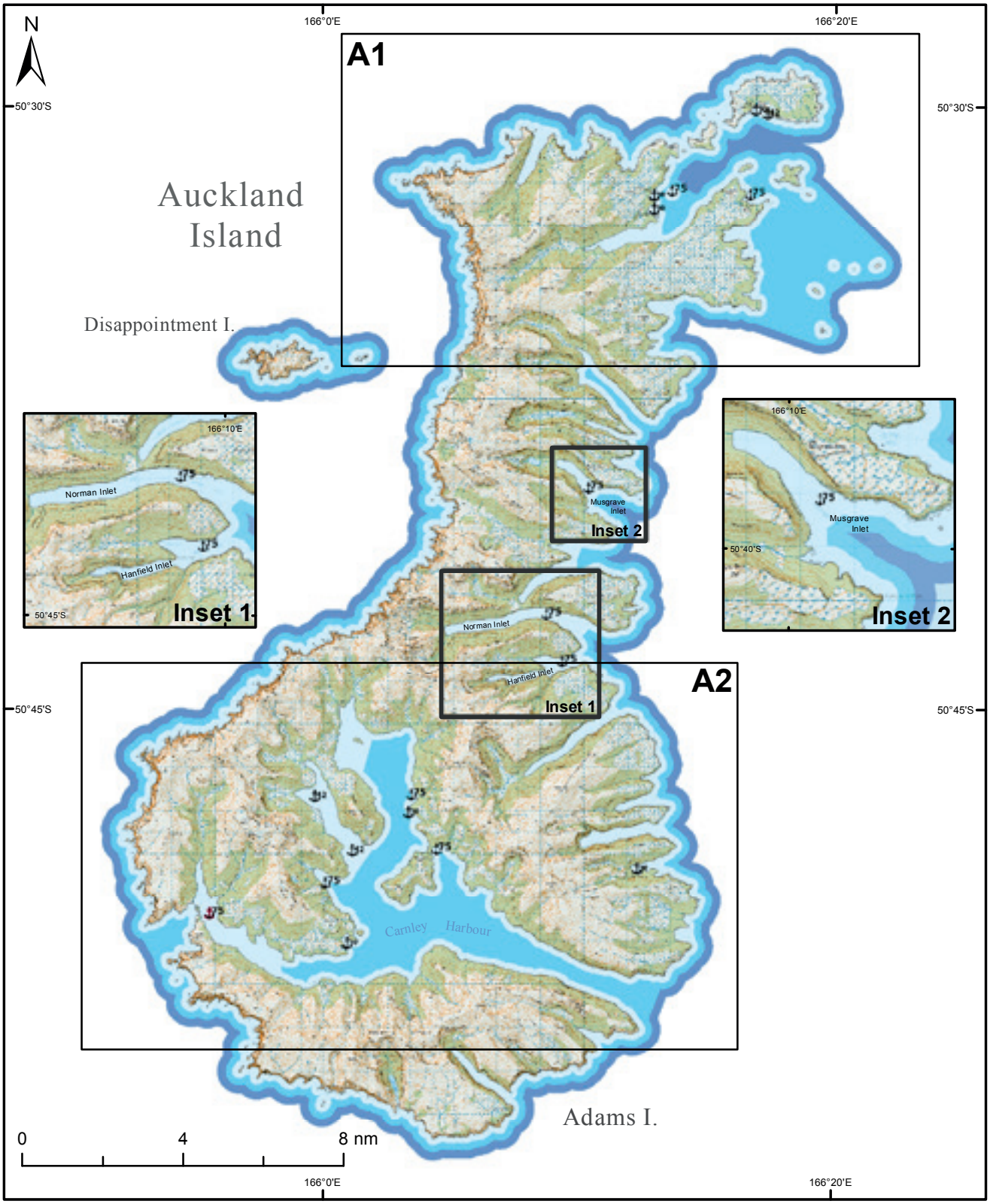
Boat Cove

Meyer Islands

Chanter Islands

Map 9 **Vessel access restrictions, Macauley Island, Cheeseman and Curtis Islands, and L'Esperance Rock**

No anchorage zones



Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	Up to 30 m	Between 30 - 125 m	Large (> 125 m)
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

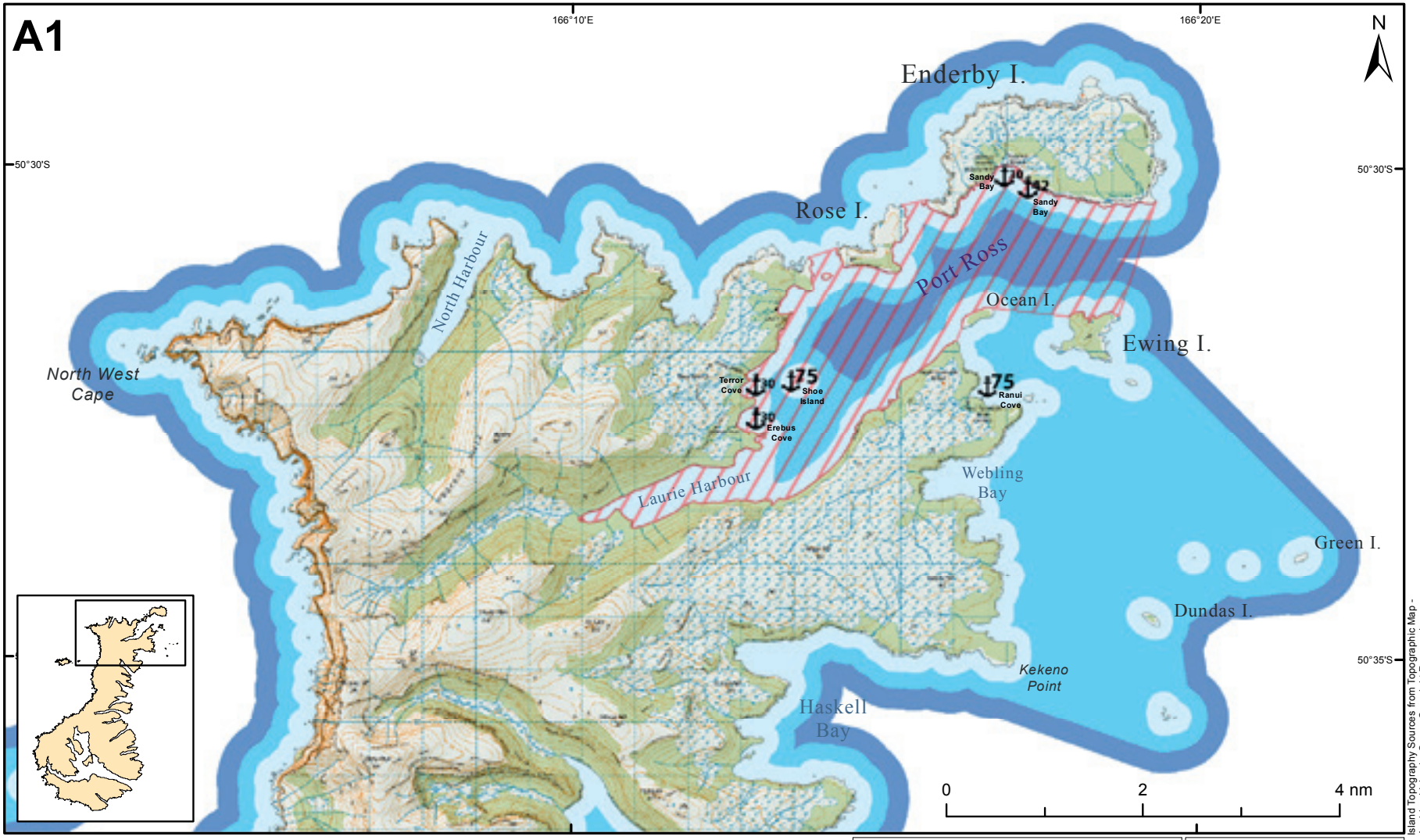
The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Anchorages

Vessels of the length specified below do not require a permit to anchor at the designated locations only (Anchor at own discretion)

- For Vessels up to 30 metres
- For Vessels up to 42 metres
- For Vessels up to 75 metres
- For Vessels up to 75 metres (if wind speed is <35 knots)

Map 1. Vessel access restrictions, Auckland Islands.



Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	Up to 30 m	Between 30 - 125 m	Large (> 125 m)
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

Port Ross southern right whale exclusion zone

Access to this area is subject to certain restrictions 1 April to 31 October - see all access and anchoring provisions where Performance Standard 5 of Table 2 applies

Anchorages

Vessels of the length specified below do not require a permit to anchor at the designated locations only (Anchor at own discretion)

- 30 For Vessels up to 30 metres
- 42 For Vessels up to 42 metres
- 75 For Vessels up to 75 metres

The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Map 2. Vessel access restrictions, Port Ross, Auckland Island.

Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	Up to 30 m	Between 30 - 125 m	Large (> 125 m)
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

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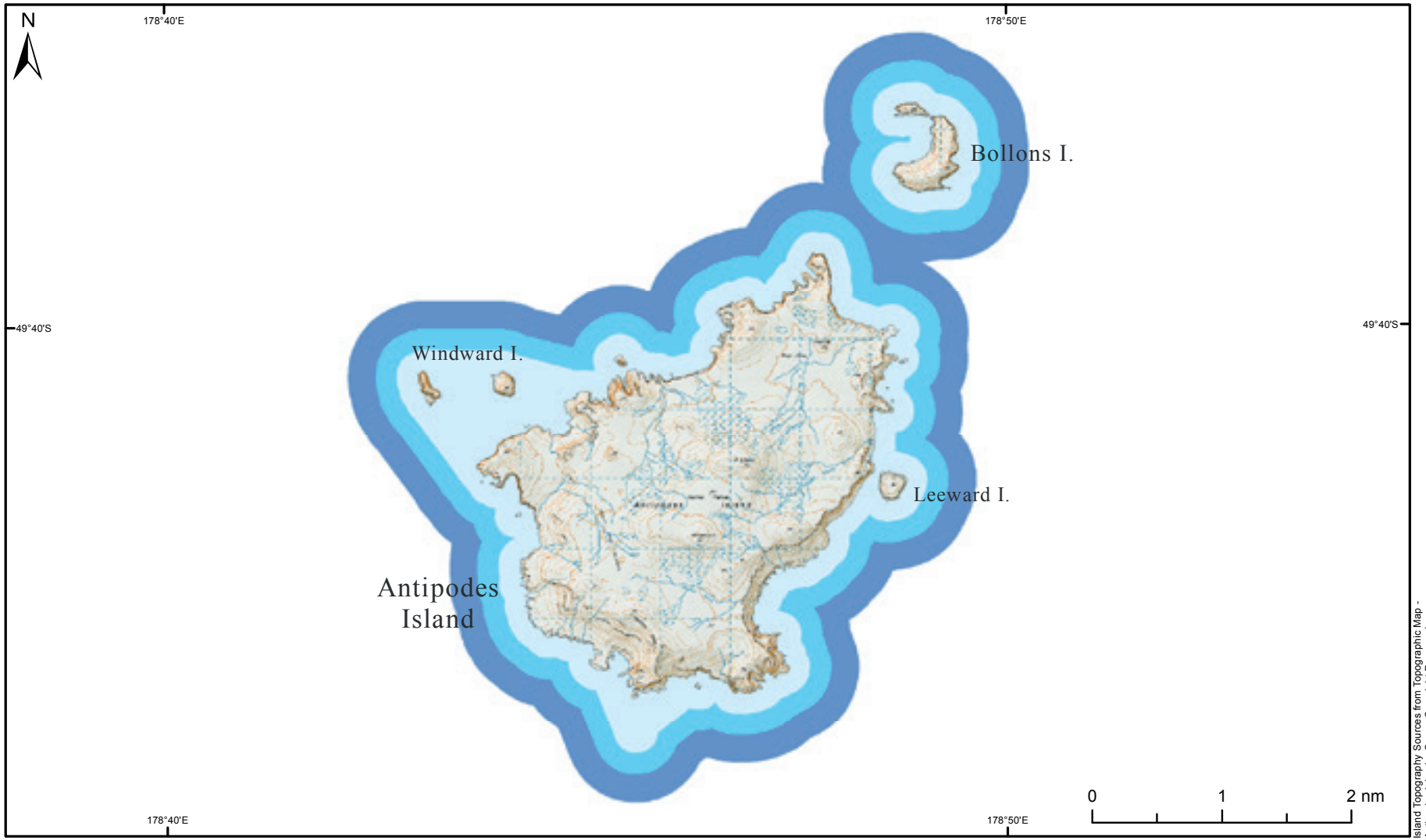
Anchorages

Vessels of the length specified below do not require a permit to anchor at the designated locations only (Anchor at own discretion)

- 30 For Vessels up to 30 metres
- 75 For Vessels up to 75 metres
- 42 For Vessels up to 42 metres
- 75 For Vessels up to 75 metres (if wind speed is <35 knots)

Map 3. Vessel access restrictions, Carnley Harbour, Auckland Island.

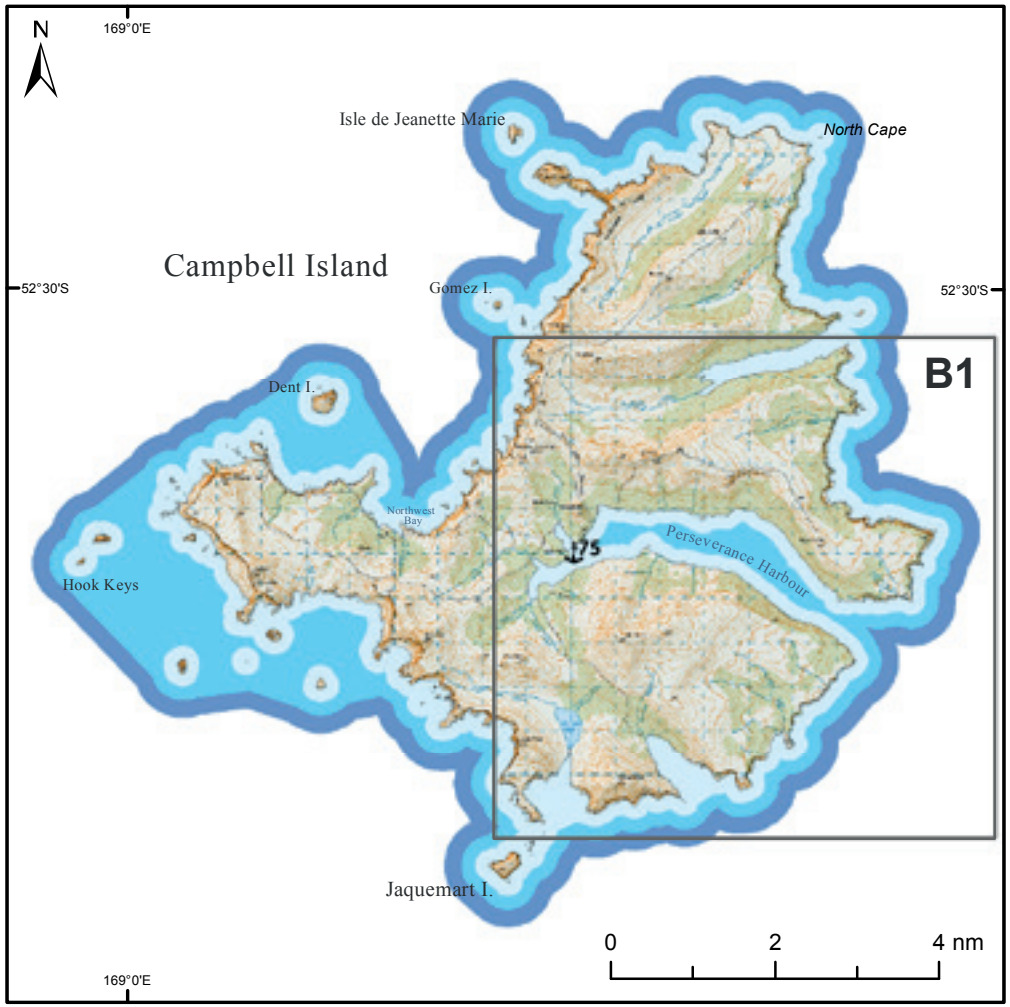


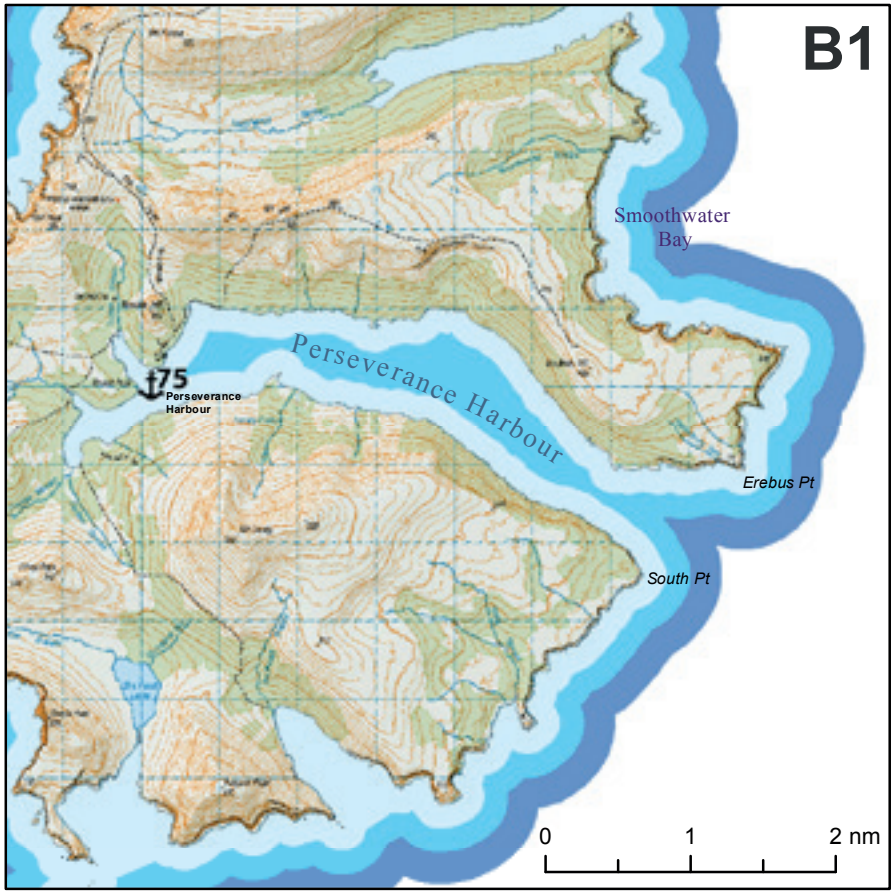
Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	**Up to 30 m**	**Between 30 - 125 m**	**Large (> 125 m)**
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Map 4. Vessel access restrictions, Antipodes Islands.





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Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	**Up to 30 m**	**Between 30 - 125 m**	**Large (> 125 m)**
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES

*MHWS: Mean High Water Springs

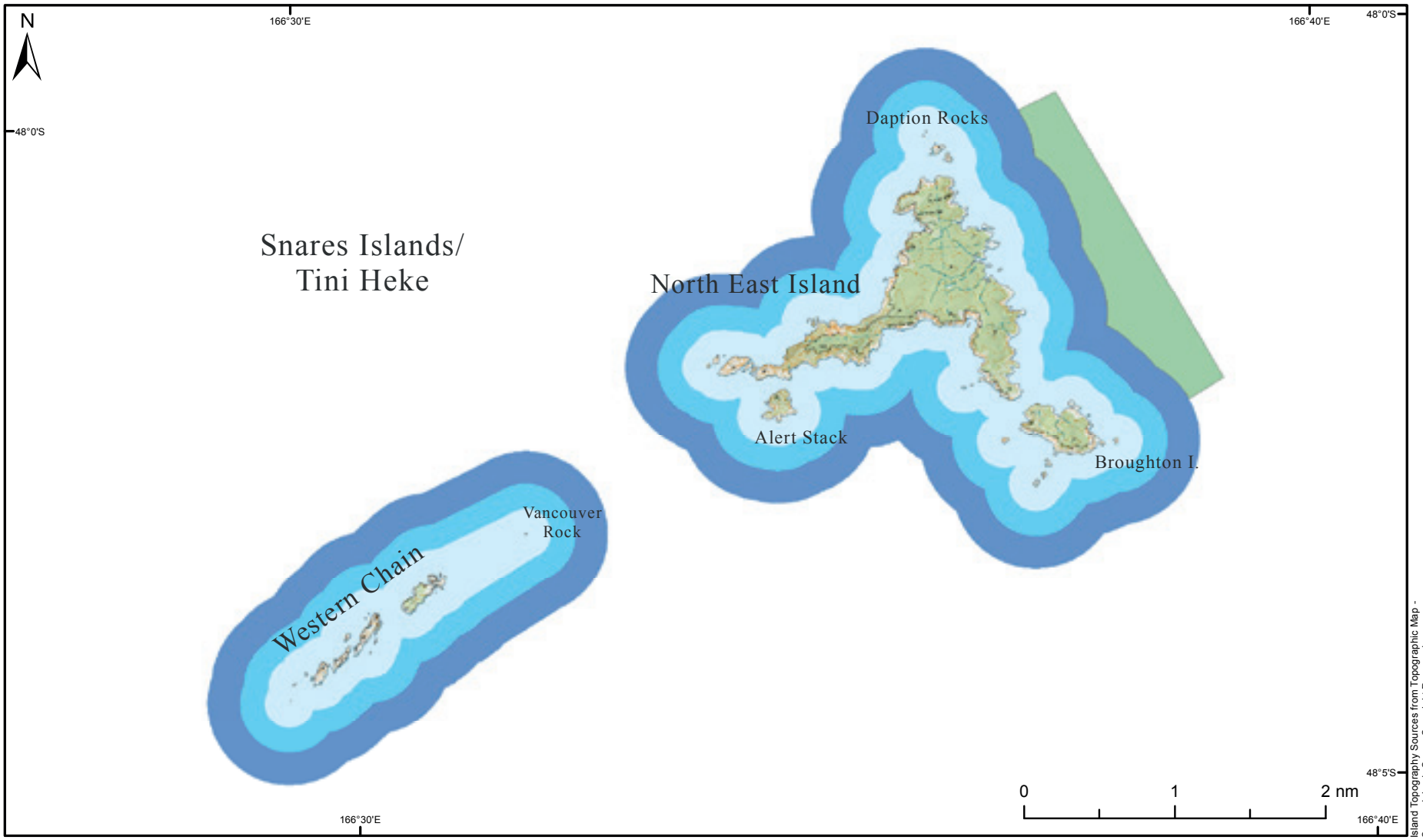
The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Anchorages

Vessels of the length specified below do not require a permit to anchor at the designated locations only (Anchor at own discretion)

⚓75 For Vessels up to 75 metres

Map 5. Vessel access restrictions, Campbell Island/Motu Ihupuku.



Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	**Up to 30 m**	**Between 30 - 125 m**	**Large (> 125 m)**
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

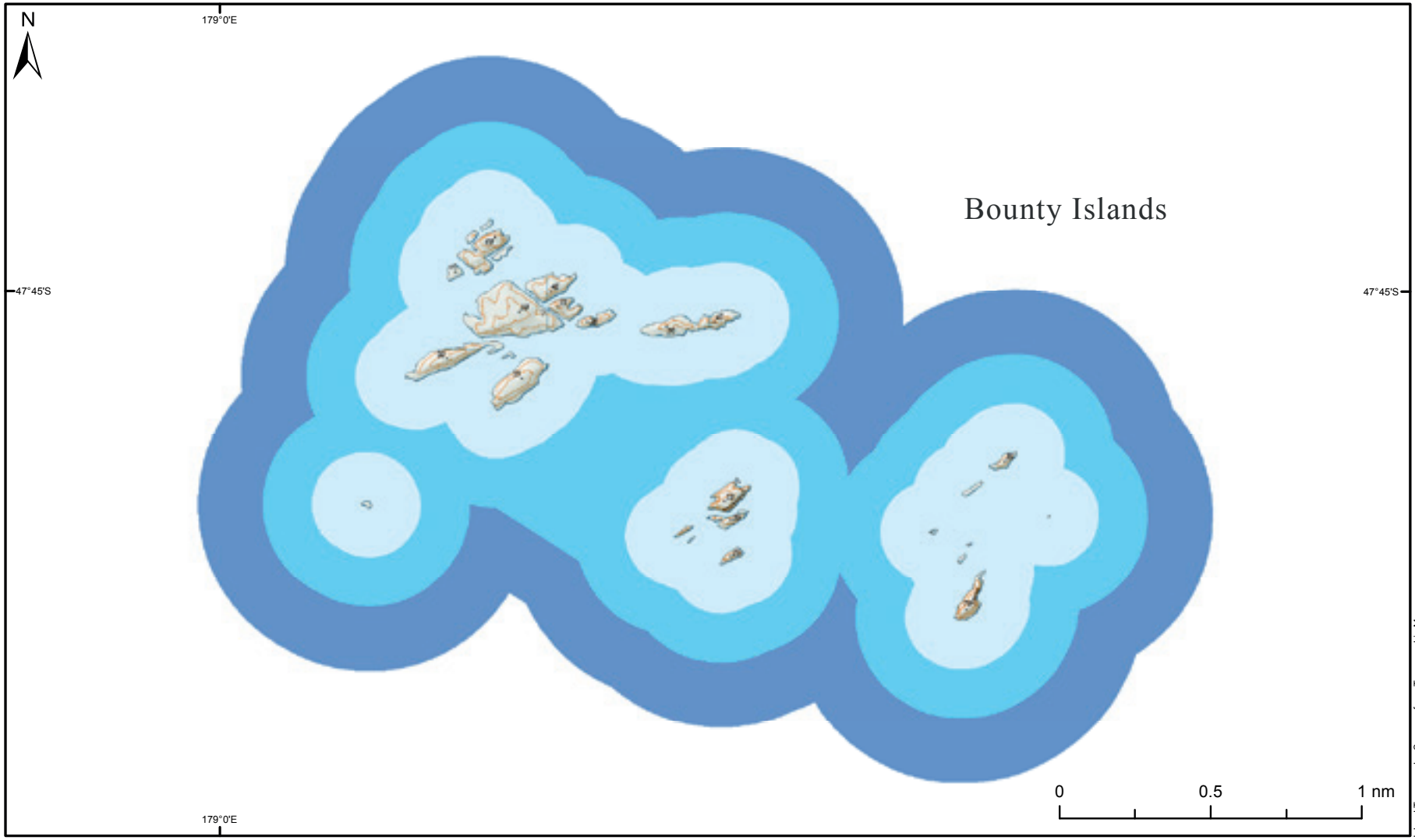
NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

Snares Islands Discretionary Exemption Zone

Vessels may be granted consent to access this zone while using heavy fuel oil - see rules 33 and 35

The Master of any vessel entering any of the waters of the Subantarctic Islands needs to be aware of the risks – such as age and nature of hydrographic survey data (potential for uncharted hazards) coupled with the effect of strong winds - and be mindful that rapid and severe changes in weather conditions can occur.

Map 6. Vessel access restrictions, Snares Islands/Tini Heke.



Distance to MHWS (metres & nautical miles)	Vessel Class (metres)			
	Ancillary Craft	**Up to 30 m**	**Between 30 - 125 m**	**Large (> 125 m)**
Up to 300 m (0.162 nm)	Permitted	Discretionary	Discretionary	Prohibited
300 m to 600 m (0.162 nm - 0.324 nm)	Permitted	Permitted	Permitted	Prohibited
600 m to 1000m (0.324 nm - 0.540 nm)	Permitted	Permitted	Permitted	Discretionary
Excess of 1000m (0.540 nm)	Permitted	Permitted	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES *MHWS: Mean High Water Springs

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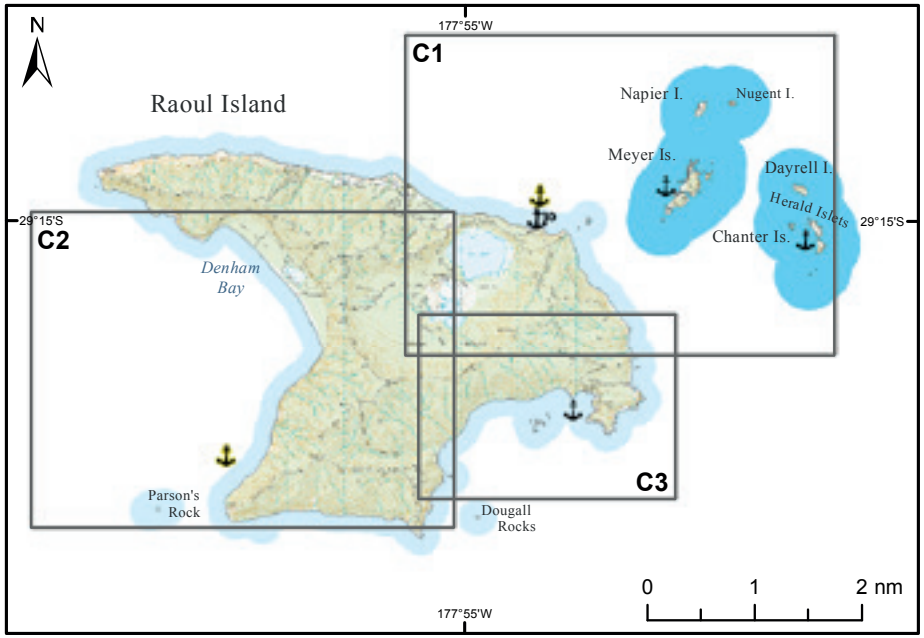
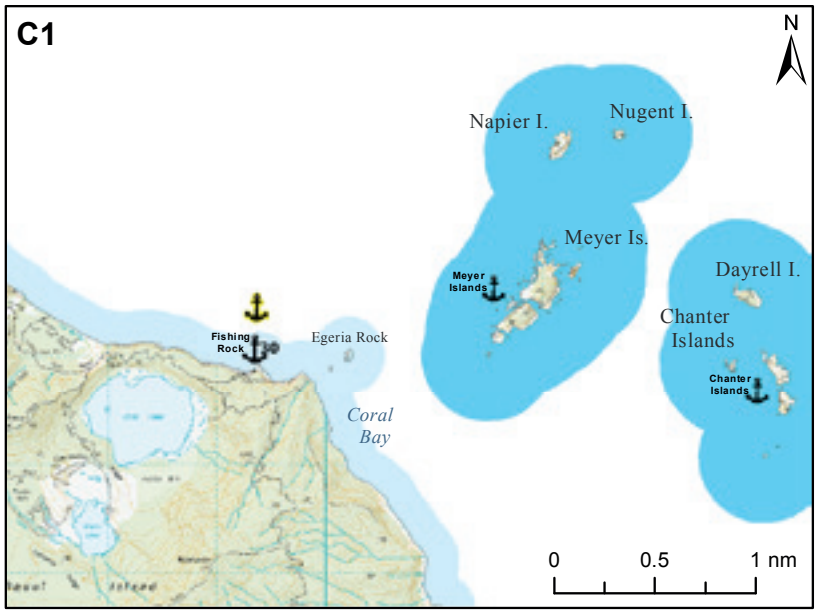
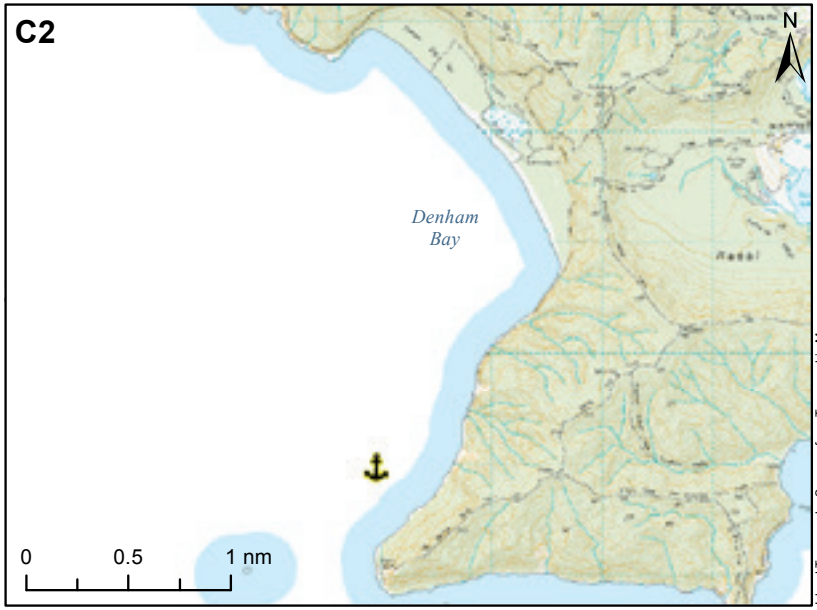
Map 7. Vessel access restrictions, Bounty Islands.







Anchorages

Vessels may anchor within 300m of MHWS at Raoul Island or within 600m of MHWS at Meyer or Chanter Islands in the designated anchorage locations (Anchor at own discretion)

For vessels up to 30 metres

For all vessels (no maximum length)

Vessels may anchor at any location outside 300m from MHWS at Raoul Island or outside 600m from MHWS at all other Kermadec Islands

Two preferred anchorages have been identified in this area. They are preferred because their use will limit any possible adverse effects of anchoring to these locations. However, this does not prohibit the use of other locations where the captain of the vessel considers appropriate

Raoul Island

Distance to MHWS (metres & nautical miles)	Vessel Type	
	Ancillary Craft	Vessels larger than ancillary craft
Up to 300 m (0.162 nm)	Permitted	Discretionary
Excess of 300 m (0.162 nm)	Permitted	Permitted

Surrounding Islets

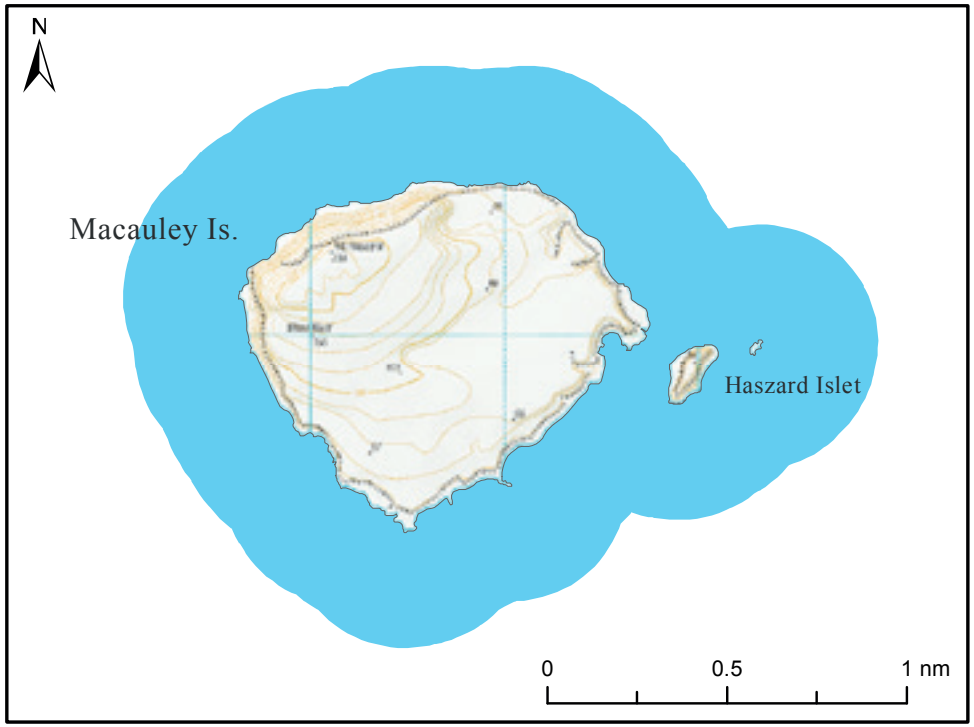
Distance to MHWS (metres & nautical miles)	Vessel Type	
	Ancillary Craft	Vessels larger than ancillary craft
Up to 600 m (0.324 nm)	Permitted	Discretionary
Excess of 600 m (0.324 nm)	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES

*MHWS: Mean High Water Springs

The Master of any vessel entering any of the waters of the Kermadec Islands needs to be aware of the risks - such as age and nature of hydrographic survey data coupled with the continuous active volcanic activity with the potential to alter seabed depth and features - and be mindful that rapid and severe changes in weather conditions can occur

Map 8. Vessel access restrictions, Raoul Island and outlying islands.



The Master of any vessel entering any of the waters of the Kermadec Islands needs to be aware of the risks – such as age and nature of hydrographic survey data coupled with the continuous active volcanic activity with the potential to alter seabed depth and features - and be mindful that rapid and severe changes in weather conditions can occur.

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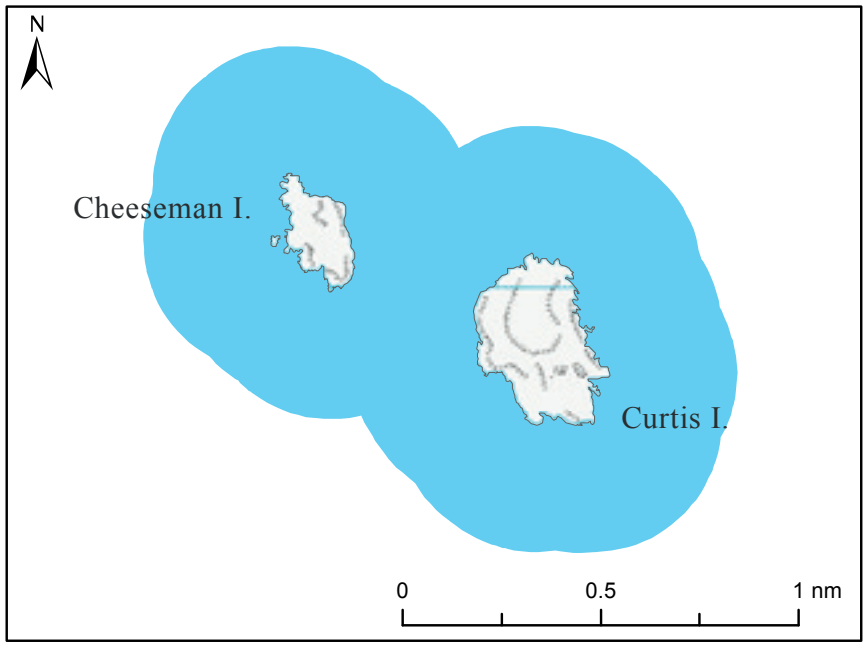
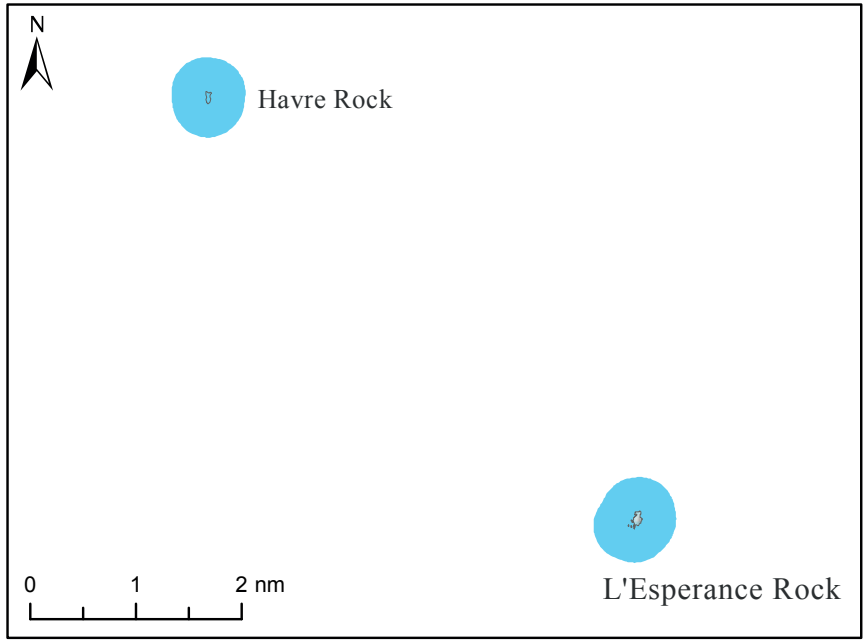




Distance to MHWS (metres & nautical miles)	Vessel Type	
	Ancillary Craft	Vessels larger than Ancillary Craft
0 - 600 m (0.324 nm)	Permitted	Discretionary
Excess of 600 m (0.324 nm)	Permitted	Permitted

NOT TO BE USED FOR NAVIGATIONAL PURPOSES

*MHWS: Mean High Water Springs

Map 9. Vessel access restrictions, Macauley, Cheeseman and Curtis Islands, and L'Esperance Rock.

Appendix 2

Chartlets

Subantarctic Islands

Chartlet 1 **Musgrave Inlet Anchoring Zone**
(east coast, Auckland Island) – *see Map 1*

Chartlet 2 **Norman Inlet/Hanfield Inlet Anchoring Zones**
(east coast, Auckland Island) – *see Map 1*

Chartlet 3 **Sandy Bay Anchoring Zones**
(Port Ross, Enderby Island) – *see Map 2*

Chartlet 4 **Shoe Island/Terror Cove/Erebus Cove Anchoring Zones**
(Port Ross, Auckland Island) – *see Map 2*

Chartlet 5 **Ranui Cove Anchoring Zone**
(east coast, Auckland Island) – *see Map 2*

Chartlet 6 **Raynal Point (North)/Raynal Point (South) Anchoring Zones**
(Carnley Harbour, Auckland Island) – *see Map 3*

Chartlet 7 **Tagua Bay Anchoring Zone**
(Carnley Harbour, Auckland Island) – *see Map 3*

Chartlet 8 **Coleridge Bay/Musgrave Harbour (North)/ Musgrave Harbour (South) Anchoring Zones**
(Carnley Harbour, Auckland Island) – *see Map 3*

Chartlet 9 **Camp Cove Anchoring Zone**
(Carnley Harbour, Auckland Island) – *see Map 3*

Chartlet 10 **Waterfall Inlet Anchoring Zone**
(east coast, Auckland Island) – *see Map 3*

Chartlet 11 **Western Arm Anchoring Zone**
(Carnley Harbour, Auckland Island) – *see Map 3*

Chartlet 12 **Perseverance Harbour Anchoring Zone**
(Campbell Island/Motu Ihupuku) – *see Map 5*

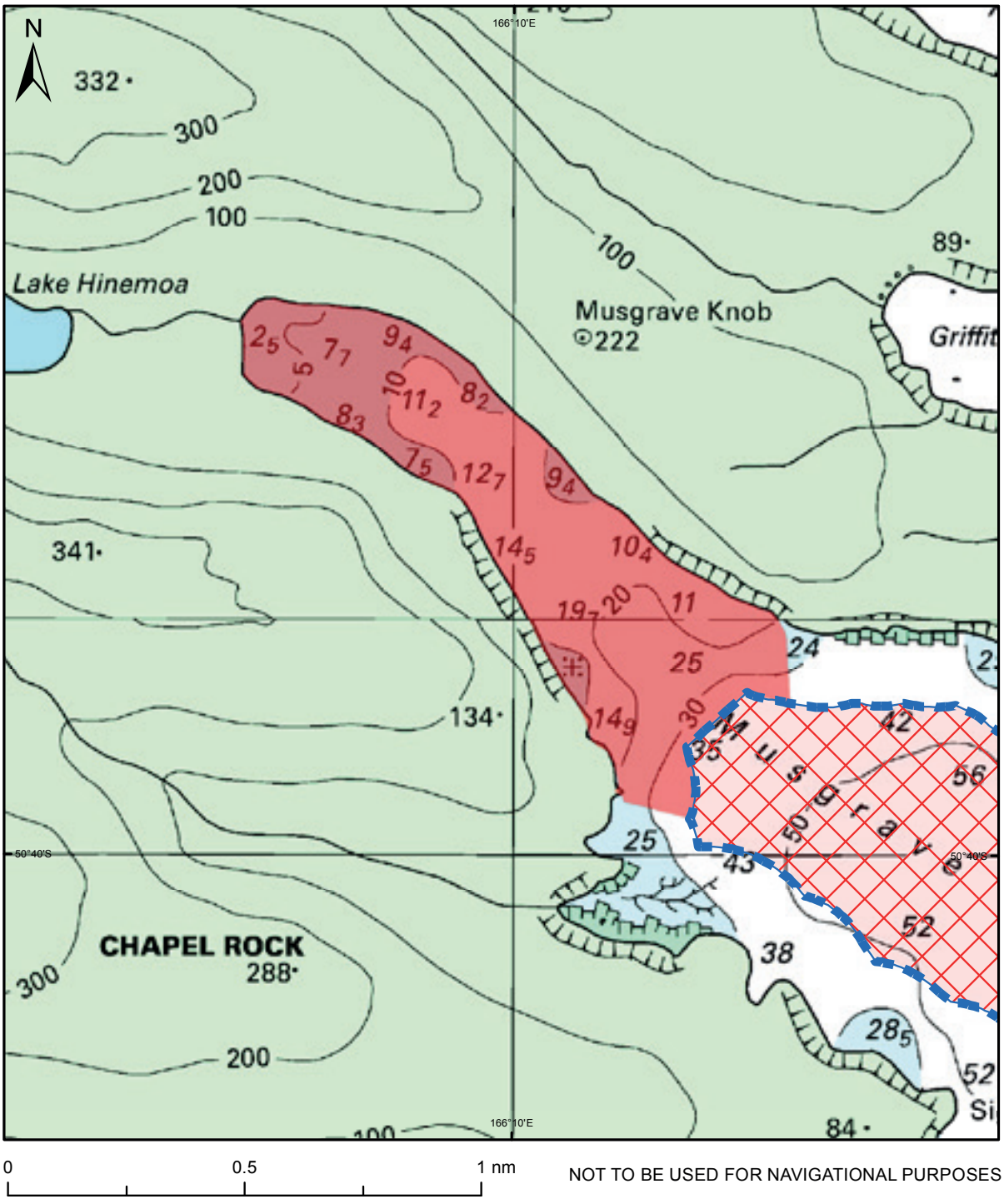
Kermadec Islands

Chartlet 13 **Raoul Island Fishing Rock Anchoring Zone**
(Raoul Island) – *see Map 8*

Chartlet 14 **Boat Cove Anchoring Zone**
(Raoul Island) – *see Map 8*

Chartlet 15 **Meyer Islands Anchoring Zone**
(Meyer Islands) – *see Map 8*

Chartlet 16 **Chanter Islands Anchoring Zone**
(Chanter Islands) – *see Map 8*

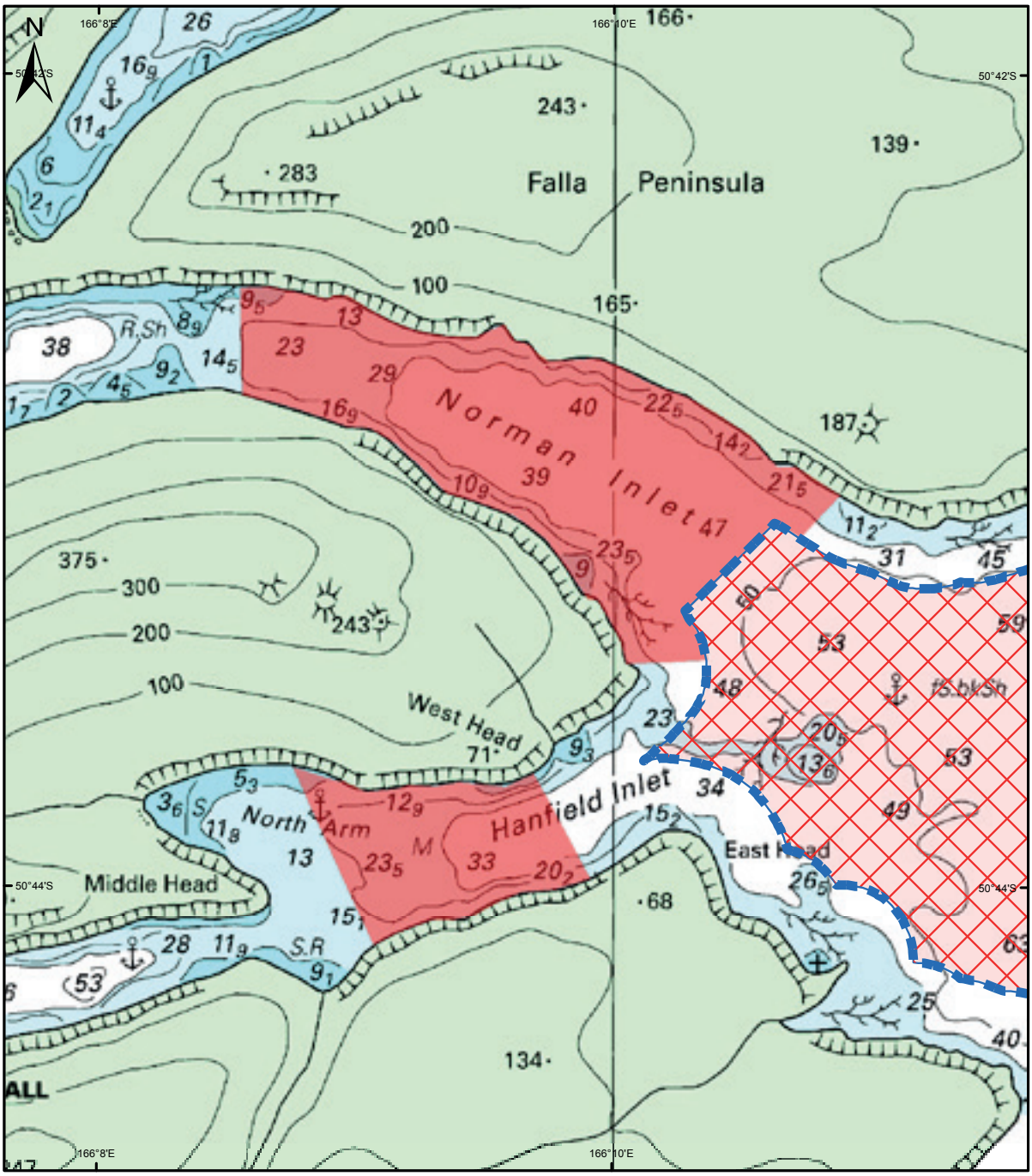


Musgrave Inlet Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 1. Musgrave Inlet Anchoring Zone



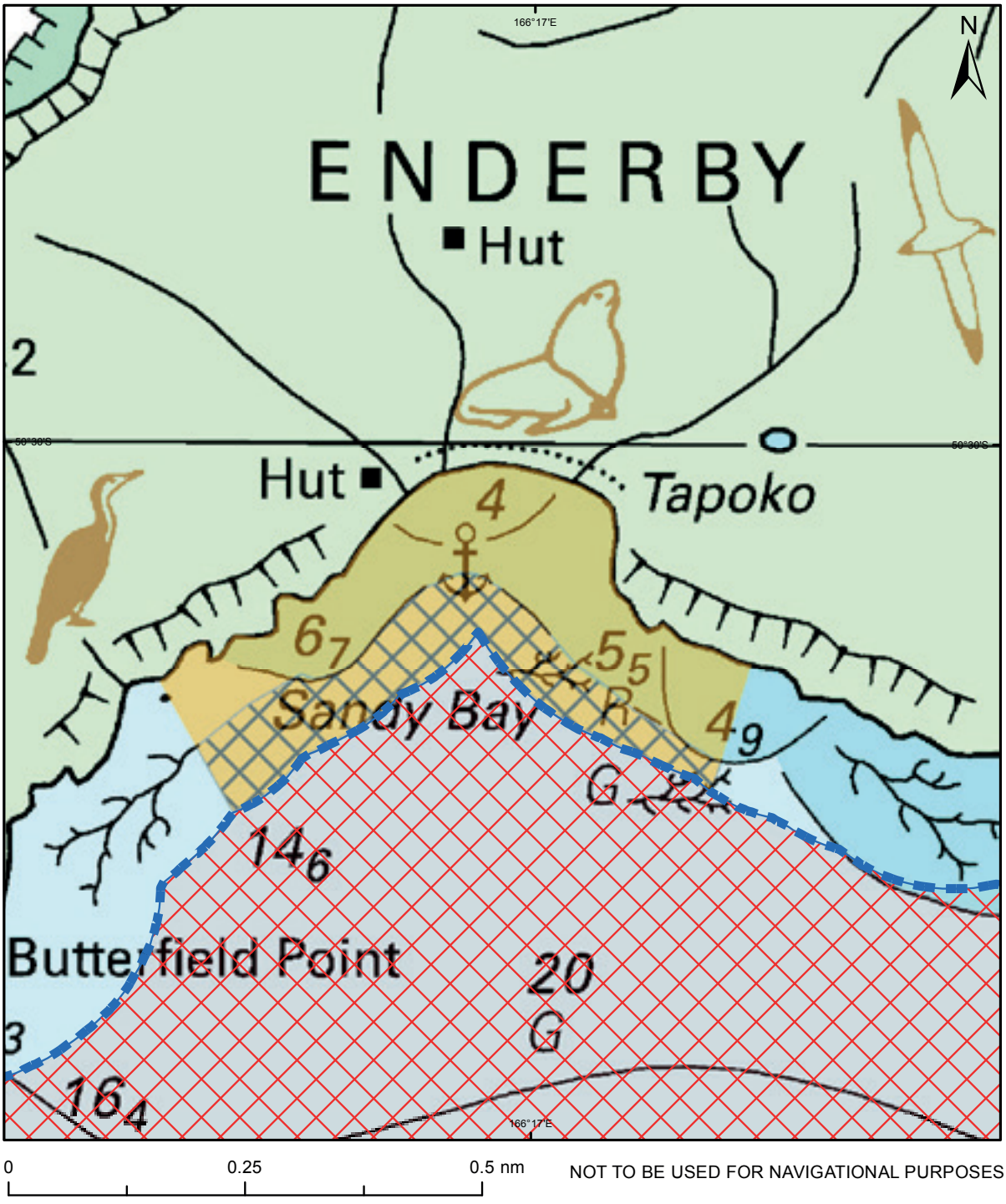
NOT TO BE USED FOR NAVIGATIONAL PURPOSES

Norman/Hanfield Inlets Anchoring Zones

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 2. Norman Inlet/Hanfield Inlet Anchoring Zones



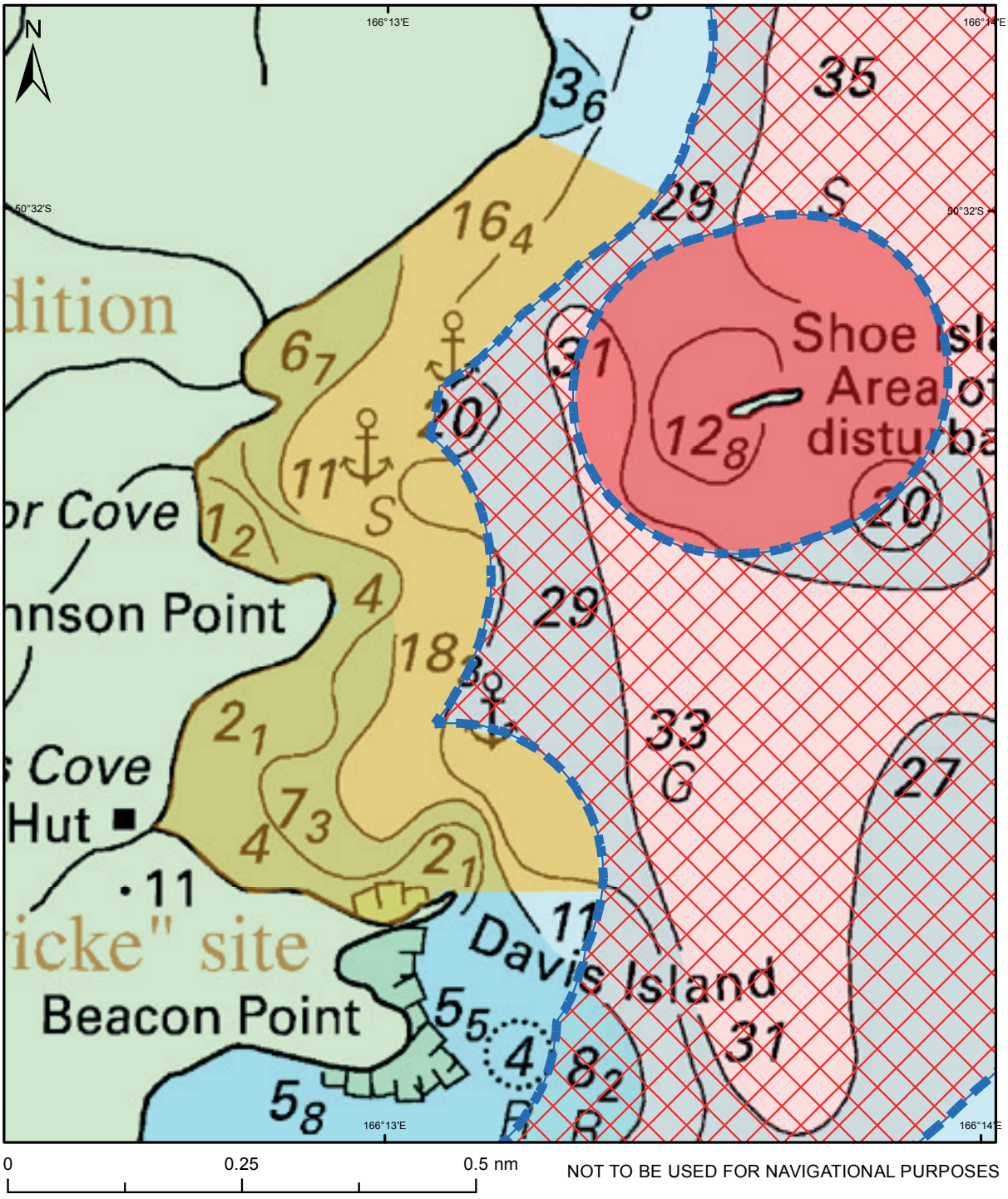
Sandy Bay Anchoring Zones

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 30m may anchor at own discretion

Designated Anchorage - Vessels up to 42m may anchor at own discretion no closer than the 10m contour

Chartlet 3. Sandy Bay Anchoring Zones



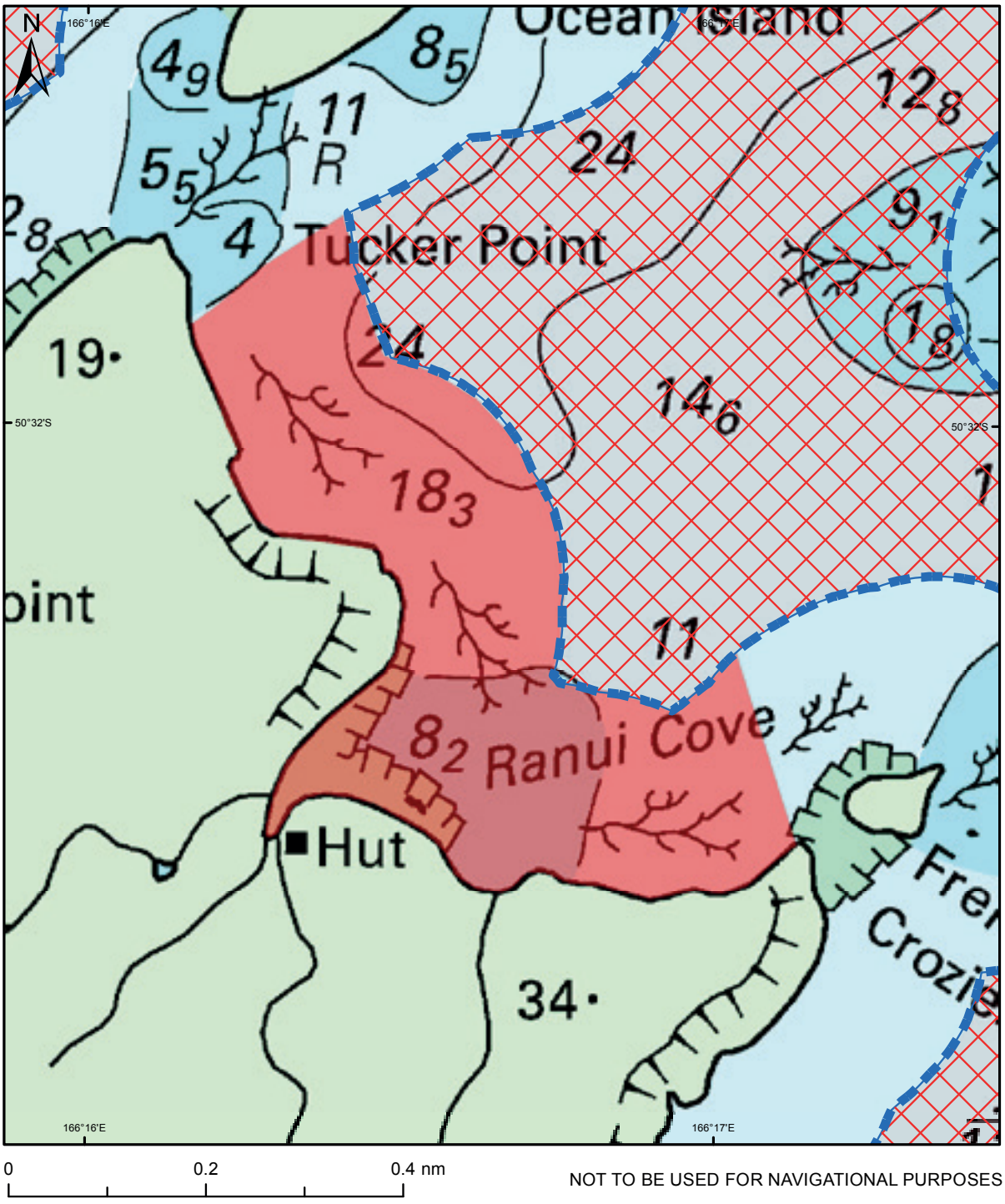
Shoe Island/Terror Cove/Erebus Cove Anchoring Zones

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorages - Vessels up to 30m may anchor at own discretion (Note this includes two anchorages: Terror Cove and Erebus Cove)

Designated Anchorage - Vessels up to 75m may anchor at own

Chartlet 4. Shoe Island/Terror Cove/Erebus Cove Anchoring Zones

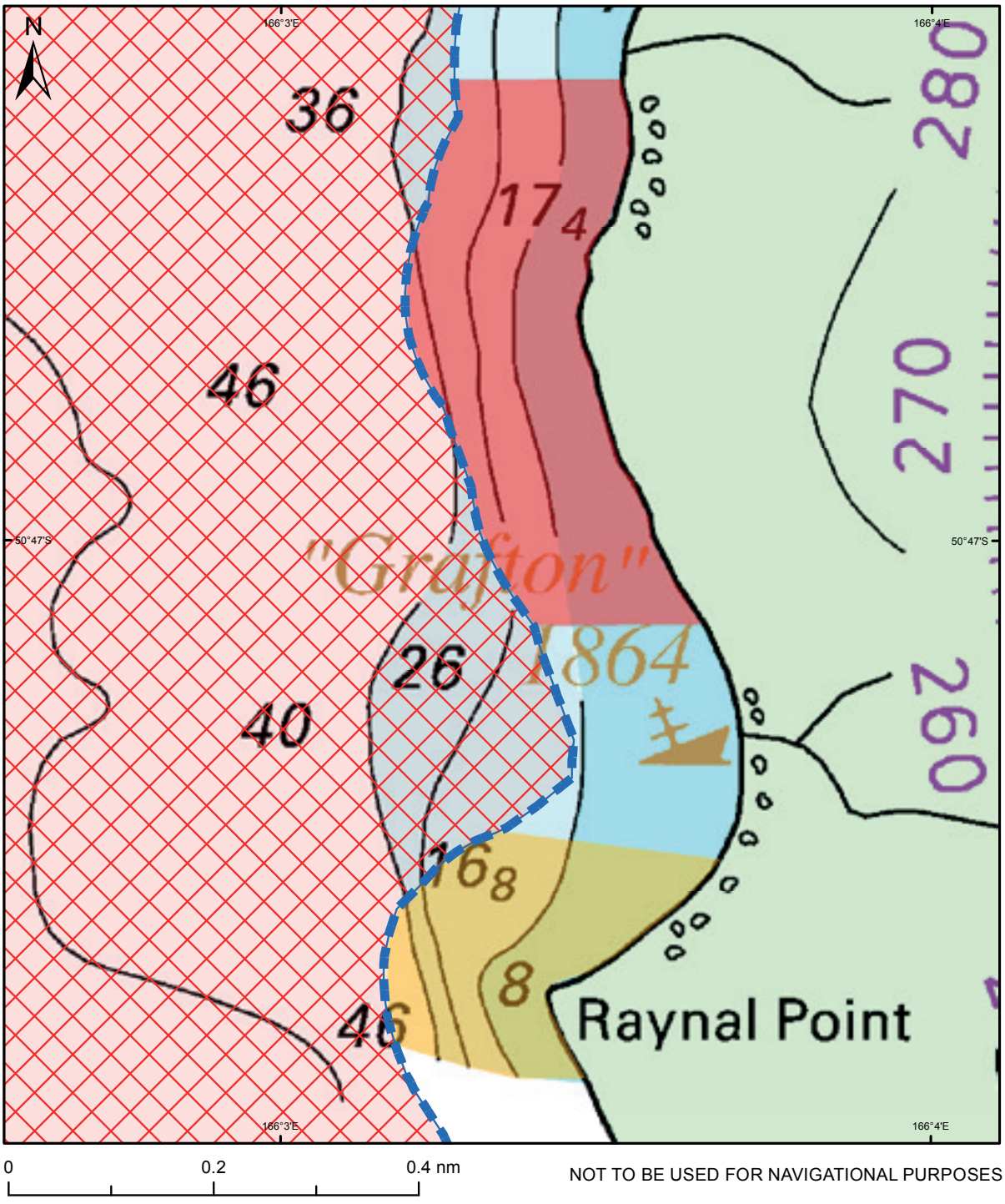


Ranui Cove Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 5. Ranui Cove Anchoring Zone



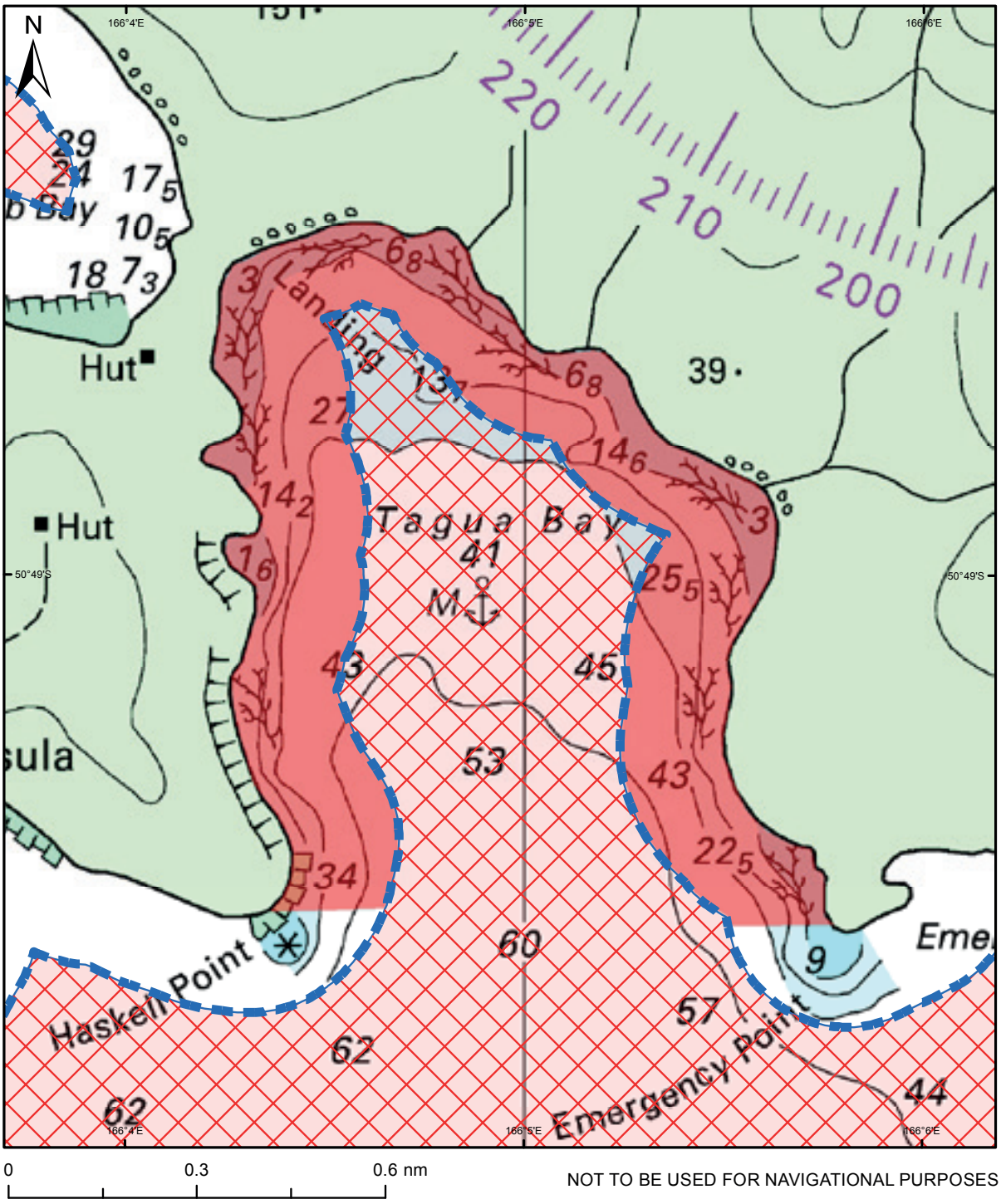
Raynal Point (North)/Raynal Point (South) Anchoring Zones

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 30m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 6. Raynal Point (North)/Raynal Point (South) Anchoring Zone

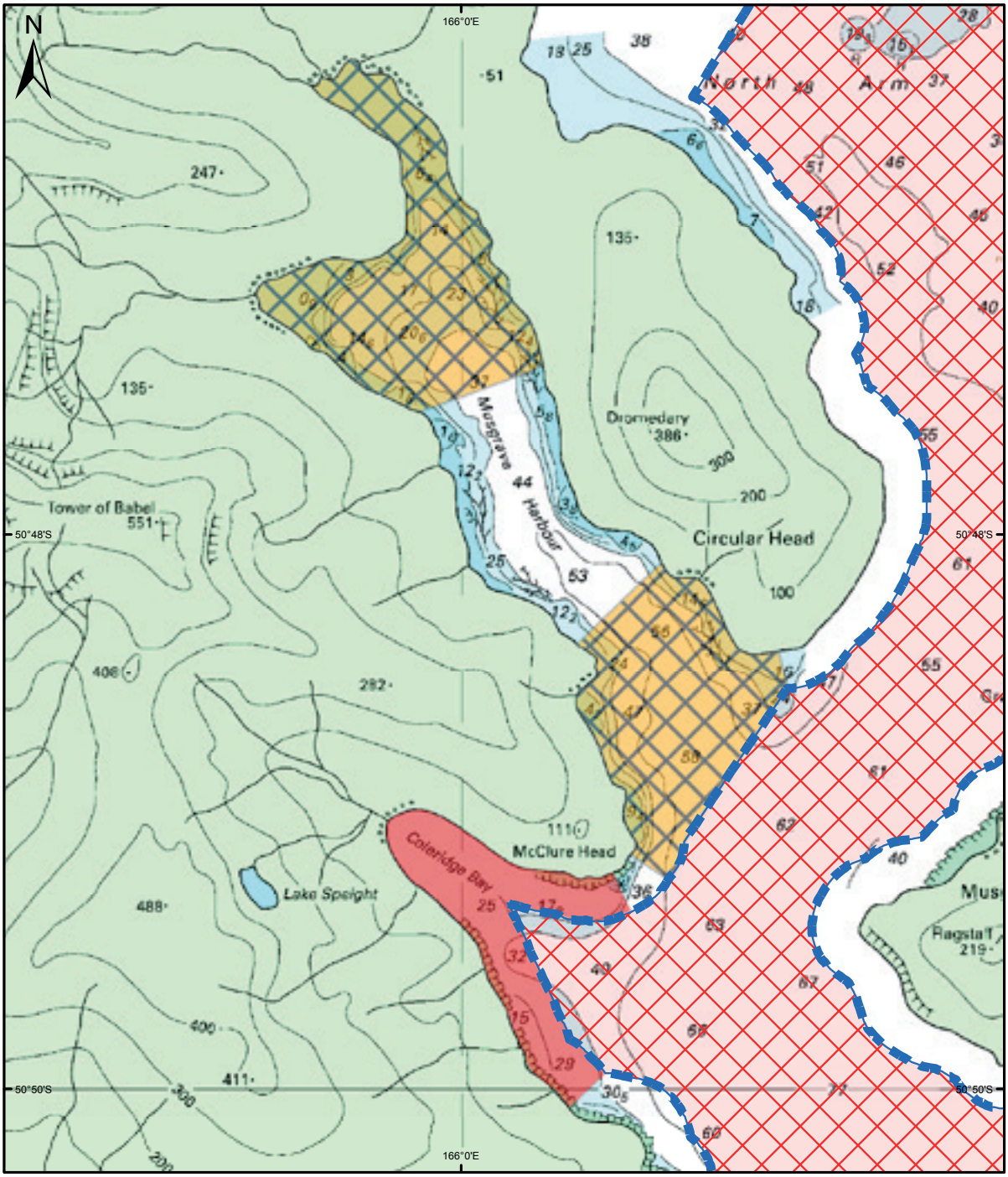


Tagua Bay Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 7. Tagua Bay Anchoring Zone



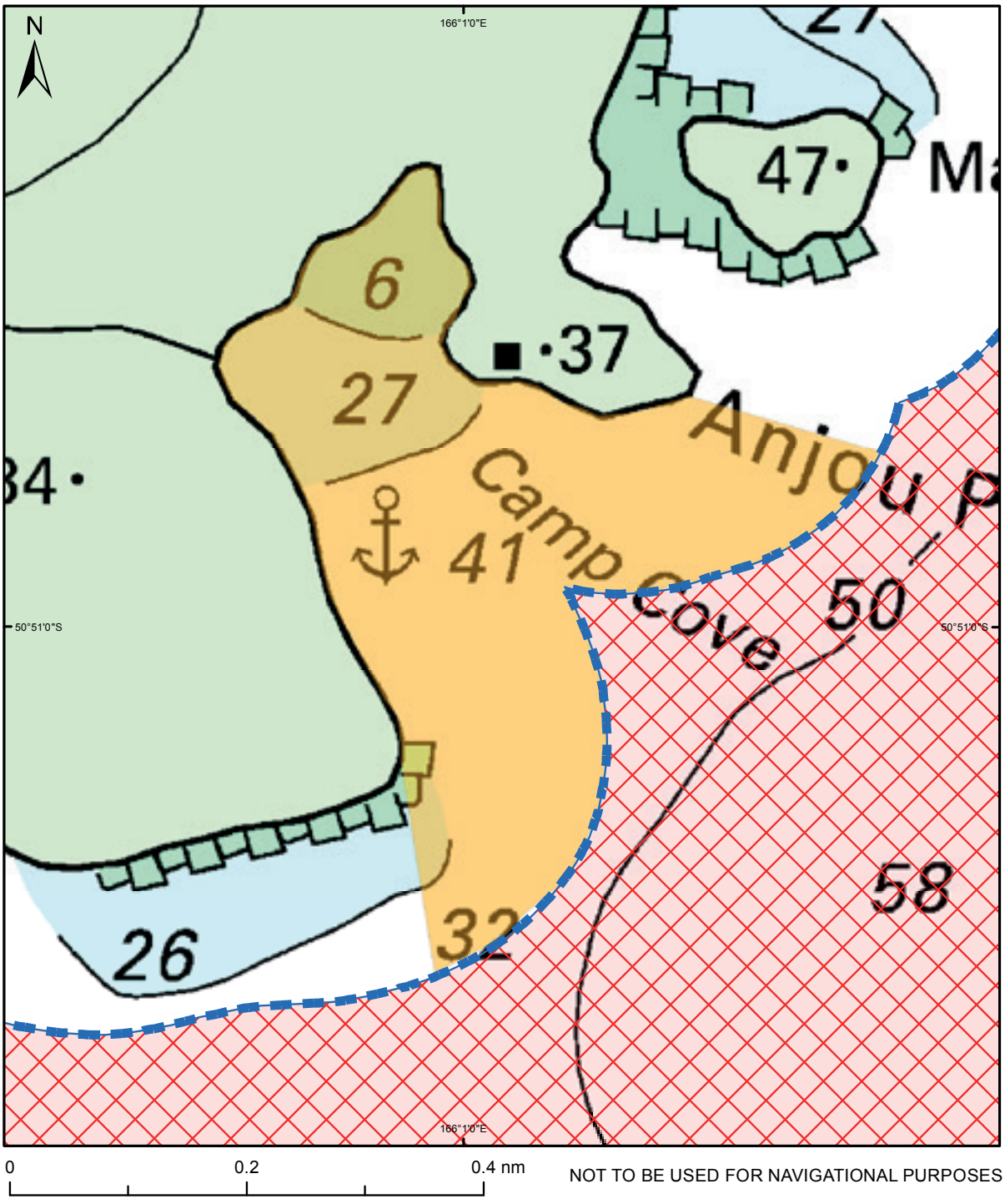
Coleridge Bay/Musgrave Harbour (North)/ Musgrave Harbour (South) Anchoring Zones

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 42m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 8. Coleridge Bay/Musgrave Harbour (North)/Musgrave Harbour (South) Anchoring Zones

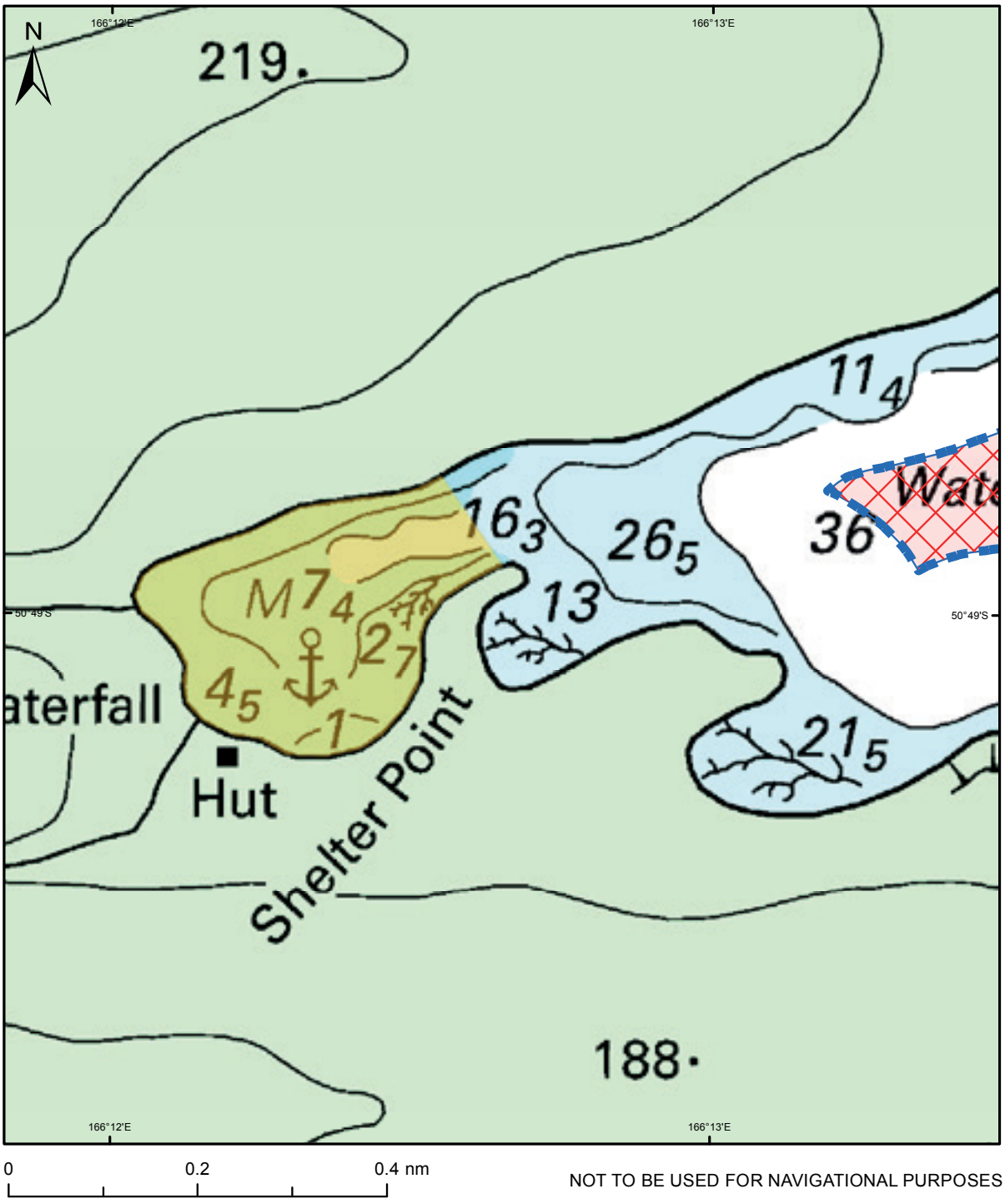


Camp Cove Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 30m may anchor at own discretion

Chartlet 9. Camp Cove Anchoring Zone

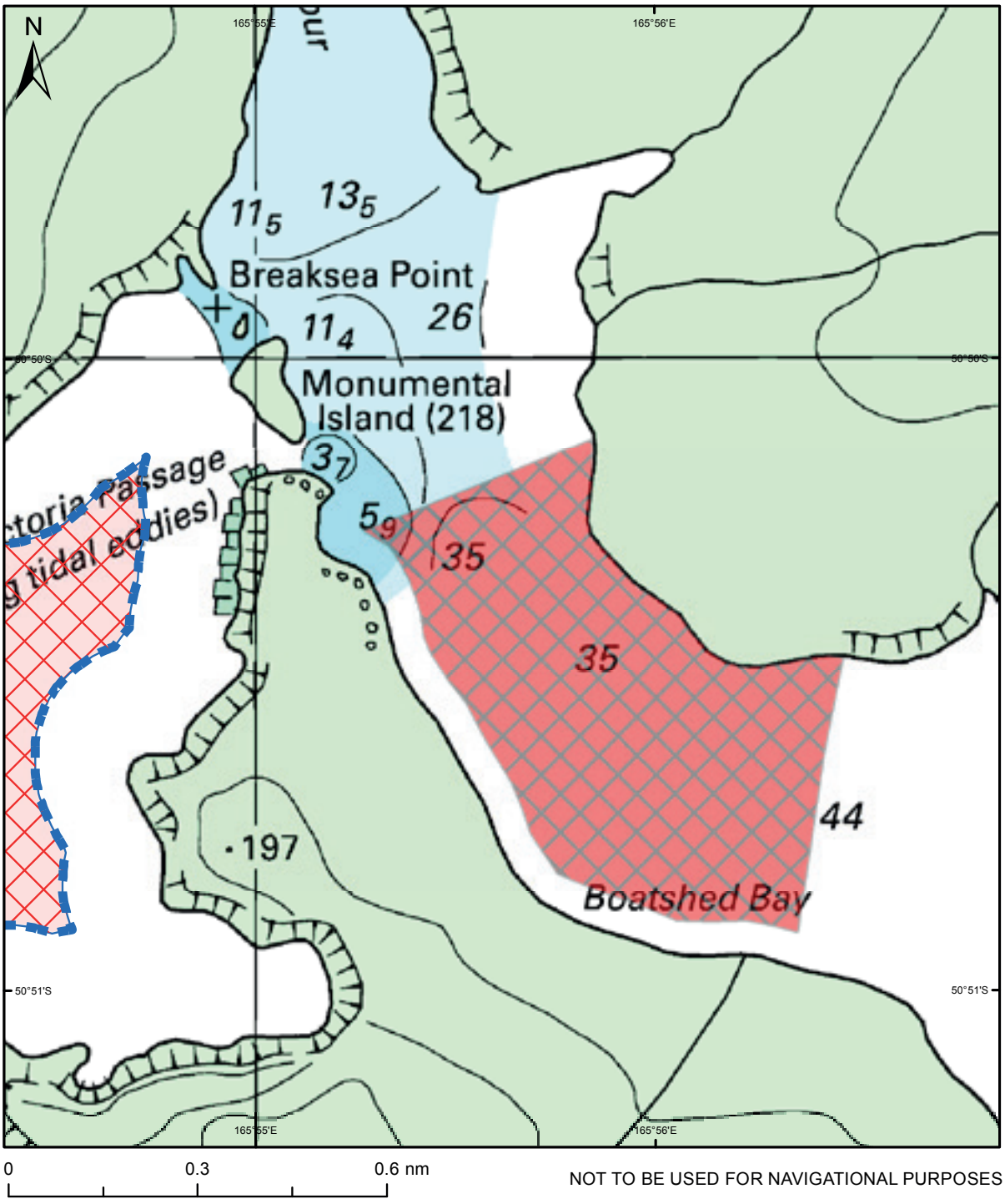


Waterfall Inlet Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 30m may anchor at own discretion

Chartlet 10. Waterfall Inlet Anchoring Zone

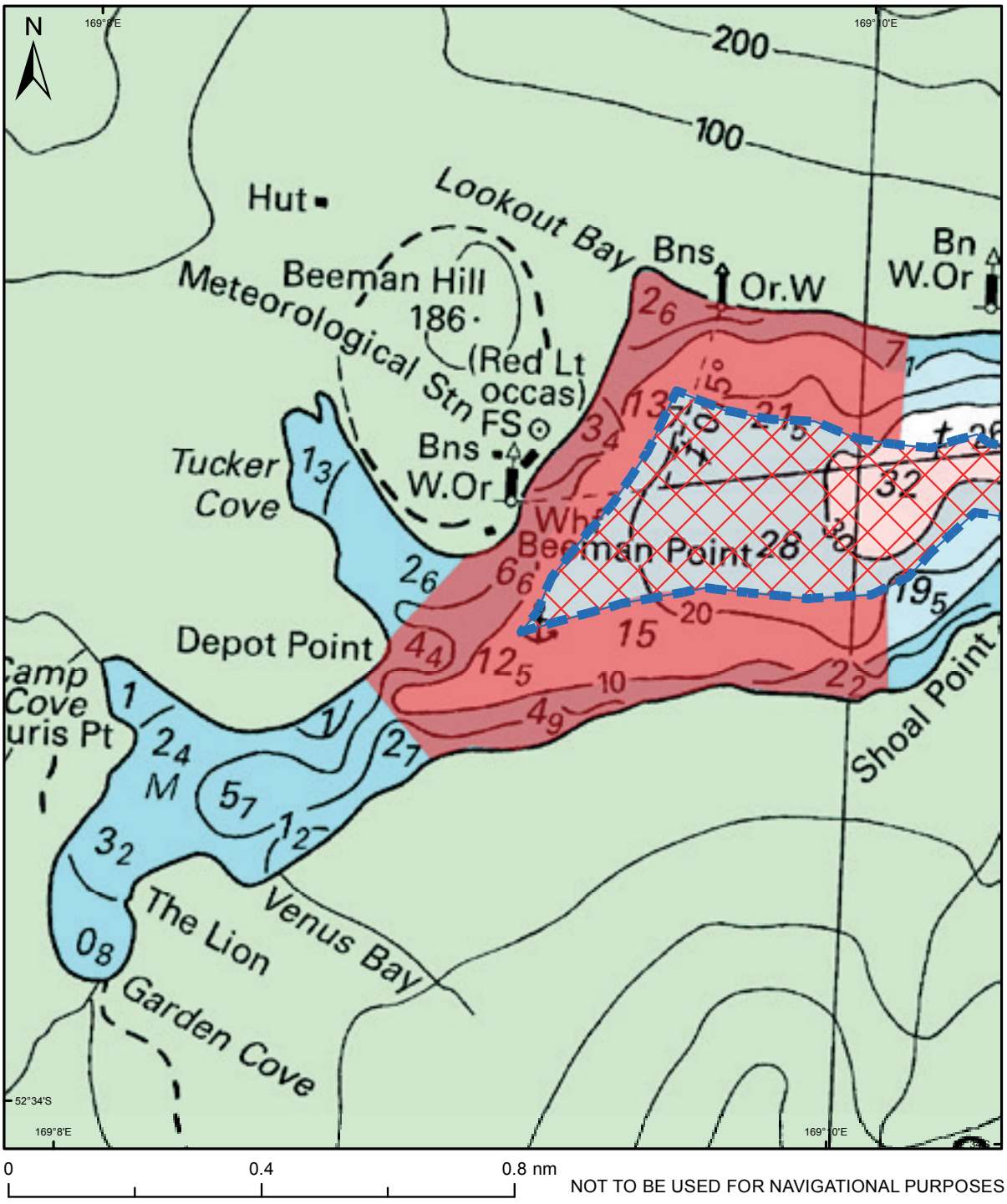


Western Arm Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion (if wind speed is <35 knots)
Anchorage zone goes no closer than 100m to Adams Island

Chartlet 11. Western Arm Anchoring Zone

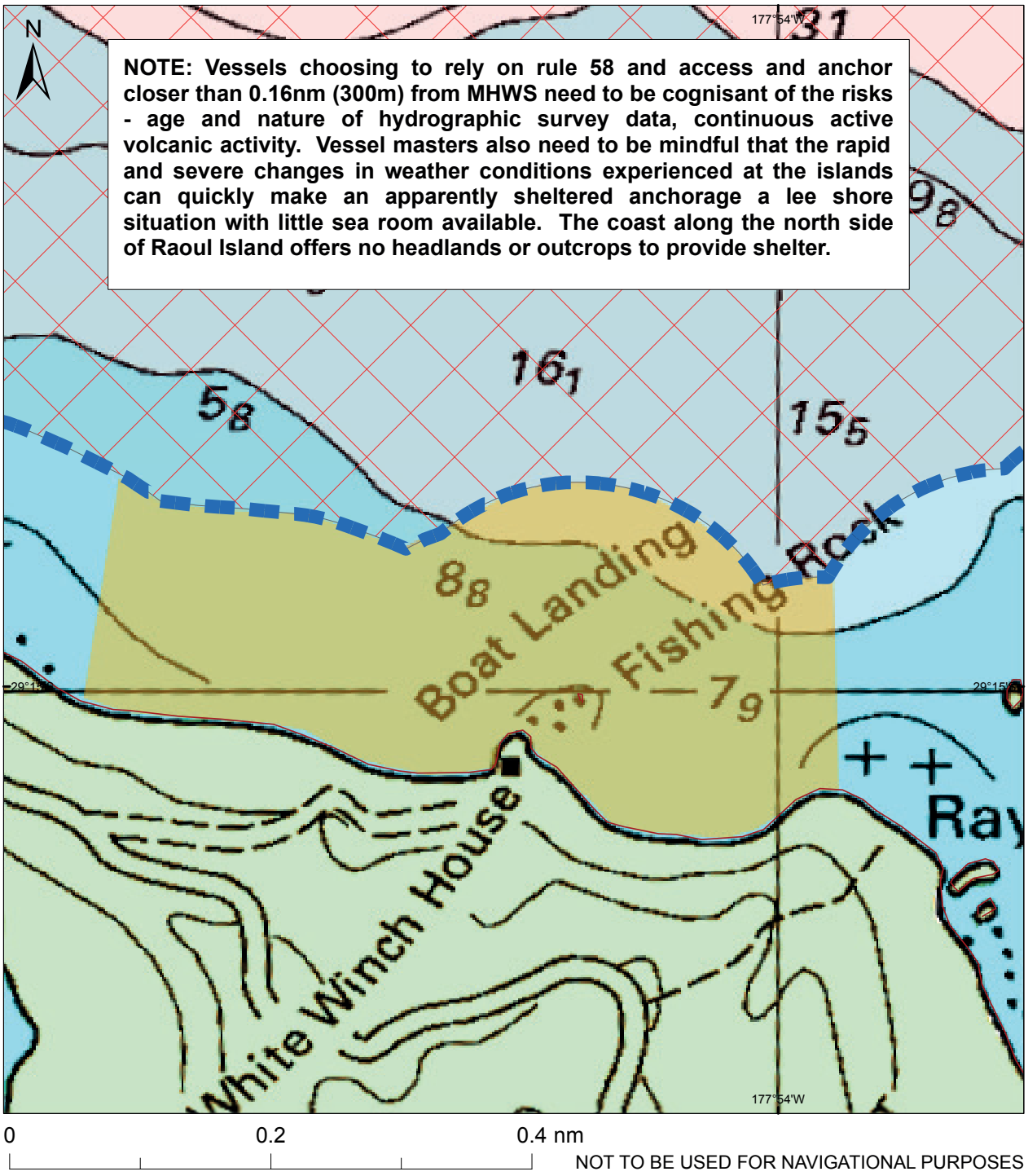


Perseverance Harbour Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels up to 125m may anchor at own discretion

Designated Anchorage - Vessels up to 75m may anchor at own discretion

Chartlet 12. Perseverance Harbour Anchoring Zone

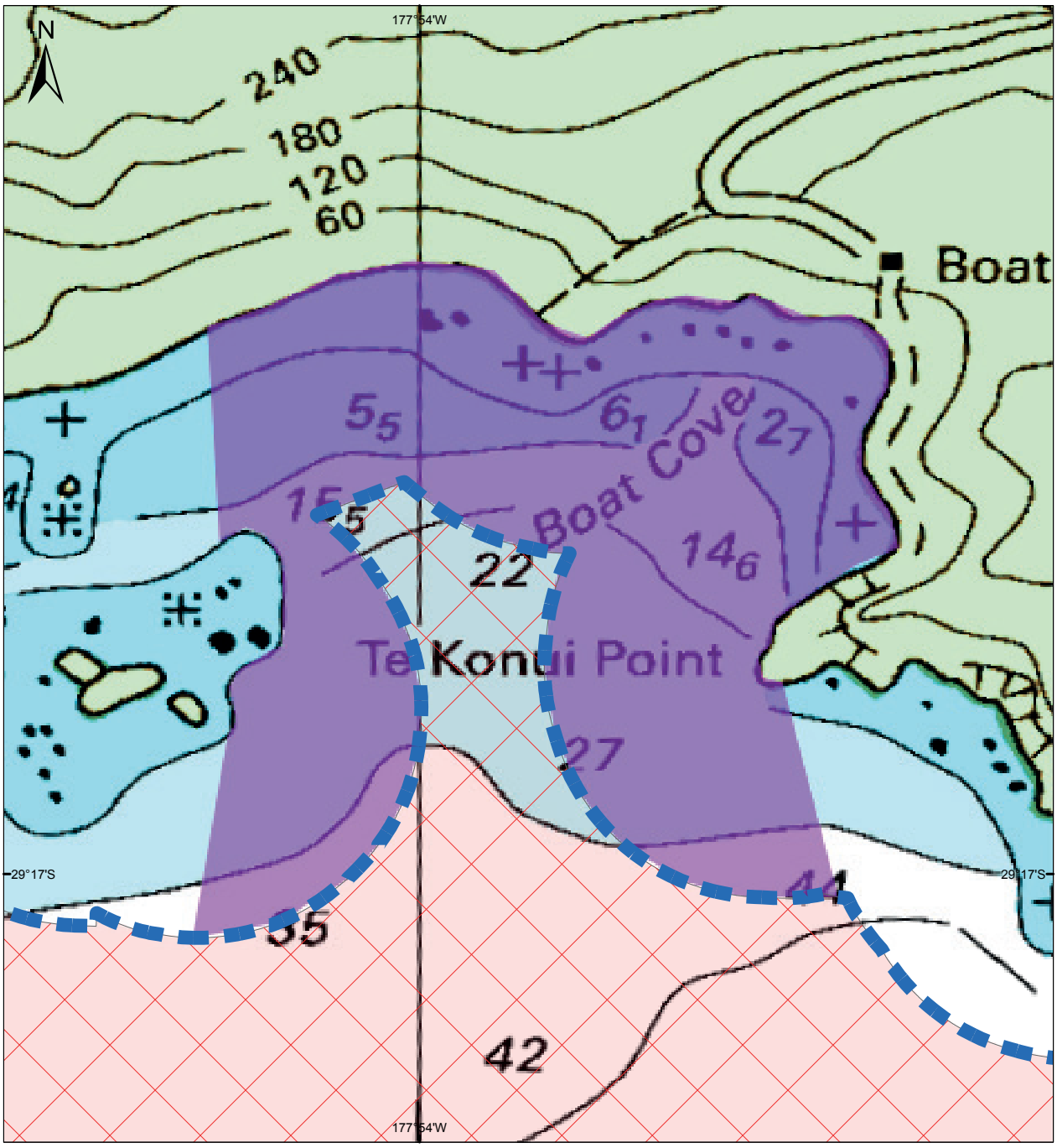


Raoul Island Fishing Rock Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels may anchor at own discretion

Designated Anchorage - Vessels up to 30m may anchor at own discretion

Chartlet 13 Raoul Island Fishing Rock Anchoring Zone

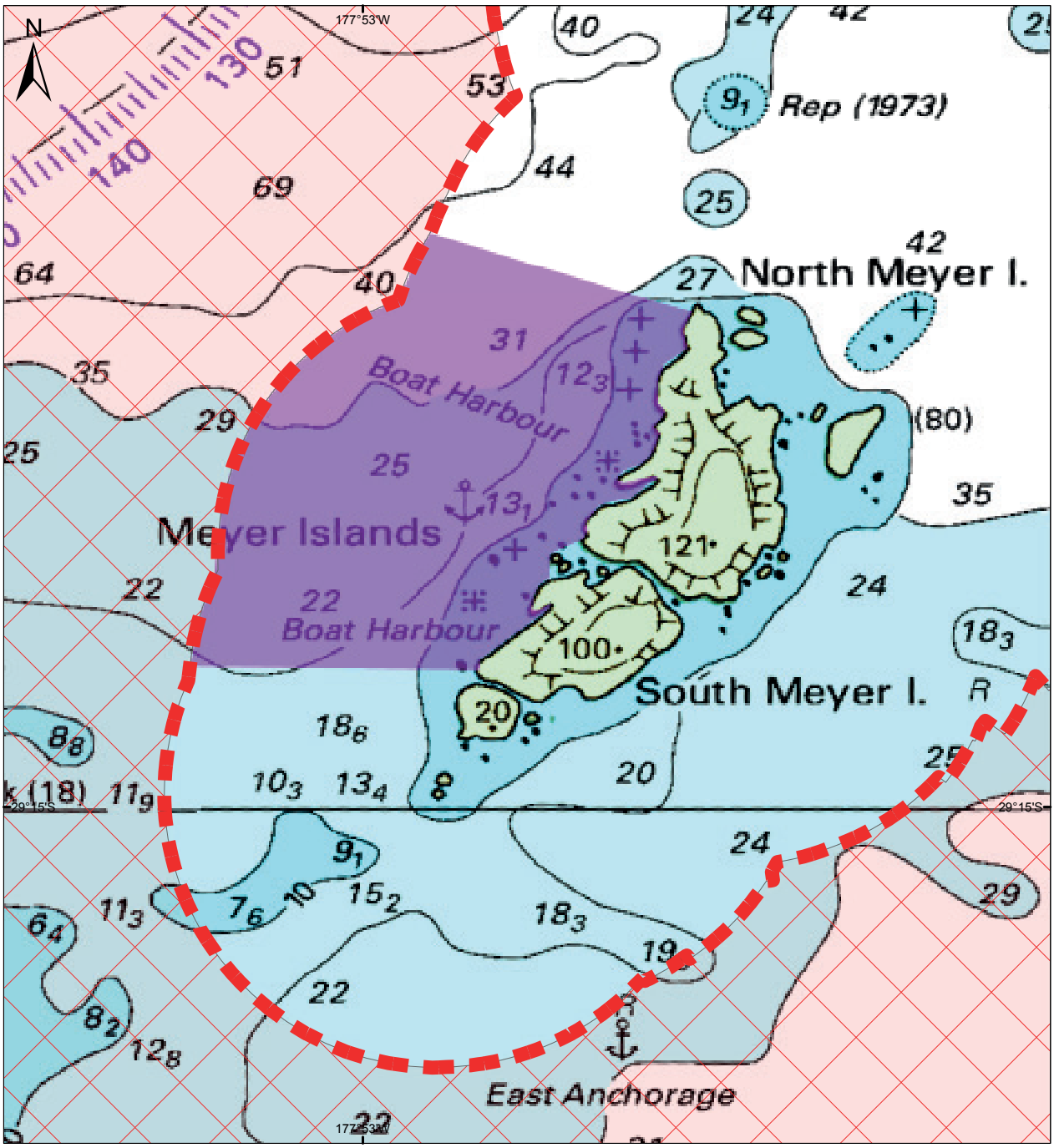


Boat Cove Anchoring Zone

More than 0.16nm (300m) from the MHWS - Vessels may anchor at own discretion

Designated Anchorage - Vessels may anchor at own discretion

Chartlet 14. Boat Cove Anchoring Zone

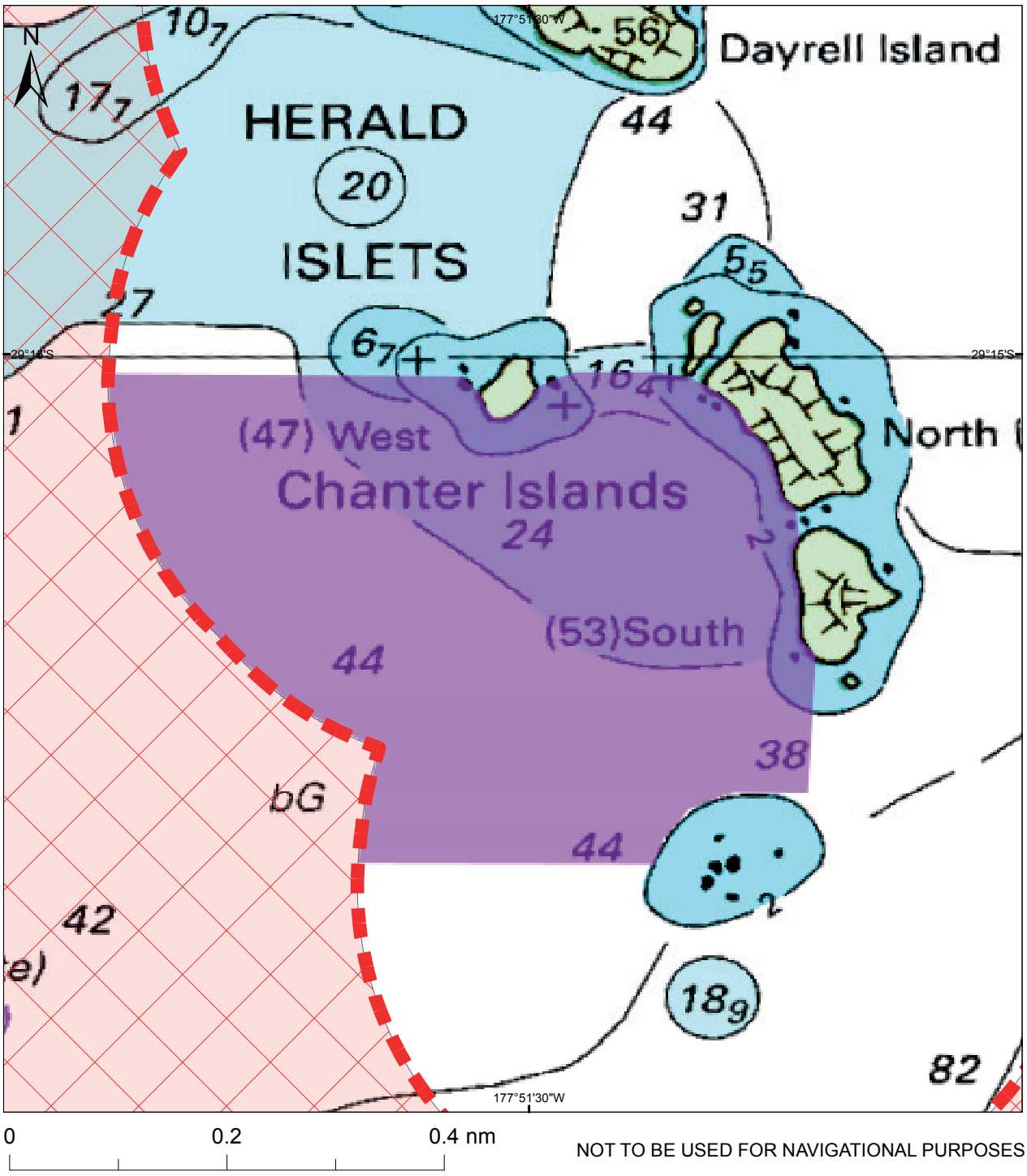


Meyer Islands Anchoring Zone

More than 0.32nm (600m) from the MHWS - Vessels may anchor at own discretion

Designated Anchorage - Vessels may anchor at own discretion

Chartlet 15. Meyer Islands Anchoring Zone



Chanter Islands Anchoring Zone

More than 0.32nm (600m) from the MHWS - Vessels may anchor at own discretion

Designated Anchorage - Vessels may anchor at own discretion

Chartlet 16. Chanter Islands Anchoring Zone

Appendix 3

Sites of historic and cultural heritage

MAP NUMBER	SITE NUMBER ON MAPS	ISLAND GROUP	NZAA SITE NUMBER	SITE NAME/TYPE
10	1	Auckland Islands	AU/6	*Derry Castle* shipwreck, Enderby Island.
10	2	Auckland Islands	AU/11	*Sally* shipwreck, Rose Island.
10	3	Auckland Islands	AU/14	*Marie Alice* or the *Stoneleigh* shipwreck, top of Auckland Island.
10	4	Auckland Islands	AU/15	*Compadre* shipwreck, North Harbour.
10	5	Auckland Islands	AU/16	*Invercauld* shipwreck, north coast.
10	6	Auckland Islands	AU/17	*General Grant* shipwreck, mid west coast of Auckland Island.
10	7	Auckland Islands	AU/18	*Anjou* shipwreck, southern end, west coast of Auckland Island.
10	8	Auckland Islands	AU/29	Davis Bay and Erebus Cove Boat haulouts, Port Ross.
10	9*	Auckland Islands	AU/42	*Grafton* shipwreck*, North Arm, Carnley Harbour.
10	10	Auckland Islands	AU/44	Camp Cove Castaway boatshed site, Camp Cove, Carnley Harbour, Auckland Island.
10	11	Auckland Islands	AU/51	*Dundonald* shipwreck, Disappointment Island.
10	12	Auckland Islands	AU/107	Haskell Bay ship remains, Webling Bay.
10	13	Auckland Islands	AU/117	Camp Cove coastal features, Camp Cove, Carnley Harbour, Auckland Island.
10	14	Auckland Islands	AU/123	Survey Bay boat run.
10	15	Auckland Islands	AU/124	Tagua track and landing, Tagua Bay, Carnley Harbour, Auckland Island.
11	16	Campbell Island/Motu Ihupuku	CA/42	Jetty at Beeman Meteorological base from 1957, Perseverance Harbour.
11	17	Campbell Island/Motu Ihupuku	CA/21	Brick tryworks platform—part covered at high tide, Perseverance Harbour.

* these sites are also included in policy 37 for active conservation.

11	18	Campbell Island/Motu Ihupuku	CA/23	Historic hut next to above beach—19th century glass on beach dates the remains, Perseverance Harbour.
11	19	Campbell Island/Motu Ihupuku	CA/10	Causeway across intertidal area to jetty making use of natural dyke—dates from end of World War 2 (coast watchers) or immediately after (first Met. Station), Perseverance Harbour.
11	20	Campbell Island/Motu Ihupuku	CA/17	Farming era (1895–1931) boulder arrangements on beach, including a 'tidal fence' from land to low water to stop stock from getting around the seaward end, Perseverance Harbour.
11	21	Campbell Island/Motu Ihupuku	CA/19	Farming era peat cutting in bank at rear of beach, Perseverance Harbour.
11	22	Campbell Island/Motu Ihupuku	CA/20	Farming era peat cutting in bank at rear of beach, Perseverance Harbour.
11	23	Campbell Island/Motu Ihupuku	CA/9	Farming era Tucker Cove homestead complex—includes boat run across the beach and boulders across rear of beach at bottom of brick ramp up to the house, Perseverance Harbour.
11	24	Campbell Island/Motu Ihupuku	CA/25	Farming era jetty and adjacent woolshed and yards.
11	25	Campbell Island/Motu Ihupuku	CA/16	Stone jetty—likely made by French Transit of Venus expedition, 1873—74, Perseverance Harbour.
11	26	Campbell Island/Motu Ihupuku	CA/8	Castaway Depot—late 19th century, includes boat run across beach to boat shed, store shed nearby, Perseverance Harbour.
11	27	Campbell Island/Motu Ihupuku	CA/18	Tidal fence—farming era, Perseverance Harbour.
11	28	Campbell Island/Motu Ihupuku	CA/40	Hut site next to beach; an old iron boiler on beach; iron bolt in rock dyke below high water and some shifting of boulders on beach for boat landing(s), Perseverance Harbour.
11	29	Campbell Island/Motu Ihupuku	CA/4	Venus Cove 1874 French Transit of Venus camp. Remains of stone jetty in centre of bay; hut sites; paths and instrument bases eroding to beach, Perseverance Harbour.
11	30*	Campbell Island/Motu Ihupuku	CA/3	Whaling station* 1911–1914 jetty remains, ringbolts etc., intertidal sea wall around most of point, Northeast Harbour.

* these sites are also included in policy 37 for active conservation.

11	31	Campbell Island/Motu Ihupuku	CA/32	Two inch (c. 50 mm) internal diameter water pipe crosses beach from source on hill above to harbour and, presumably, across to whaling station, Northeast Harbour.
11	32	Campbell Island/Motu Ihupuku	CA/2	Whaling Station 1909–1917. Boat shed on the Sandy Bay shore; accommodation.
11	33	Campbell Island/Motu Ihupuku	CA/2	Whaling capstan, Capstan Cove, dragged parts of whale to the beach for processing, Northwest Bay.
11	34	Campbell Island/Motu Ihupuku	CA/28	A shipwreck fragment. West side of stream between Six Foot Lake and Monument Harbour.
12	35	Raoul Island	K036/05	*Rosa Y Carmen* burials.
12	36	Raoul Island	K036/23	*Picton* Shipwreck.
12	37	Raoul Island	K036/24	*Shiner* Shipwreck.
12	38	Raoul Island	K036/27	*Kinei Maru No. 10* Shipwreck.
12	39	Raoul Island	K036/28	*Salano* Shipwreck.

Auckland Islands

NOT TO BE USED FOR NAVIGATIONAL PURPOSES

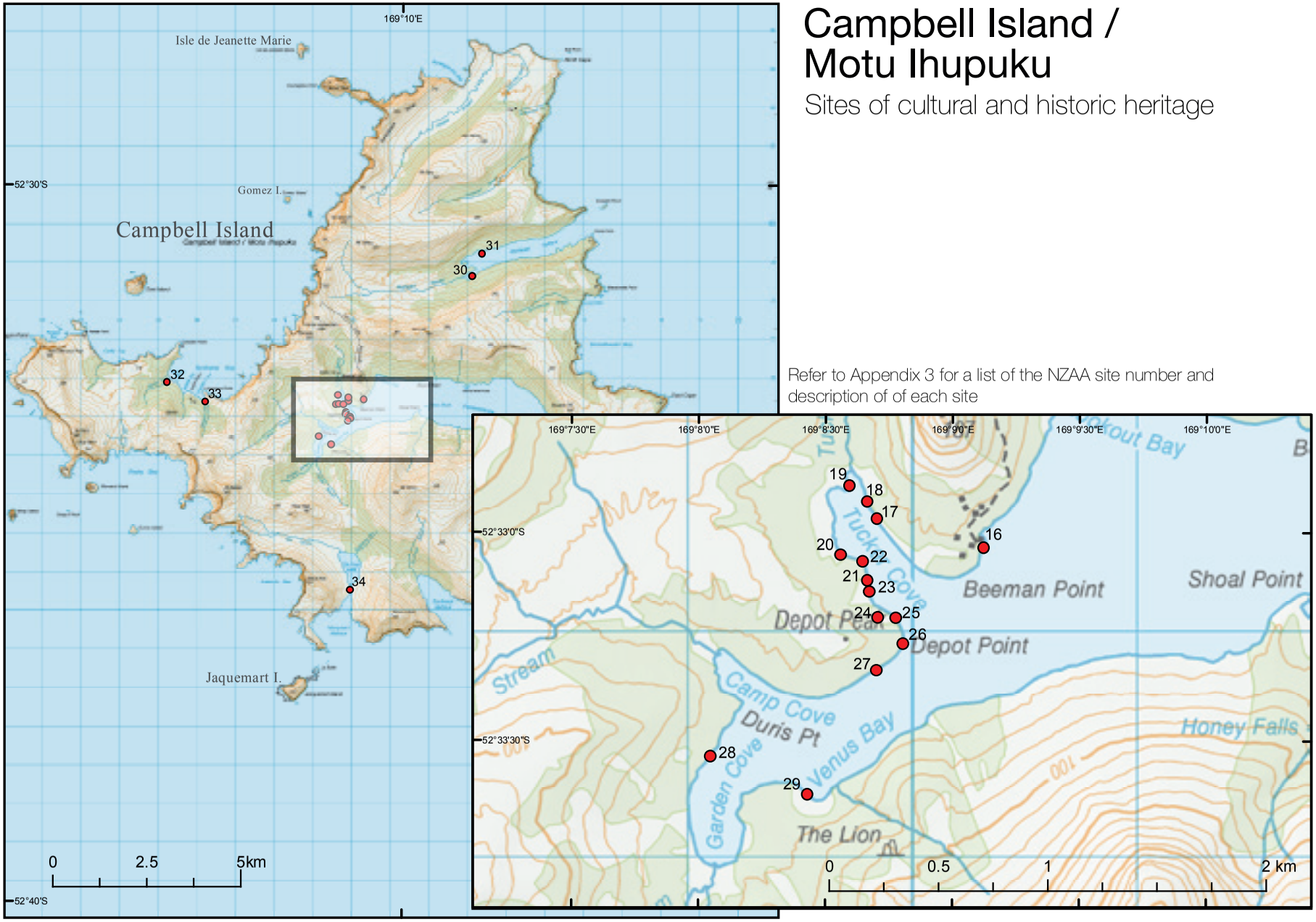
Sites of cultural and historic heritage

Refer to Appendix 3 for a list of the NZAA site number and description of of each site

Map 10

Campbell Island / Motu Ihupuku

Sites of cultural and historic heritage



Refer to Appendix 3 for a list of the NZAA site number and description of of each site

Map 11

Raoul Island
Kermadec Islands

Sites of cultural and historic heritage

Map 12

Refer to Appendix 3 for a list of the NZAA site number and description of of each site

Appendix 4

Vessel hull and niche area inspection - requirements, method and forms

Note: All references in this Appendix to Performance Standards are references to the Performance Standards in Table 1.

This Appendix sets out the inspection process to be followed in Performance Standard 2 to satisfy the requirements of Performance Standard 1.1[41]

1. Inspection Overview

1.1 General provisions

a) Inspections can be undertaken either out-of-water or in-water.

b) Inspections must be undertaken by a person approved by the Minister of Conservation in accordance with Performance Standard 2.2 to conduct the type of inspection being undertaken (see Appendix 5).

c) Inspections must follow the process set out in this Appendix.

Note: It is recommended that the relevant Department of Conservation Director is advised in advance of any inspection to avoid the risk of delay, particularly where the inspection may be complex or the vessel is at particular risk.

1.2 Inspection results

a) An inspection is a *passed inspection* when that inspection follows the methodology set out in this Appendix and demonstrates compliance with Performance Standard 1.1.

b) An inspection is a *failed inspection* when that inspection follows the methodology set out in this Appendix and Performance Standard 1.1 is not complied with.

c) Where a failed inspection occurs, *re-inspection(s)* may be undertaken over a 7 day period from the date of the original failed inspection. Re-inspection(s) shall be confined to the area(s) of the hull, including any niche areas, that failed the original inspection.

d) Hull cleaning may be undertaken during an inspection and/or during or prior to any re-inspection(s).

e) Where any re-inspection occurs more than 7 days after the original failed inspection, a new inspection of the entire vessel shall be undertaken.

f) Notwithstanding Performance Standard 1, where a vessel operator is undertaking an activity lawfully established prior to notification of this plan and the vessel fails an inspection prior to 1 April 2018, that vessel operator may access within 0.54nm (1000m) of MHWS of any of the islands, provided that the vessel operator takes all reasonable steps to remove any identified macro-

[41] The inspection, sampling and reporting protocols included in this appendix are based on recommendations from Floerl, O.; Wilkens, S.; Inglis, G. 2010: Development of a template for vessel hull inspections and assessment of biosecurity risks to the Kermadec and sub-Antarctic Islands regions. NIWA.

fouling and having regard to the provisions of section 17 of the RMA, minimises any actual or potential adverse effects of that macro-fouling on the island environments addressed by this plan. For the avoidance of doubt, the inspection process otherwise required by rule 29B must still be carried out, Forms 1 and 2 completed and provided in accordance with Performance Standard 2.3.

1.3 Record of inspection

a) Inspection results, including re-inspection results, are to be recorded in Forms 1 and 2 and representative photographs taken as set out in this Appendix.

Note: Form 1 records whether a vessel has passed or failed the inspection or re-inspection(s). Form 2 records additional information about the vessel and any biofouling that is found. The information in Form 2 is not used to determine whether the inspection is passed or failed.

b) Where an approved person undertakes an inspection, that person is to provide the completed inspection forms and information required by this Appendix to the vessel operator as soon as practicable after completion of the inspection.

2. Inspection process

2.1 General provisions

a) Prior to the inspection the vessel operator must provide the inspector with a copy of a diagram of the ship to identify the location and number of niche areas. If the vessel has a docking plan showing the arrangement and the number of dry dock support strips, that must also be provided.

b) An inspection of a vessel must include inspections along vertical and horizontal transects of the vessel's hull and inspections of hull niche areas as set out in 2.2, 2.3 and 2.4 of this Appendix. (These areas are illustrated in Figures A4.1 and A4.2 in this Appendix.)

c) A record of the inspection results for each transect and for each niche area present on the hull are to be recorded on Forms 1 and 2, including a record of any fouling that is removed during the inspection or re-inspection(s).

d) To provide a permanent record, during any inspection or re-inspection(s) photographs must be taken that are representative of what is seen along each transect and at each niche area. Where any biofouling is removed during an inspection or re-inspection(s), photographs must be taken that are representative of the fouled area before and after the removal of the fouling. Photographs of the hull transects must be taken at a constant distance of approximately 30 cm from the hull surface for in-water inspections, or as near to this as is practicable. Where the inspection is out-of-water, the photograph must be taken at a distance which ensures the clear depiction of what is observed. Each photograph must include a label identifying the location on the hull that the photograph depicts and a scale bar.

e) Level of Fouling (LOF) rankings are to be provided as required on Form 2.

2.2 Vertical stern transects

a) Two vertical transects are to be inspected at the stern: one on the port and one on the starboard side.

b) The vertical transects should generally be situated approximately 5m from the stern, where the hull curves inwards.

c) The width of observation along each transect shall be at least 1 metre.

2.3 Horizontal transects

a) Two horizontal transects are to be inspected along the entire length of the vessel: one on the port and one on the starboard side.

b) The width of observation along each transect shall be from the waterline for an in-water inspection, or the Plimsoll line for an out-of-water inspection, to at least 1 metre below those lines.

c) Inspection results are to be recorded for the horizontal transect in three separate parts (the stern, amidship and bow), for each side of the vessel.

2.4 Niche areas

a) All niche areas that are below the waterline for an in-water inspection, or the Plimsoll line for an out-of-water inspection, on a vessel's hull must be inspected as part of any inspection.

> Where it is not practicable to access a niche area to inspect part or all of that niche area then for the purpose of this inspection process there is no requirement to inspect the niche area concerned.

2.5 Opportunistic observations - biofouling in other areas

a) During an inspection or re-inspection(s) if the inspector observes any biofouling in any location other than the hull transects and niche areas, this must be recorded on Forms 1 and 2 and photographs must be taken that are representative of the fouled area in the manner described in 2.1(c) and 2.1(d).

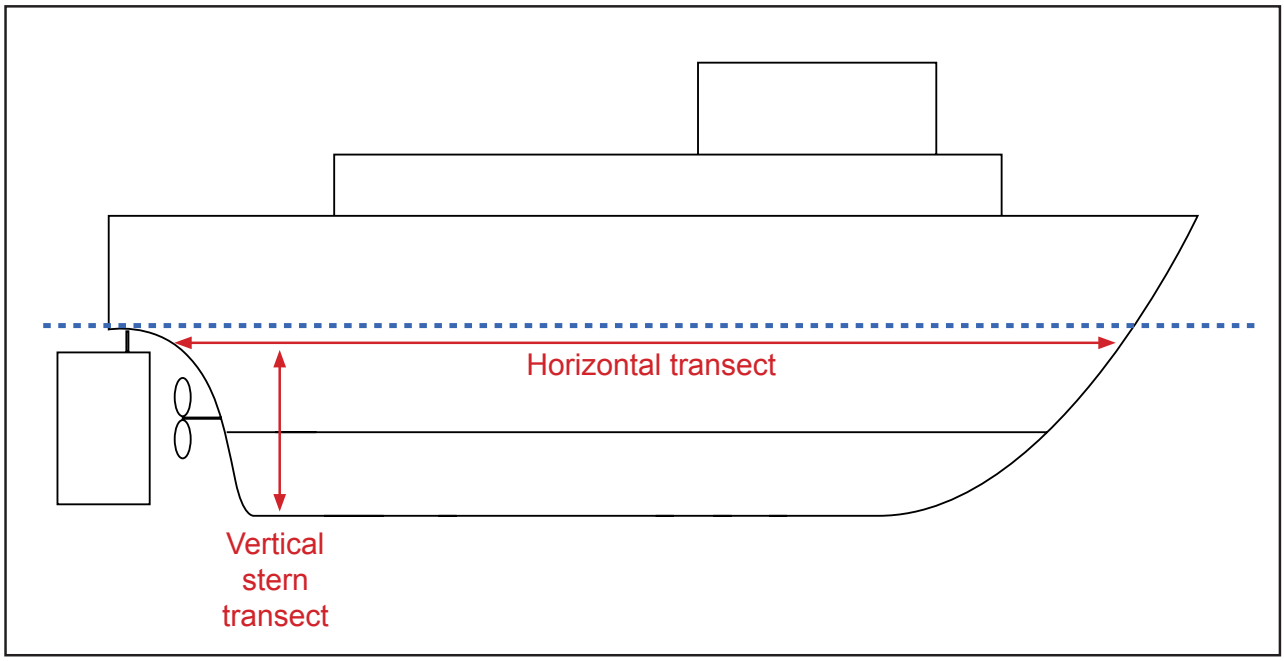


Figure A4.1. Biofouling inspection of general hull areas using vertical stern transects and horizontal transects of both port and starboard areas.

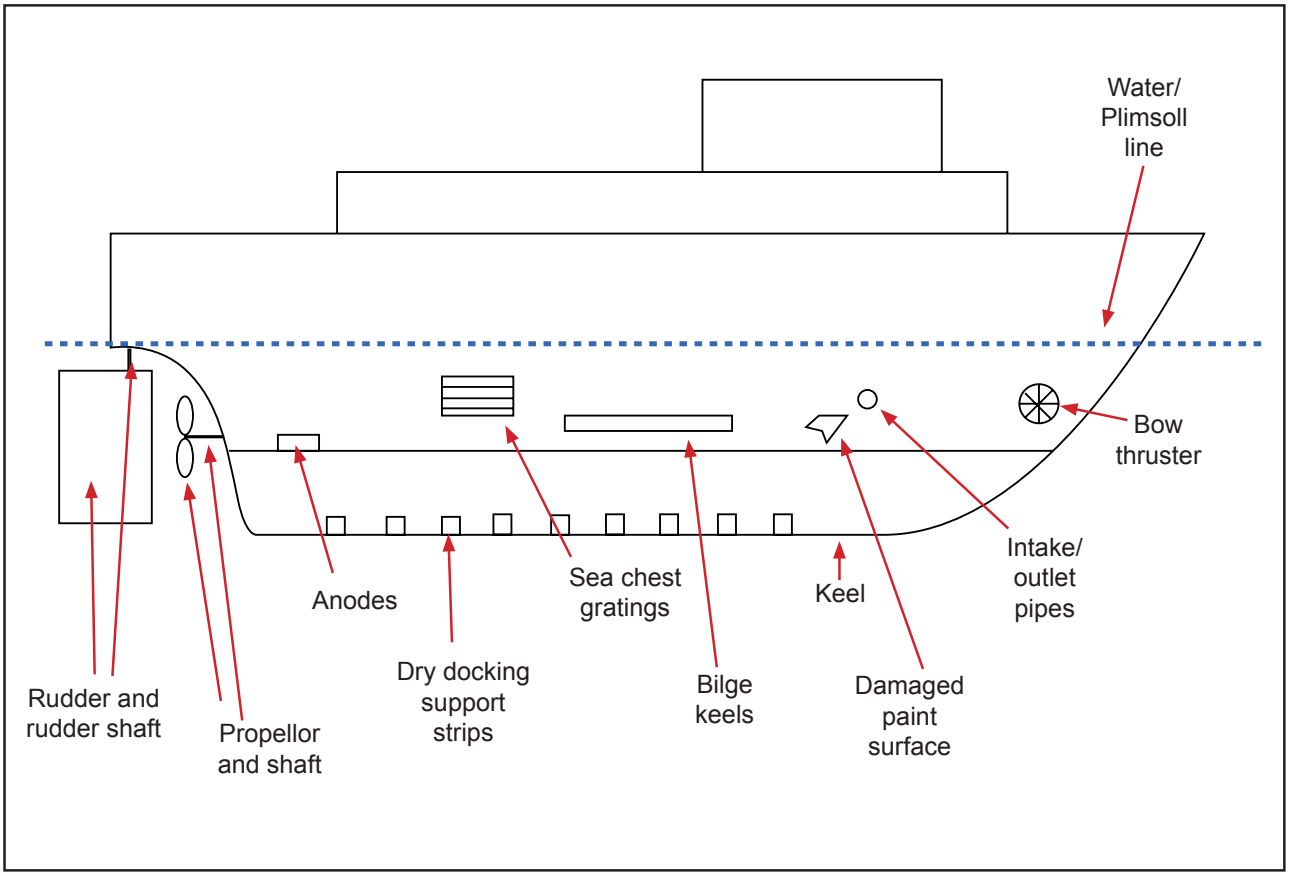


Figure A4.2. Biofouling inspection of niche areas.

Appendix 4: Form 1

Form 1 is used to determine and record whether the inspection is a *passed inspection* or a *failed inspection*.

Contact details (to be completed by vessel operator)

1.	Vessel name, IMO number, vessel type (e.g. fishing, cruise, yacht), displacement, length, breadth, draft:	
2.	Date and location of inspection:	
3.	Inspecting company, representative and contact details:	
4.	Vessel captain or crew representative and contact details:	

Maintenance and travel history (to be completed by vessel operator)

5.	Type of anti-fouling system that has been applied, and the manufacturer's timeframe for effectiveness of that anti-fouling system:	
6.	Date and location of the last application of the anti-fouling system:	
7.	Date and location of last in-water or out-of-water inspection, brief description of results and treatment undertaken:	
8.	Ports and countries visited in the past 3 months or since past anti-fouling system application (whichever was more recent):	

AREA INSPECTED (Hull area or niche area – add/delete as appropriate for the vessel)		**LOCATION ON VESSEL**	**INSPECTION RESULTS** Tick one column, as appropriate			**RE-INSPECTION RESULTS (if applicable)** Tick one column, as appropriate		
			No biofouling observed in exceedance of the biofouling threshold in Performance Standard 1.1 OR It was not practicable to inspect the niche area (Inspection Pass)	Biofouling was observed in exceedance of the biofouling threshold in Performance Standard 1.1 but has been removed (Inspection Pass)	Macro-fouling observed in exceedance of the biofouling threshold in Performance Standard 1.1 (Inspection Fail)	No biofouling observed in exceedance of the biofouling threshold in Performance Standard 1.1 OR It was not practicable to inspect the niche area (Re-Inspection Pass)	Biofouling was observed in exceedance of the biofouling threshold in Performance Standard 1.1 but has been removed (Re-Inspection Pass)	Macro-fouling observed in exceedance of the biofouling threshold in Performance Standard 1.1 (Re-inspection Fail)
Vertical stern transects		Port						
		Starboard						
Horizontal transects	Stern	Port						
		Starboard						
	Amidship	Port						
		Starboard						
	Bow	Port						
		Starboard						

Rudder and shaft					
Propeller and shaft					
Anodes	Port				
	Starboard				
Dry dock support strips	Port				
	Starboard				
	Flat bottom				
Sea chest gratings	Port				
	Starboard				
Sea chest(s) (out-of-water inspection only)	Port				
	Starboard				
Intake/overflow gratings	Port				
	Starboard				
Bilge keels	Port				
	Starboard				
Damaged paint surfaces	Port				
	Starboard				
Opportunistic collections (outside of transects/niche areas)	(Note location) 1. 2. Etc.				

I have conducted an inspection of the subject vessel on *(insert date)*.....and I certify that the vessel has:

a) Passed the inspection

OR

b) Failed the inspection on the basis recorded in the "Inspection Fail" column above.

(delete one as applicable)

Signed..... Date.....

In the event that b) applies, the inspector is to complete the following:

I have completed re-inspection(s) on *(insert date(s) of re-inspection(s))*.....
of the areas of the vessel that failed the original inspection on *(insert date of original inspection)*..... and I certify that the vessel has:

a) Passed the inspection

OR

b) Failed the inspection on the basis recorded in the "Inspection Fail" column above.

(delete one as applicable)

Signed..... Date.....

Note: If more than one re-inspection is carried out, a record of each re-inspection is to be maintained. Please adapt Form 1 accordingly.

Appendix 4: Form 2

Purpose

This Form is not to be used to determine whether the inspection is a *passed inspection* or a *failed inspection*.

The purpose of Form 2 is to record information at the time of inspection to assist vessel operators to comply with Performance Standards 1.2 and 1.3 (in particular). It will also assist any vessel operator who fails an inspection to undertake a risk assessment application as a controlled activity or to make a wider application as a discretionary activity.

Process

Where cleaning is undertaken as part of the inspection or re-inspection(s), this Form must include information concerning biofouling observed on the vessel prior to such cleaning. Where no cleaning is undertaken and the vessel fails the inspection, this Form will also record information about the biofouling observed that resulted in the failure of that inspection.

Photos

During any inspection or re-inspection(s) photographs must be taken that are representative of what is seen along each transect and at each niche area. Where any biofouling is removed during an inspection or re-inspection(s), photographs must be taken that are representative of the fouled area before and after the removal of the fouling. Photographs of the hull transects must be taken at a constant distance of approximately 30 cm from the hull surface for in-water

inspections, or as near to this as is practicable. Where the inspection is out-of-water, the photograph must be taken at a distance which ensures the clear depiction of what is observed. Each photograph must include a label identifying the location on the hull that the photograph depicts and a scale bar.

Level of Fouling (LOF) rank

The Level of Fouling (LOF) rank index of 0-5 is to be determined in accordance with the methodology set out in the NIWA report prepared by Floerl, O.; Inglis, GJ, Haydon, B, 2005: A risk-based predictive tool to prevent accidental introduction of non-indigenous marine species. *Environmental Management 35(6): 765-778.*, a copy of which will be made available to all persons approved to carry out inspections at the time of their application for approval. A copy is also available on the relevant Department of Conservation website. See Figure A4.3 below for examples of the LOF ranking levels 0-5.

Note: Training concerning how to undertake this ranking process will be given by the Department of Conservation to any inspector if requested.

AREA INSPECTED (Hull area or niche area – add/delete as appropriate for the vessel)		**LOCATION ON VESSEL**	**LOF rank (0–5)**	**Description of Biofouling** i.e. algae, barnacles, encrusting, etc. (Note this is a generic description only – it does not require a precise scientific description by taxa)
Vertical stern transects		Port		
		Starboard		
Horizontal transects	Stern	Port		
		Starboard		
	Amidship	Port		
		Starboard		
	Bow	Port		
		Starboard		
Rudder and shaft				
Propeller and shaft				

Anodes	Port		
	Starboard		
Dry dock support strips	Port		
	Starboard		
	Flat bottom		
Sea chest gratings	Port		
	Starboard		
Sea chest (out-of-water inspection only)	Port		
	Starboard		
Intake/overflow gratings	Port		
	Starboard		
Bilge keels	Port		
	Starboard		
Damaged paint surfaces	Port		
	Starboard		
Opportunistic collections (outside of transects/ niche areas)	(Note location) 1. 2. Etc.		

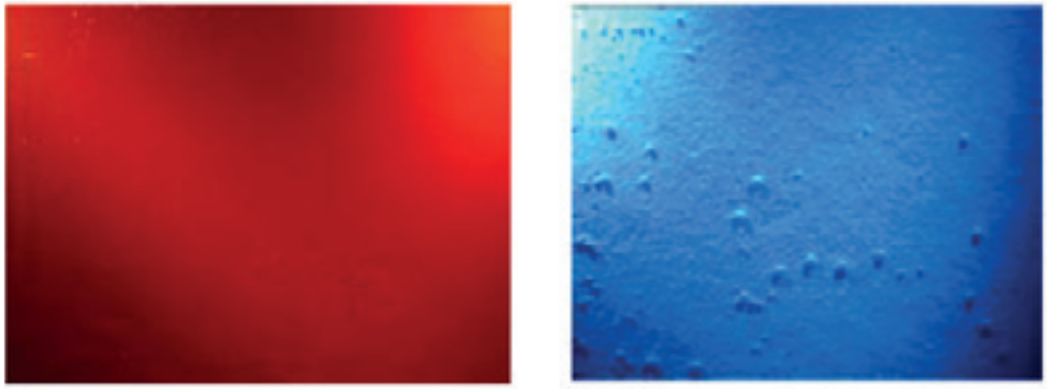
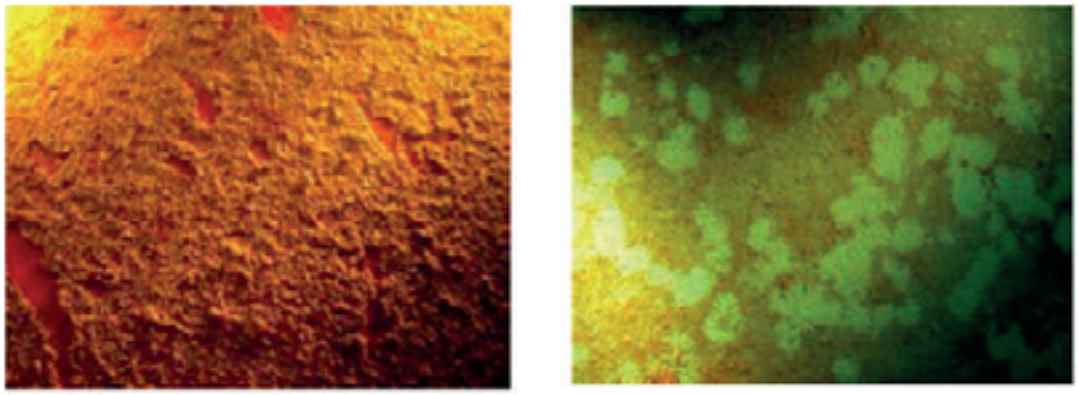
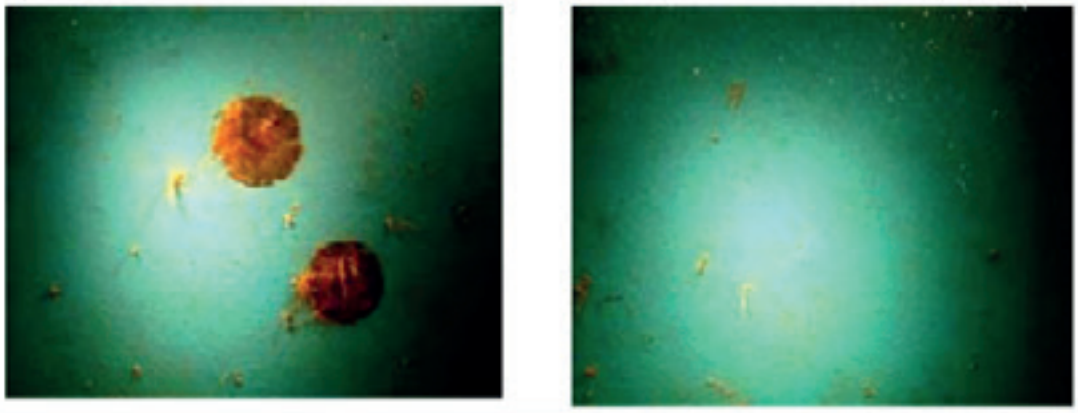
LOF rank	Criteria
0	No visible biofouling. Hull entirely clean, **no slime fouling (biofilm)** on any visible submerged parts of the hull. 
1	Hull partially or completely covered in slime fouling (biofilm). **Absence of any macrofouling**. 
2	**Light biofouling**. 1–5% of visible surface covered by very patchy macrofouling. Remaining area often covered in slime. Examples below show presence vs. absence of fouling in two adjacent areas of a vessel hull. 

Figure A4.3. Definition of the LOF ranks (ranging from 0 to 5) and example images of vessel hull surfaces of each of the different ranks (continued on next page).

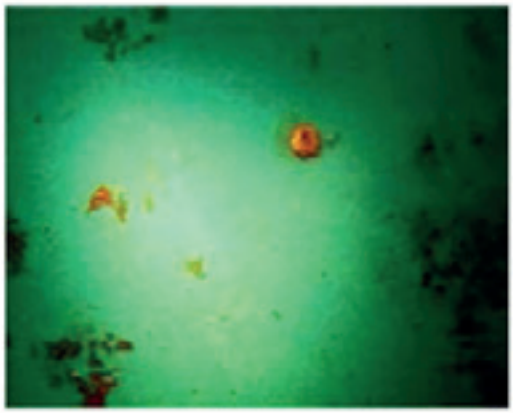
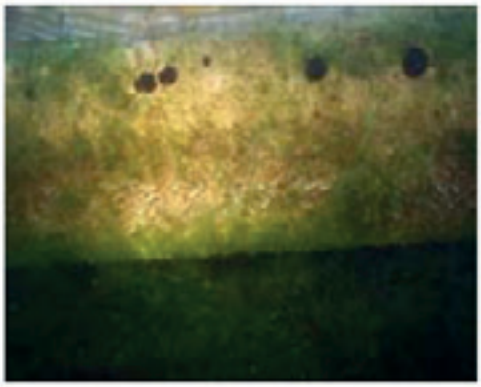
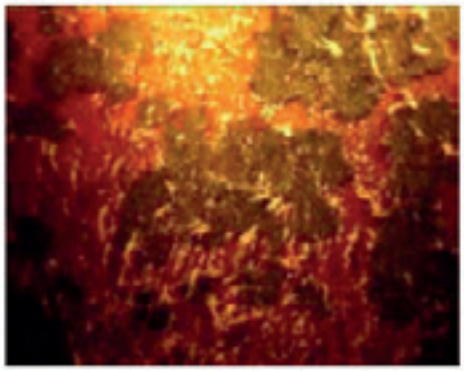
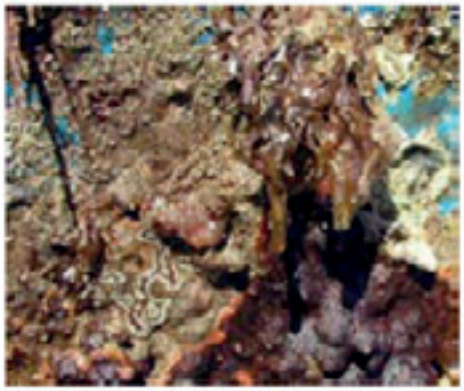
LOF rank	Criteria
3	**Moderate biofouling**. Macrofouling clearly visible (usually > 1 species) but still patchy. 6–15% of visible hull surface covered by macrofouling. Remaining area often covered in slime.  
4	**Extensive fouling**. 16–40% of visible hull surface covered by macrofouling, generally with several distinct types of organisms. Remaining area often covered in slime.  
5	**Very heavy fouling**. 41–100% of visible hull surface covered by macrofouling, often with many distinct types of organisms. Remaining area often covered in slime.  

Figure A4.3 – continued.

Appendix 5

Approval of inspectors

Note: All references in this Appendix to Performance Standards are references to the Performance Standards in Table 1.

1. Inspections carried out in accordance with Performance Standard 2 (Table 1), whether in-water or out-of-water, must be undertaken by an approved person.
2. Inspectors (individuals or organisations) may be approved by the Minister of Conservation following an application in writing (email or letter) made to the relevant Department of Conservation Director and such approval will not be unreasonably withheld and will be provided based on the criteria in clause 4.
3. The required application for approval must contain the name, address, contact details (including phone number(s) and email address), relevant qualifications and practical experience of the individual, or in the case of an organisation of its employees, contractors or members, and two independent references as to relevant professional expertise.
4. The requirements to be met for approval by the Minister of Conservation include:
    a) The inspector must have appropriate qualifications and relevant practical experience of vessel hull inspections (including niche areas).
    b) The inspector must confirm that they are familiar with Appendix 4 of this plan.
    c) The person must confirm that they are familiar with and have a copy of the Department of Conservation's current guidance document relevant to inspection, sampling and reporting protocols for vessel hull inspections (including niche areas).[42]
    d) For yachts only, an approved person includes any Safety Inspector appointed by Yachting New Zealand or Maritime New Zealand.
5. Where an in-water inspection is undertaken by a diver in New Zealand, that diver must hold a current certificate of competence for the category of diving required and who meet the requirements of a diver under the Health and Safety in Employment Regulations 1995.
6. Where an in-water inspection is undertaken by a diver outside New Zealand, that diver must be compliant with all relevant commercial diver certificates required in their country of operation, relevant health and safety legislation, and confirm their relevant diving experience.
7. Where any in-water cleaning is undertaken by a diver in New Zealand, that diver must be a current qualified construction diver.
8. Where any in-water cleaning is undertaken by a diver outside New Zealand, that diver must be compliant with all relevant commercial diver certificates required in their

[42] At the time of preparation of this plan, the relevant document containing this information is NIWA report prepared by Floerl, O.; Wilkens, S.; Inglis, G. 2010: Development of a template for vessel hull inspections and assessment of biosecurity risks to the Kermadec and sub-Antarctic Islands regions. NIWA.

country of operation, relevant health and safety legislation, and confirm their relevant diving experience.

9. An approved inspector must be independent from the vessel owner/operator/company when undertaking a vessel hull and niche area inspection in accordance with Appendix 4 to demonstrate compliance with Performance Standard 1.1.

10. The Minister of Conservation will make available on the official DOC website and on request the details of which inspectors are approved for in-water and out-of-water inspections.

11. Approval of an inspector may be suspended or cancelled by the Minister of Conservation in situations where s/he is not satisfied of that inspector's competency. An inspector can reapply for approval.

Appendix 6

Independent Risk Assessment Protocol and Forms

Note: All references in this Appendix to Performance Standards are references to the Performance Standards in Table 1.

This inspection and sampling protocol is for the purposes of conducting a risk assessment, as required in rule 31. The vessel hull and niche area inspection protocols in Appendix 4 should be followed, along with the protocols for sampling in this Appendix. The forms contained in this Appendix should be used – they include columns for recording the details of sample collection.

This Appendix includes the following:

1. Sampling protocols
2. Protocols for handling, labelling, preserving and submitting samples to taxonomic specialists

   Table A: Taxonomic grouping
3. Information required from taxonomic assessment

   Table B: Example of Form C completed by taxonomists
4. Risk assessment decision

   Table C: A decision-making tool to guide the risk assessment
5. The following forms:

   Form A: Vessel details and inspection summary

   Form B: Overview of sampling and biofouling distribution

   Form C: Results of taxonomic identification of biofouling samples.

1. Sampling protocols

1.1 Sample handling and recording

Biofouling organisms sampled from the vessel hull must be removed gently using (preferably) a plastic paint scraper. When removing biofouling from a hull area the divers should attempt to minimise damage to fragile organisms. Accurate species identification relies on detailed examination of the organism's morphology and, often, external features. Specimens may not be able to be identified if damaged or broken (i.e. crushed barnacle shells, torn/crushed algae, squashed crustaceans). Care must also be taken to prevent damage to the vessel's hull surfaces and structures. This includes sites where sessile organisms (such as barnacles, sponges or ascidians) are scraped off. Although likely to be minimal, care must be taken to avoid removing paint during hull scrapings.

The divers should ensure that all material removed from a hull is transferred into the sample bags and that no organisms are lost and able to sink to the seafloor below the vessel. Non-indigenous species escaping into the local environment may pose a biosecurity risk to the location of the inspection and the release of any biofouling or anti-fouling paint material from the vessel may require a resource consent from the regional council (or unitary council). It is important that samples are placed into sample bags containing the correct label to ensure species identifications from specific areas on the ship are accurate.

Field data recording sheets should be developed and used during the inspection that allow the topside personnel to log the hull and niche areas inspected by the divers, the LOF

allocated to each inspected area and whether and where any samples were collected (and using which methods) and/or images taken. Such field sheets also provide a measure of quality assurance to ensure that all hull areas are sampled.

Following collection, the samples need to be transferred to a field laboratory for sorting and preservation. To make an inspection most efficient, transfer of samples should occur as soon as these have been received from the divers. It is important to check that each sample contains a correctly completed label and that a sample register is developed that identifies the location on the hull the sample was taken from and confirms its transfer to the laboratory.

1.2 Vertical stern transect sampling

Two vertical transects are inspected at the stern: one on the port and one on the starboard side. Each transect receives a LOF rank, has representative images taken of any organisms encountered and representative samples (LOF ranks 2 and 3) or quadrat samples (LOF ranks 4 and 5) are taken of biofouling.

The method of collection of biofouling samples depends on the LOF rank allocated:

a) For transects with LOF ranks of 2 (light biofouling) and 3 (moderate biofouling), representative samples of all biofouling species are collected by the divers along the transect. Where available, at least three (3) individuals or colonies of each distinguishable species should be collected for identification purposes. Images of the organisms should be taken prior to removal, and each image needs to contain a slate or label that identifies the location in which it was taken.

All material collected during the transect is placed into the same sample bag for simplicity, along with a waterproof label that identifies:

- vessel name and date;
- side of vessel (port, starboard);
- transect type (i.e. vertical stern transect);
- LOF rank.

b) For transects with LOF ranks of 4 (extensive biofouling) and 5 (very heavy biofouling) it is too difficult for the divers to reliably "seek out" all of the species present. Instead, the divers place a sampling quadrat into each of five (5) haphazardly selected locations along the transect. The quadrats can be placed anywhere within the 1m width of the transect. A digital image of each quadrat is taken prior to removal of the organisms, and each image needs to contain a slate or label that identifies the location it was taken in. Using a paint scraper, the entire contents of each quadrat are then transferred into a separate sample bag, along with a waterproof label that identifies:

- vessel name and date;
- side of vessel (port, starboard);
- transect type (i.e. vertical stern transect);
- LOF rank;
- Quadrat number (1-5).

If more than a single sample bag is required, an identical label is placed into the second (third, etc.) bag such that samples taken from the same transect can be processed together following the inspection.

1.3 Horizontal transect sampling

Biofouling samples should be collected as described above for the vertical stern transects: representative specimens collected for LOF ranks of 2 and 3, or three replicate sample quadrats where the LOF rank is 4 and 5.

1.4 Niche area sampling

The method of collection of biofouling from niche areas depends on the LOF rank allocated:

a) For niche areas with a LOF rank of 2 (light biofouling) and 3 (moderate biofouling), representative samples of all biofouling species are collected by the divers. Ideally, at least three (3) individuals or colonies of each distinguishable species should be collected for identification purposes.

All material collected from a given niche area is placed into a single sample bag, along with a waterproof label that identifies:

- vessel name and date;
- side of vessel (port, starboard);
- type of niche area;
- LOF rank.

If more than one sample bag is required, an identical label should be placed into the second (third, etc.) bag.

b) For niche areas with a LOF rank of 4 (extensive biofouling) and 5 (very heavy biofouling) it is too difficult for the divers to reliably "seek out" all of the species present. Instead, an alternative collection method is used that depends on the size of the niche area.

(i) If the niche area is relatively small (e.g. intake/outflow openings; damaged paint areas, etc.), the divers should collect all of the biofouling present in the niche area and place it into a single sample bag containing a waterproof label that identifies:

- vessel name and date;
- side of vessel (port, starboard);
- type of niche area;
- LOF rank.

(ii) If the niche area is large (e.g. rudder, DDSS, propeller, etc.) then the divers should take a quadrat sample in each of three (3) haphazardly selected locations within the niche area and transfer the entire contents of each quadrat into a separate sample bag, along with a waterproof label that identifies:

- vessel name and date;
- side of vessel (port, starboard);
- type of niche area;
- LOF rank;
- Quadrat number (1-3).

Some niche areas may occur more than once on a vessel, particularly sea chest gratings (usually 2-8 depending on vessel size) and dry-docking support strips (potentially >10). The divers should target all of these where possible.

1.5 Opportunistic samples

If the divers encounter biofouling outside the hull transects and niche areas listed above, images should be taken and representative samples should be collected using an appropriate label.

2. Protocols for handling, labelling, preserving and submitting samples to taxonomic specialists

This section outlines the procedures that should be followed in topside processing of biofouling samples collected from vessels. Incorrect handling can render specimens unidentifiable, even by experienced taxonomists. Any organisms removed from a hull must be sorted and preserved appropriately so that their identification can be confirmed by qualified taxonomists. As hazardous substances (e.g. ethanol and formaldehyde solutions) are generally used to fix and preserve specimens collected from the hulls, the contractor must maintain appropriate Health & Safety practices in the area where the samples are processed.

2.1 Processing facilities

All biofouling samples should be kept shaded, cool and wet, and processed within 1–2 hours of collection according to the following procedures. A field lab should be set up that has:

- Sheltered, well ventilated working/bench space;
- Ready supplies of fresh salt water;
- Selection of containers for sorting (buckets, tubs, trays);
- Selection of appropriately-sized plastic vials and jars for storing samples (non-rigid clear plastic with water-tight screw caps);
- Supply of waterproof paper and pencils.

2.2 Labelling and sample registers

Accurate labelling of samples is essential. Unlabelled collections or collections with illegible (unreadable or faded printing) labels cannot be used because the information cannot be salvaged. Labels should be made from high quality, water-resistant parchment paper, light card, or archival quality paper. Write in pencil or preferably permanent ink using a pigment pen. Pens must be water- and alcohol-proof.

Labels for every sample must go inside the container, preferably so they can be read easily from outside. Permanent marker pen labels on the outside of containers may increase convenience, but are often dissolved by leaking ethanol, may be abraded by friction during transit or may be forgotten when a container is changed.

Ideally, the location and number of hull fouling samples taken should be planned in advance. However, this is not always feasible during an urgent hull inspection where the level of biofouling is unknown. In this situation, clear communication between divers and topside personnel is essential. It is important that divers relay the exact sample location (i.e. niche area, transect number, quadrat number) for each sample bag which is handed to topside personnel. Each of these samples sites should then be recorded on a sample register. This involves recording data from each field label or pre-marked collection bag on an electronic (e.g., Excel) or hardcopy registration sheet. The sample register allows the field team to track all samples collected and should be established once the hull inspection is underway.

2.3 Sorting into taxonomic groups

Once a sample has been received by topside personnel, it should be sorted into broad taxonomic groups such as algae, barnacles, crustaceans, ascidians, etc. (see Table A).

The material in the sample bag should be emptied into a shallow tray of fresh seawater and the entire collection sorted into taxonomic groups, placing specimens from each taxon into separate, appropriately-sized containers. Keep all specimens of each group except where there are several individuals of large species. In such cases, some specimens may be discarded but care should be taken to avoid discarding new species. Decisions on which specimens to discard should be made only by an experienced scientist. If in doubt, keep all specimens.

Each taxonomic group extracted from the sample should be placed in a separate container with a separate label indicating the taxon (e.g. all the barnacles collected should be sorted into a separate container). These labels comprise the collection information, plus a 2-letter code for the taxonomic group (Table A). If lab personnel are uncertain about what taxon a particular specimen may represent this should be identified accordingly on the sample label (e.g. "Sponge? Taxon unknown.").

Each preserved, sorted collection should be recorded in the sample register as it provides a record of all samples that leave the field laboratory and allows easy tracking from the field laboratory to the taxonomic service providing the identification. It is recommended that reference specimens of any distinct taxa be photographed. Each photo should include a scale bar and a visible label with the collection information and taxon codes adjacent to each specimen. Create a record of the image file number associating it with the collection code, in case the label is not legible within the image.

2.4 Fixatives and preservatives

All specimens should be fixed and preserved as soon as possible. See Table A for fixation requirements specific to each taxon group. Do not use isopropyl alcohol (IPA) for fixing or preserving any specimens. Formalin should be diluted to 5% or 10% using seawater, not freshwater. Ethanol must be diluted using freshwater, not seawater.

Each sorted collection should be placed in at least five times its own volume of preservative so that water in the specimens' tissues does not dilute the preservative.

Where fixatives or preservatives are not available, sorted and labelled specimens can be kept wet (preferably in a container/jar filled with fresh seawater), and kept chilled (*not frozen*) until fixatives are available. However, this period should not exceed 24 hours post-collection or the integrity of the specimens will be compromised.

2.5 Health and Safety

When using ethanol or formalin, ensure the area is well ventilated and away from electrical appliances (such as laptops).

a) Formalin is a Class 9 hazardous substance (ecotoxic and corrosive). When formalin is used at 5% or 10% dilution, it may cause skin irritation and burns to the skin and eyes. Therefore, it is recommended that nitrile gloves, protective clothing (i.e. long sleeves which cover skin) and safety glasses are used. Immediately clean up spills and discard of waste in approved manner.

b) Ethanol is a Class 3 flammable liquid and care must be taken to avoid use within the vicinity of sparks, electrical appliances or ignition sources. Immediately wipe up spills. Ventilation is important as vapours may cause dizziness. Skin exposure may result in irritation or mild burns, particularly to eyes. Again, it is recommended that nitrile gloves, protective clothing and safety glasses are used.

Neither of these substances should be spilt or released into the marine environment.

2.6 Shipping and Handling

Prepare samples for shipping by packing containers/jars in plastic bags (including absorbent packaging to minimise damage caused by any leakage), then into larger, tougher plastic bags, buckets or plastic bins. Seal properly. If samples have been preserved or fixed prior to shipping, they must be sent with an approved Dangerous Goods transporter (e.g. Chem Couriers). A shipper's declaration, specific dangerous goods emergency response procedures and supporting documentation will be required.

Table A: Taxonomic Groupings

Taxonomic groups into which all collections should be sorted, their taxon code for labelling, and fixation requirements. An asterisk (*) denotes a requirement to transfer sample into 70 % ethanol within 1–4 days.

Taxon	Sorting groups	Taxon Code	Fixative and/or preservative	Concentration
Algae	Algae	AG	Formalin	5 %
Ascidians	Colonial ascidians	AN	Formalin	10 %
	Solitary ascidians	AN	Ethanol	70 %
Bryozoa	Bryozoa	BR	Ethanol	70 %
Crustacea	Amphipods	AM	Ethanol	70 %
	Barnacles	BN	Ethanol	70 %
	Crabs	CB	Ethanol	70 %
	Other decapods	DP	Ethanol	70 %
	Isopods	IS	Ethanol	70 %
	Ostracods	OS	Ethanol	70 %
	Tanaids	TN	Ethanol	70 %
Cnidaria	Ctenophores	CN	Formalin	10 %
	Hydroids	HY	Formalin	10 %
	Hard corals	HC	Ethanol	70 %
	Sea anemones	SN	Formalin	10 %
	Soft corals	SF	Formalin*	10 %
	Jellyfish	JF	Formalin	10 %
Echinoderms	Brittle stars	BS	Ethanol	70 %

	Echinoids	EC	Ethanol	70 %
	Holothurians	HT	Ethanol	70 %
	Sea stars	SS	Ethanol	70 %
Fishes	Fishes	FH	Formalin	10 %
Molluscs	Bivalves	BV	Ethanol	70 %
	Gastropods	GP	Ethanol	70 %
	Other molluscs (shell)	MU	Ethanol	70 %
	Other molluscs (no shell)	MU	Formalin*	10 %
	Polyplacophorans/chitons	PO	Ethanol	70 %
	Opisthobranchs (no shell)	OB	Formalin*	10 %
Pycongonids	Pycongonids	PY	Ethanol	70 %
Sponges	Sponges	SP	Ethanol	70 %
Flatworms	Flatworms	FW	Formalin	10 %
Annelid worms	Annelid worms	WM	Formalin	10 %
Nemerteans	Nemertean worms	NT	Formalin	10 %
Sipunculans	Sipunculan worms	SI	Formalin	10 %
Washings	Residues from sorting	WH	Formalin	10 %
Unknown	Unknown	UK	Formalin	10 %

3. Information required from taxonomic assessment

The risk the biofouling species present on a vessel pose to the Kermadec or Subantarctic Islands is governed by a range of factors pertaining to their abundance, age (or level of maturity), biogeography, environmental tolerance, habitat requirements and invasive history in other locations. When samples from a biofouling inspection are submitted to taxonomic specialists, they must be accompanied by clear instructions on what information the taxonomists are expected to provide as part of their identification of each species. Conversely, it is important that the taxonomists are provided with all information required for their identification process (e.g. the travel history of the vessel).

The following information is required from the taxonomists, for each species they identify from the specimens collected during the hull inspection – to be recorded on Form C (see Table B for an example):

a) Name of taxonomic expert who identified the sample;

b) Species name and common name (if there is one);

c) Details of the samples each of the species was encountered in;

d) Native and introduced range of the species (broad geographic regions, where known);

e) Presence/absence of each species in mainland New Zealand (North/South Islands);

f) Biosecurity status of each species in mainland New Zealand (indigenous, non-indigenous, cryptogenic);

g) Presence/absence in the Kermadec Islands and/or those Subantarctic Islands the vessel intends to visit. If a species is non-indigenous and already present in the islands, information on its distribution if available;

h) Biosecurity status in the Kermadec Islands and/or those Subantarctic Islands the vessel intends to visit;

i) Potential for establishment and proliferation in the Kermadec and Subantarctic Islands based on environmental tolerance and habitat requirements (categories: unlikely, possible, likely);

j) Age and maturity of specimens examined (e.g. non-reproductive juveniles; adults; presence of eggs/larvae), where possible;

k) Perceived risk posed to the Kermadec and Subantarctic Islands (negligible, low, moderate, high), and justification of this estimated risk. Note that the risk posed by a non-indigenous species that is *already known* to occur in the Kermadec or Subantarctic Islands should not by default be regarded as low (due to the species already being established. An example is *Undaria pinnatifida* – present in the Snares Islands/Tini Heke but not known from any other islands).

Table B: Example of Form C completed by taxonomists for all species identified from biofouling samples removed from a fictional vessel, the MV Sub-Antarctic Explorer.

Species	Presence in samples	Native range	Introduced range	Presence mainland NZ	Biosecurity status mainland NZ	Presence Kermadec and Subantarctic Islands	Biosecurity status Kermadec and Subantarctic Islands	Potential to establish, survive, reproduce in the Kermadec and Subantarctic Islands	Age/maturity of material examined (where possible)	Perceived overall risk posed to the Kermadec and Subantarctic Islands
Lepas anatifera (goose barnacle)	SAE-RS-1; SAE-DS-2 SAE-T2-PL	Cosmopolitan		Present in North and South Island	Indigenous	Present in Kermadec and Subantarctic Islands	Indigenous	Already established	Mature adults	Negligible as indigenous to these locations
Undaria pinnatifida (Asian kelp)	SAE-RS-1	Asia	Mediterranean, New Zealand, Australia, Argentina	Present in North and South Island	Non-indigenous (invasive)	Present in the Snares Islands	Non-indigenous	Could establish and proliferate	Reproductive specimen	High-Extreme as non-indigenous, notorious invasive species, suitable for Subantarctic/ Kermadec Islands environment
Species 3										
Species 4										

4. Risk assessment decision

The taxonomic information provided by the taxonomist in Form C, together with the decision-making tool in Table C, will be used to determine the relative biosecurity risk. The risk estimate is then made for the entire vessel, which will be based on the highest risk level species detected on the vessel.

Table C: Decision-making tool

Evaluation of the biosecurity risk vessels intending to visit New Zealand's remote offshore islands pose to their intended destinations. Levels of biosecurity risk are simple relative estimates based on (i) whether non-indigenous species (NIS) are present on a vessel, (ii) how likely they are to establish in the vessels' intended destination(s), (iii) whether they are known to have a history of invasion in other global locations, and (iv) the extent of biofouling on the vessel. The risk estimate is made for the entire vessel (based on the information collected in accordance with this Appendix) and on criteria (i)-(iv) for all species detected on the vessel, as set out in the table below.

NIS present on vessel?	Likelihood of establishment in offshore islands?	Invasive history of NIS found on vessel	Max. LOF of hull/niche areas NIS was collected from	Relative biosecurity risk
No	n/a	n/a	2 to 3	Negligible
No	n/a	n/a	4 to 5	Negligible
Yes	Unlikely	No record	2 to 3	Low
Yes	Unlikely	No record	4 to 5	Low
Yes	Unlikely	Record of establishment	2 to 3	Low
Yes	Unlikely	Record of establishment	4 to 5	Low
Yes	Unlikely	Record of invasion	2 to 3	Low
Yes	Unlikely	Record of invasion	4 to 5	Low
Yes	Possible	No record	2 to 3	Medium
Yes	Possible	No record	4 to 5	High
Yes	Possible	Record of establishment	2 to 3	High
Yes	Possible	Record of establishment	4 to 5	Very High
Yes	Possible	Record of invasion	2 to 3	Very High
Yes	Possible	Record of invasion	4 to 5	Very High
Yes	Likely	No record	2 to 3	High
Yes	Likely	No record	4 to 5	Very High
Yes	Likely	Record of establishment	2 to 3	Very High
Yes	Likely	Record of establishment	4 to 5	Very High
Yes	Likely	Record of invasion	2 to 3	Very High
Yes	Likely	Record of invasion	4 to 5	Very High

All vessels attributed with a negligible or low biosecurity risk may be issued a Coastal Permit.

Appendix 6: Form A. Vessel details and inspection summary

Contact details (to be completed by vessel operator)

1.	Vessel name , IMO number, vessel type (e.g. fishing, cruise, yacht), displacement, length, breadth, draft:	
2.	Date and location of inspection:	
3.	Inspecting company, representative and contact details:	
4.	Vessel captain or crew representative and contact details:	

Maintenance and travel history

5.	Type of anti-fouling system that has been applied, and the manufacturer's timeframe for effectiveness of that anti-fouling system:	
6.	Date and location of last application of the anti-fouling system:	
7.	Date and location of last in-water or out-of-water inspection, brief description of results and treatment undertaken:	
8.	Ports and countries visited in past 3 months or since last anti-fouling paint renewal (whichever was more recent):	

Inspection results

9.	Were biofouling organisms encountered on the vessel?	
10.	What is the vessel's overall biofouling extent? Provide average LOF rank allocated during sampling, also provide maximum LOF rank allocated to any area inspected.	

Appendix 6: Form B. Overview of sampling and biofouling distribution

AREA INSPECTED (Hull area or niche area – add/delete as appropriate for the vessel)		**LOCATION ON VESSEL**	**Inspected? (Y/N)**	**LOF rank (0–5)**	**Biofouling taxa detected** (e.g. barnacles, algae, bivalves)	**High-risk non-indigenous species detected? Provide names.**	**Photos taken**
Vertical stern transects		Port					
		Starboard					
Horizontal transects	Stern	Port					
		Starboard					
	Amidship	Port					
		Starboard					
	Bow	Port					
		Starboard					
Niche Areas							
Rudder and shaft		Port/ Starboard					
Propeller and shaft		Port/ Starboard					
Anodes		Port					
		Starboard					

AREA INSPECTED (Hull area or niche area – add/delete as appropriate for the vessel)	**LOCATION ON VESSEL**	**Inspected? (Y/N)**	**LOF rank (0–5)**	**Biofouling taxa detected** (e.g. barnacles, algae, bivalves)	**High-risk non-indigenous species detected? Provide names.**	**Photos taken**
Dry-docking support strips	Port					
	Starboard					
	Flat bottom					
Sea chest gratings	Port					
	Starboard					
Intake/outflow openings	Port					
	Starboard					
Bilge keels	Port/ Starboard					
Bow thruster						
Damaged paint surfaces	Port					
	Starboard					
Opportunistic collections (i.e. outside the transects)						

Appendix 6: Form C. Results of taxonomic identification of biofouling samples

Authority that conducted the identification:

Contact person and contact details:

TABLE OF SPECIES IDENTIFIED FROM VESSEL

Species (scientific and common name)	Details of the sample this species was found in	Native range	Introduced range	Presence mainland NZ	Biosecurity status mainland NZ (native, non-indigenous, cryptogenic)	Presence in the Kermadec and Subantarctic Islands	Biosecurity status in the Kermadec and Subantarctic Islands (native, non-indigenous, cryptogenic)	Potential to establish, survive, reproduce in the Kermadec and Subantarctic Islands	Age/ maturity of material examined	Perceived overall risk posed to the Kermadec and Subantarctic Islands (negligible, low, moderate, high)	Risk justification
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											

9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

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Appendix 7

Biofouling Management Plan and Biofouling Record Book

Note: All references in this Appendix to Performance Standards are references to the Performance Standards in Table 1.

A. Format and content of Biofouling Management Plan

1. Purpose

1.1 The general purpose of the Biofouling Management Plan (BMP) is to:

a) outline measures for control and management of vessels' biofouling, and

b) provide operational guidance for planning and actions needed for vessels' biofouling management.

1.2 The specific purpose of the BMP is to demonstrate how the vessel will be maintained and managed so that at the time Rule 29B(b)(iv) requires an inspection, the vessel will demonstrate compliance with Performance Standard 1.1 and how the vessel will comply with the biofouling threshold in Performance Standard 1.2 at other times.

2. Contents/Index

2.1 A table of contents must be included.

3. Vessel particulars

3.1 The following vessel particulars must be included:

a) Name

b) Flag

c) Port of registry

d) Gross tonnage

e) Registration number (i.e. IMO number and/or other registration numbers, if applicable)

f) Vessel length

g) Beam

h) Vessel type (as classified by Lloyd's Register)

i) International call sign and Maritime Mobile Service Identity (MMSI)

j) Diagram of the vessel including underwater hull shape (showing both side and bottom views of the vessel)

4. **Description of areas on the vessel particularly susceptible to biofouling**

4.1 The BMP must identify all areas on the vessel which are particularly susceptible to biofouling. Diagrams must be included which identify these particularly susceptible areas.

5. **Description of anti-fouling system(s) including marine growth prevention system(s)**

5.1 The BMP must contain documentation confirming that the vessel's anti-fouling system will at no time be more than 12 months old, and complies with Performance Standard 3.1.

5.2 The BMP must describe the anti-fouling system(s), including any marine growth prevention system(s) (MGPS), in place for different parts of the vessel, including:

a) type(s) of anti-fouling system including any MGPS(s);

b) details of where an anti-fouling system(s) is and is not applied or installed;

c) details of where an MGPS(s) is and is not fitted, including any internal seawater cooling systems covered or not covered;

d) manufacturer and product names of all coatings or products used in the anti-fouling system(s) and MGPS(s);

e) anti-fouling system specifications (including dry film thickness for coatings) together with the manufacturer's anticipated timeframe of effectiveness, the operating conditions required for the system to be effective, cleaning requirements and any other specifications relevant to the system's performance; and

f) MGPS specifications and any advice about the MGPS including dosing and frequency.

5.3 The BMP must include reports on the performance of the vessel's anti-fouling system(s) for the previous 5 years (or for such shorter period for which they are available), including the anti-fouling system certificate, statement of compliance or other documentation relating to that previous anti-fouling system(s).

6. **Description of operating profile**

6.1 The BMP must describe the vessel's operating profile that determines the specifications of the vessel's anti-fouling system(s) and operational practices, including:

a) typical operating speeds;

b) periods underway at sea compared with periods berthed, anchored or moored;

c) typical operating areas, trading/navigational routes;

d) frequency of in-water cleaning and inspections; and

e) frequency of dry-dockings/slipping.

7. **Vessel hull and niche area maintenance**

Hull maintenance

7.1 The BMP must set out how the vessel hull will be managed and maintained to comply with Performance Standard 1.

7.2 The BMP must also describe actions which will be taken if the vessel is operating beyond its operating profile or if excessive and unexpected biofouling is observed on the vessel to ensure it will comply with Performance Standard 1.

Particularly susceptible areas

7.3 The BMP must set out how the particularly susceptible areas identified will be managed and maintained to comply with Performance Standard 1.

7.4 The BMP must also describe actions which will be taken if the vessel is operating beyond its operating profile or if excessive and unexpected biofouling is observed on the vessel to ensure it will comply with Performance Standard 1.

Maintenance of anti-fouling system

7.5 The BMP must contain a detailed description of the operation and maintenance of the anti-fouling system(s) used, including a schedule(s) of maintenance activities and step-by-step operational procedures.

Maintenance of MGPS

7.6 The BMP must contain a detailed description of the operation, maintenance and inspection schedule and procedures of any MGPS(s). This includes details of when each MGPS is run, for how long and any cleaning/maintenance requirements of the system once use is finished.

7.7 The BMP must also describe what actions will be taken if the MGPS is temporarily out of operation, to ensure it will comply with Performance Standard 1.

Timing of operational and maintenance activities

7.8 The BMP must contain a schedule of planned inspections, including at least one inspection in accordance with Performance Standard 2 (Appendix 4), between 4 and 8 months from the date of application of the anti-fouling system.

7.9 The BMP must contain a schedule of when repairs, maintenance and renewal of the anti-fouling system(s) will be undertaken.

In-water cleaning and maintenance procedures

7.10 The BMP must set out planned maintenance procedures that will be completed to ensure vessel hull and niche area biofouling complies with Performance Standard 1. This includes both routine cleaning and other treatments. Details must be provided on the treatment/cleaning to be conducted, specification of any equipment required, details of the areas to which each specific treatment/cleaning is to be applied, step-by-step operational procedures and any other details relevant to the processes (such as chemicals required for treatment and any discharge standards).

8. **Safety procedures for the vessel and the crew**

8.1 The BMP must include details of specific operational or safety restrictions, including those associated with the management system that affects the vessel and/or the crew, and details of specific safety procedures to be followed during vessel inspections.

9. **Disposal of biological waste**

9.1 The BMP must contain procedures for disposal of biological waste generated by treatment or cleaning processes when the cleaning is conducted by, or under the direct supervision of, the vessel owner, master or crew.

10. **Recording requirements**

10.1 The BMP must contain details of the types of documentation to be kept to verify the operations and treatments to be recorded in the Biofouling Record Book, as outlined below.

10.2 A Biofouling Record Book must be maintained for each vessel, to record the details of all inspections and biofouling management measures undertaken on the vessel to show compliance with the vessel's Biofouling Management Plan. This must include photographs of the vessel's hull and niche areas, which are to be taken before dry dock cleaning and during in-water inspections.

11. **Review**

11.1 The BMP must be reviewed and updated at least every 3 years to ensure that its content remains current with regard to any developments in technological capabilities and management practices.

B. Format and content of the Biofouling Record Book

Period From: ..... To: .....

Name of vessel.....

Registration number*.....

Gross tonnage.....

Flag.....

* Registration number = IMO number and /or other registration numbers.

The vessel is provided with a Biofouling Management Plan? Y/N

Include a diagram of the vessel indicating underwater hull shape (showing both side and bottom views of the vessel, if necessary) and areas particularly susceptible to biofouling.

Introduction

A Biofouling Record Book must be maintained for each vessel, to record the details of all inspections and biofouling management measures undertaken on the vessel to show compliance with the vessel's Biofouling Management Plan.

Entries in the Biofouling Record Book

The following information is be recorded in, or kept with, the Biofouling Record Book:

1. For each dry-docking (or travel lift, slip or hard stand):
    a) Date and location that the vessel was out of the water.
    b) Date that vessel was re-floated.
    c) Any hull cleaning that was performed while out of the water, including areas cleaned, method used for cleaning, description of any biofouling observed/ removed, e.g. algae, barnacles, encrusting, etc, (including photos) and the location of dry docking support blocks.
    d) Any anti-fouling system(s), including patch repairs, that was applied out of the water. Detail the type of anti-fouling coating system, the area to which it was applied, the coating thickness achieved and any surface preparation work undertaken (e.g. complete removal of underlying anti-fouling system or application of new anti-fouling system over the top of existing anti-fouling system).
    e) Name, position and signature of the person in charge of the activity for the vessel.
2. All details relating to an inspection of the vessel undertaken in accordance with Performance Standard 2, between 4 and 8 months from the date of application of the anti-fouling.
3. When the hull area, fittings, niches and voids below the waterline are inspected by divers for whatever reason, including the inspection undertaken in accordance with

Performance Standard 2, the Forms in Appendix 4 shall be completed and a copy kept with the Biofouling Record Book.

4. When the hull area, fittings, niches and voids below the waterline have been cleaned:
    a) Date and location of vessel when cleaning/treatment occurred.
    b) Hull areas, fittings, niches and voids cleaned/treated.
    c) Methods of cleaning or treatment used.
    d) General observations about the biofouling (i.e. extent of biofouling and predominant biofouling types; e.g. mussels, barnacles, tubeworms, algae and/or slime).
    e) Any supporting evidence of the actions taken (e.g. report from the classification society or contractor, photographs and receipts).
    f) Records of permits required to undertake in-water cleaning, if applicable.
    g) Name, position and signature of the person in charge of the activity.
5. When the internal seawater cooling systems have been inspected and cleaned or treated:
    a) Date and location of vessel when inspection and/or cleaning occurred.
    b) General observations about biofouling of internal seawater cooling systems (i.e. extent of biofouling and predominant biofouling types; e.g. mussels, barnacles, tubeworms, algae and/or slime).
    c) Any cleaning or treatment undertaken.
    d) Methods of cleaning or treatment used.
    e) Any supporting evidence of the actions taken (e.g. report from the classification society or contractor, photographs and receipts).
    f) Name, position and signature of the person in charge of the activity.
6. For vessels with a MGPS fitted:
    a) Records of operation and maintenance (such as regularly monitoring the electrical and mechanical functions of the systems).
    b) Any instances when the system was not operating in accordance with the Biofouling Management Plan.
7. Periods of time where the vessel berths, anchors or moors for more than 7 consecutive days:
    a) Date and location where vessel was berthed, anchored or moored
    b) Date when vessel returned to normal operations.
    c) Maintenance action taken before and after the period berthed, anchored or moored.
    d) Precautions taken to prevent biofouling accumulation (e.g. sea chests blanked off).
8. Periods of time when the vessel is operating outside its normal operating profile:
    a) Duration and dates when vessel not operating in accordance with its normal operating profile.
    b) Reason for departure from normal operating profile (e.g. unexpected maintenance required).

9. Since the vessel was last cleaned, has the vessel spent periods of time in locations that may significantly affect biofouling accumulation (e.g. fresh water, high latitude—Arctic and Antarctic—or tropical ports)?

10. Any additional observations and general remarks.

Record of Biofouling Management Actions

SAMPLE BIOFOULING RECORD BOOK PAGE

Name of Ship: .....

Registration number: .....

Date	Item (number)	Record of management actions	Signature of officers in charge

Signature of master .....

Appendix 8

Statutory Restrictions in Parts 2 and 3 of the RMA

Legislative framework—the Resource Management Act 1991

The cornerstone of the Act is Part II, the Purpose and Principles. All the section references below refer to sections in the RMA.

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 well-being 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.

6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga:

(f) the protection of historic heritage from inappropriate subdivision, use, and development.

(g) the protection of protected customary rights.

(h) the management of significant risks from natural hazards.

7 **Other matters**

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:

(ba) the efficiency of the end use of energy:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(e) *[Repealed.]*

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(h) the protection of the habitat of trout and salmon:

(i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

8 **Treaty of Waitangi**

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Restrictions on use of the coastal marine area

Part 3 of the RMA contains duties and restrictions. Sections 12, 14 and 15 of the RMA restrict certain activities in the coastal marine area unless expressly allowed by a rule in a regional coastal plan (i.e. as a permitted activity) or a coastal permit. This plan contains objectives, policies and methods including rules, which establish the framework within which certain uses are permitted, or prohibited, or for which applications for coastal permits will be accepted and assessed.

Appendix 9

Other agencies with key roles in coastal marine area

AGENCY	RESPONSIBILITY
Minister of Conservation under RMA	• Responsible for sustainable coastal management in conjunction with councils • Preparation, monitoring and review of New Zealand Coastal Policy Statements • Approval of regional coastal plans
Department of Conservation under other legislation	• Servicing the Minister of Conservation • Advocating for sustainable coastal management • Implementation of the New Zealand Coastal Policy Statement • Marine reserves • Marine mammal and wildlife protection
Environmental Protection Authority	• Marine consents in New Zealand's Exclusive Economic Zone • Proposals of national significance in the coastal marine area
Ministry for Primary Industries - Fisheries	• Fisheries and habitat management • Fisheries permits for marine farms
Ministry for Primary Industries - Biosecurity	• Leadership of the New Zealand biosecurity system; it encompasses facilitating international trade, protecting the health of New Zealanders and ensuring the welfare of our environment, flora and fauna, marine life and Māori resources
Maritime New Zealand	• Marine oil pollution response • Navigation safety—ship standards, navigation aids, shipping routes, manning requirements, maritime safety inspections, aids to navigation • Search and rescue • Maritime incident response (including places of refuge)
Ministry for Business, Innovation and Employment	• Allocation of mineral resources
Heritage New Zealand Pouhere Taonga	• New Zealand's national historic heritage agency and guardian of New Zealand's national heritage; maintains the New Zealand Heritage List and ArchSite
United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Committee	• Establishes the sites to be listed as UNESCO World Heritage Sites and is responsible for the implementation of the World Heritage Convention