

Bay of Plenty - Marine Reserves

Tuhua (Mayor Island)
Marine Reserve



Te Paepae o Aotea



White Island



-  Marine Reserve
-  No Commercial Fishing Zone

2.5 MARINE RESERVES




Marine reserves are managed as a place because of their unique role as the marine equivalent of terrestrial conservation areas, protecting important ecosystems and habitats.

Marine reserves provide long-term legal protection for species and habitats. At present, less than five per cent of New Zealand's territorial sea is fully protected as no-take marine reserves. Less than 0.1 per cent is around the mainland coast. Marine reserves are the highest form of protection for marine protected areas, and as such are expected to provide the core of the marine protected area network.

The marine environment is poorly understood in comparison with terrestrial ecosystems. Marine reserves are extremely valuable as places to further scientific knowledge and increase understanding of marine processes.

The two marine reserves within Bay of Plenty Conservancy are Te Paepae o Aotea (Volkner Rocks) and Tuhua (Mayor Island). Both of these reserves protect subtidal rock reef marine assemblages.

For marine reserves to reach and maintain their full biological potential, compliance and law enforcement activities are essential. Both Te Paepae o Aotea and Tuhua marine reserves have internal compliance and law enforcement response plans to guide the Department of Conservation's activities. But both are located some distance offshore. Ensuring their long-term viability requires the co-operation and support of all users, including commercial operators, to ensure adherence to regulations and provisions.

An underwater photograph showing several fish swimming in clear blue water. The fish are of various species, including what appear to be snappers or similar reef fish. The background is slightly hazy, suggesting depth.

Marine reserves contribute to preservation and enhancement of marine biodiversity. They provide safe spawning and nursery habitats for commercially and recreationally valuable fish species. Research suggests that, over time, individuals disperse into adjacent marine areas, enhancing the wider environment. Ecotourism ventures such as guided kayak tours, underwater photography and diving and snorkelling trips allow people to experience and learn about marine biodiversity in settings unaltered by extractive uses.

Te Paepae o Aotea (Volkner Rocks) Marine Reserve

Te Paepae o Aotea Marine Reserve (1267 hectares) was established in October 2006 after a joint application by the Director General of Conservation and the Whakaari Marine Protection Steering Committee. This marine reserve, 55 kilometres offshore from Whakatane, possesses outstanding natural features of international significance.

Ngāti Awa are regarded as the kaitiaki (custodians) of Te Paepae o Aotea on behalf of all Mataatua iwi. Te Paepae o Aotea holds significant cultural and historical values and is wāhi tapu. Because of the cultural sensitivity of Te Paepae o Aotea, tangata whenua have requested that sensitive details not be included in this strategy.


The marine reserve comprises three volcanic rock stacks or pinnacles that rise approximately 113 metres above sea level. The pinnacles are geologically linked to the active andesite volcano of Whakaari (White Island) and they drop away almost vertically before levelling out to the seafloor 400 metres below the surface. The water is unusually clear due to low levels of sedimentation and run-off from the hard rock pinnacles, and visibility can extend up to 40 metres. Oceanic and subtropical currents merge here and the tropical and temperate species present create a unique marine ecosystem.

Large schools of pelagic (open water/oceanic) and reef fish such as kahawai and kingfish are found in the surface layers of the reserve. The depths provide refuge for deep-water species such as hapuka (grouper). Rare invertebrate species include the fire brick starfish and the diadema urchin. The reserve's sessile invertebrate community is in the top ten per cent of the world's most diverse marine invertebrate assemblages.

Tuhua (Mayor Island) Marine Reserve

Tuhua Marine Reserve (5000 hectares) was established in January 1993 after the Tuhua Trust Board, as representatives of the owners and tangata whenua, called for the establishment of a marine reserve and a complementary restricted fishing area (administered by the Ministry of Fisheries) around the remainder of Tuhua. The reserve extends from the mark of mean high water springs around the northern quarter of Tuhua out to one nautical mile offshore. The reserve includes approximately five kilometres of coastline from Tumutu Point east to Turanganui Point.

The cultural importance of Tuhua Marine Reserve and the once abundant kai moana resources are reflected in a comment made by a rangatira of

An underwater photograph showing several fish swimming in clear blue water. The fish are of various species, including what appear to be snappers and kingfish. The background is slightly hazy, suggesting depth.

Tuhua who referred to the surrounding waters as ‘our matapuna ika’ or ‘our well of fish’. The same chief told his people, ‘We must not fail to conserve our matapuna ika’.

Tuhua arose from the sea amongst the violent explosions of a calderic volcano. The underwater substrate within Tuhua Marine Reserve reflects this tumultuous formation. The seascape is varied, with extensive areas of sand, vast arrays of large angular volcanic blocks interspersed with deep cracks and crevices, and boulders and cobbles rounded smooth by wave movement. In Orongatea Bay, bubbles emitted from active thermal hot springs can be seen close to shore. Steep drop-offs to 50 metres depth are found towards the seaward end of the reserve.

Large black spiny sea urchins, chitons, snails and limpets, rock lobsters, brittle and feather stars and sea cucumbers are common inhabitants of subtidal reef systems. Where sea urchin numbers are low and rocks and boulders are present, extensive kelp forests can form dense canopies. Over 60 species of finfish are known from the reserve. Common species in shallow, rocky areas include black angelfish, leatherjacket, hiwihiwi, marblefish, paketi, banded wrasse and red moki. Two-spot demoiselles, sweep and blue maomao occur widely and goat fish are common in sandy areas. Snapper and kingfish are also commonly observed. Moray eels and stingrays are occasionally observed and schools of koheru, kingfish, trevally and pink maomao often congregate near pinnacles and deeper water drop-offs. Subtropical species encountered occasionally include Lord Howe coralfish, long-finned boarfish, clown toado and crimson cleanerfish.

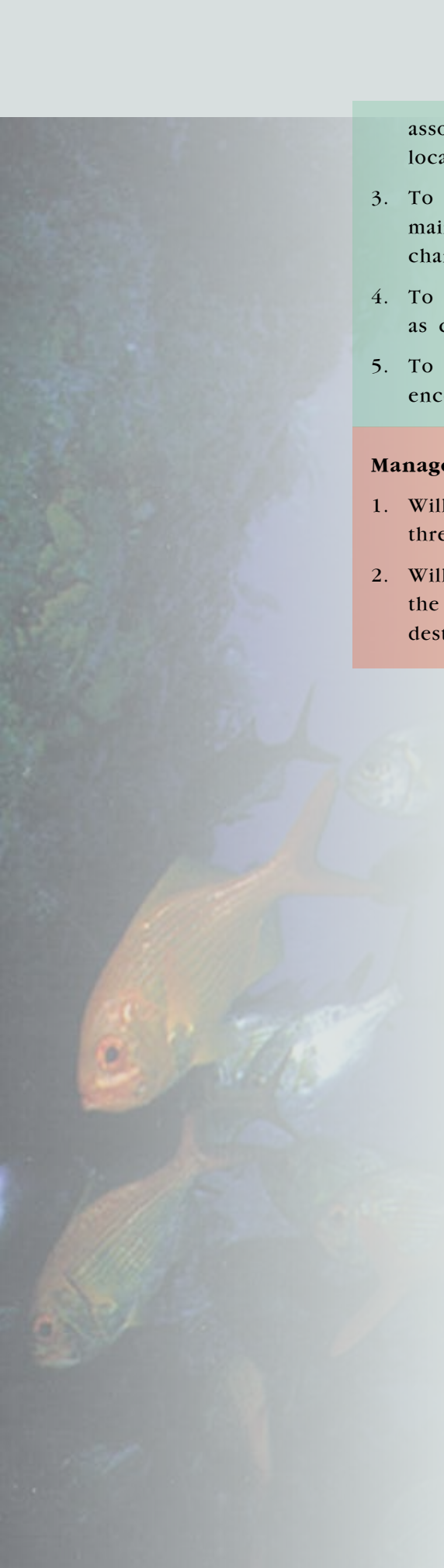
Tuhua and its surrounding marine environs were once internationally renowned for recreational and big game fishing as well as diving. However, recreational and commercial fishing pressures severely depleted fish stocks around the island. Fish numbers are still relatively low and more research is needed to ascertain the reasons.

Outcomes - Marine Reserves

1. The diverse habitats and ecosystems of Te Paepae o Aotea and Tuhua marine reserves sustain viable populations of indigenous flora and fauna.
2. Te Paepae o Aotea and Tuhua marine reserves are recognised and valued and lead to an increased understanding of the wider marine environment.
3. Research at Te Paepae o Aotea and Tuhua marine reserves increases knowledge of the marine environment.

Management Objectives

1. To recognise the special connection of tangata whenua with Te Paepae o Aotea and Tuhua marine reserves.
2. To manage Te Paepae o Aotea Marine Reserve to protect and allow for the restoration of the biotic communities and ecological processes

An underwater photograph showing a school of fish swimming near a coral reef. The water is clear and blue, and the coral is visible in the background.

associated with the reserve's topographical diversity and geographical location.

3. To manage Tuhua Marine Reserve to allow for the recovery and maintenance of the subtropical reef fish populations that once characterised the Tuhua Island environs.
4. To encourage visitor use of marine reserves through activities such as charter boat tours and diving.
5. To increase understanding and appreciation of marine reserves by encouraging education partnerships.

Management Policies

1. Will work with tangata whenua and other organisations to co-ordinate threat management and compliance within marine reserves.
2. Will work with tangata whenua and communities of interest, including the tourism industry, to market and promote marine reserves as visitor destinations.

