

6. Whanganui-A-Hei (Cathedral Cove) marine reserve extension

Site description

Whanganui A Hei (Cathedral Cove) Marine Reserve is Coromandel Peninsula's only marine reserve. Established in 1992, it is located on the east coast just north of Hahei. It protects 8.8 km² of coastal waters, spanning 5 km of coastline and extending 1 km offshore. Several small nearshore islands and isolated patch reefs are included in the reserve. Ōi / grey-faced petrels (*Pterodroma macroptera*) are known to breed on Mahurangi Island (Goat Island) at the reserve's southern boundary. The reserve is adjacent to the Cathedral Cove Recreation Reserve, which attracts large numbers of visitors every year.



Marine biodiversity values

The habitats and biological assemblages in the marine reserve and surrounds are typical of coastal northeast North Island. Rocky reefs, soft sediments, intricate caves and underwater arches provide homes for complex communities of plants, crustaceans, molluscs and fishes (Fig. 28). The shallow rocky reefs within the reserve are dominated by large brown algae, particularly *E. radiata* and *Carpophyllum flexuosum*. Sponge-dominated assemblages occur on reefs below 30 m depth, and large green-lipped mussels (*Perna canaliculus*) cover much of the South Sunk Rock reef system (located just outside the reserve).



Low relief, almost flat, rocky platforms occur in some outer parts of the reserve. They are covered in a thin layer of sand, short turfing algae and small sponges.

Killer whales (*Orcinus orca*) visit the marine reserve at irregular intervals, possibly hunting short-tail stingrays and eagle rays (*Myliobatis tenuicaudatus*). Juvenile green turtles (*Chelonia mydas*) have occasionally been seen around the islands.

Figure 28. Clown nudibranch (*Ceratosoma amoenum*).
Te Whanganui-a-Hei Marine Reserve. Photo: Brian Mackie

Direct pressures

Parts of the marine reserve, particularly Cathedral Cove and Stingray Bay, are heavily used recreationally, creating potential for trampling impacts on intertidal organisms and disturbance of coastal wildlife, particularly birds. Boat traffic includes kayaks and other vessels visiting the reserve or Cathedral Cove, as well as a large number that are just passing through. Launches occasionally anchor overnight off Cathedral Cove. The effect of this on coastal wildlife and species such as stingrays that use the shallows is unknown. Recreational fishing, including spear fishing and scuba diving for rock lobster, as well as commercial rock lobster fishing occurs around the boundary of the reserve. Recreational fishing can be intense during public holidays and illegal fishing in the reserve is not uncommon, particularly around the Mahurangi Island (Goat Island) boundary.

Existing management

Whanganui A Hei (Cathedral Cove) Marine Reserve is a no-take MPA in which all removal of marine life (alive or dead), habitat disturbance (including discharges of effluent) and introductions of organisms are prohibited. DOC undertakes systematic, long-term biological monitoring of rocky reef

communities and selected species such as red rock lobster within the marine reserve and at control sites outside it (Haggitt & Mead 2009).

In waters outside the reserve there are prohibitions on trawling, Danish seining and commercial scallop dredging²⁴.

The Auckland Coromandel shellfish recreational daily bag limits and size restrictions apply to recreational fishers outside the marine reserve.

The coastline, coastal waters and islands off Cathedral Cove are classed as an area of Outstanding Natural Character in the Waikato Regional Coastal Plan²⁵.

Sea Change Plan proposal for Whanganui A Hei (Cathedral Cove) Marine Reserve

The proposal seeks to extend the boundary of the existing marine reserve further offshore and along its eastern border to encompass Mahurangi Island (Goat Island) and Te Tio Island to the south of the existing reserve (Fig. 29). The objective of this proposal is twofold, first to improve protection to account for offshore rock lobster movement and second to provide direct access to the marine reserve from Hahei Beach. To this end, the proposal extends the southern border to encompass approximately half the length of Hahei Beach.

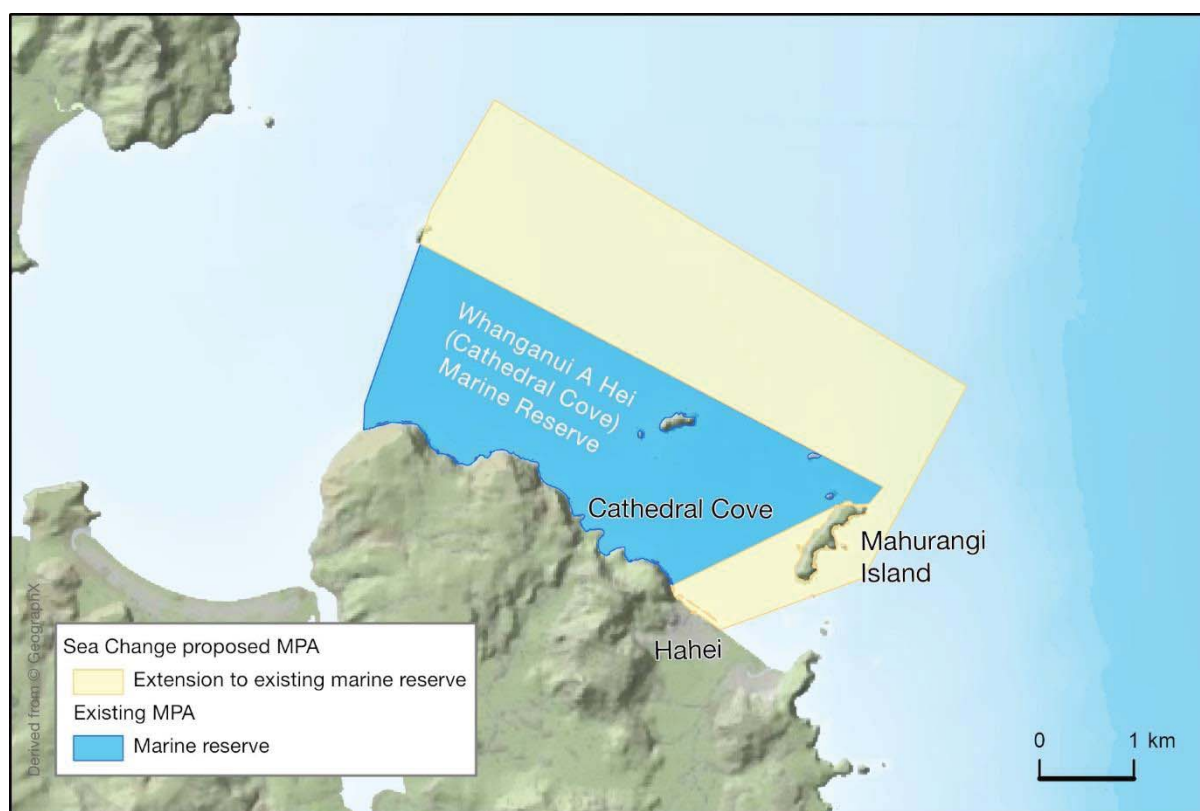


Figure 29. Sea Change Plan proposal for extension of Whanganui A Hei (Cathedral Cove) Marine Reserve.

²⁴ 6 (2) Auckland and Kermadec Areas Commercial Fishing Regulations 1986.
<http://www.legislation.govt.nz/regulation/public/1986/0216/43.0/DLM104498.html> (accessed 22 October 2020).

²⁵ Waikato Regional Council 2005: Waikato Regional Coastal Plan. Waikato Regional Council.
<https://www.waikatoregion.govt.nz/Council/Policy-and-plans/Rules-and-regulation/Regional-Coastal-Plan/> (accessed 21 October 2020).

The proposal would extend the marine reserve by 9 km², taking the total area of marine reserve to approximately 18 km² marine area (0.13% HGMP), adding approximately 5 km of coastline (of which approximately 800 m are along Hahei Beach).

Agency assessment of habitats and ecologically significant features that would be protected

The proposed marine reserve in Scenario 1 would provide a high level of protection to the habitats that it contained, and the biodiversity associated with those habitats. Based on the habitat classification, 11 physical habitats would be afforded protection by this proposal (see Appendix 3 for full list of habitats). Of particular note are the rocky reef associated with Mahurangi Island (Goat Island) and the additional protection for the offshore reefs (adding deep reef habitat to the marine reserve).

The extension would provide for a buffer around the outer edge of the reef system, increasing its efficacy in protecting reef ecosystems.

Agency assessment of proposal against Sea Change Plan objectives

Table 19 provides the Sea Change Plan objectives for marine reserves and whether the proposal contributes to the objectives.

Table 19. Assessment of Whanganui A Hei (Cathedral Cove) Marine Reserve extension against Sea Change Plan objectives.

MARINE RESERVE OBJECTIVES	WHANGANUI A HEI (CATHEDRAL COVE) MARINE RESERVE EXTENSION
Set aside places where mana whenua and communities want to experience abundance and diversity of marine and coastal life	Would allow some recovery to meet this objective
Conserve and protect cultural and spiritual values and practices associated with nature according to tikanga such as solitude, protection of wāhi tapu and connection to tupuna	To be confirmed with mana whenua
Identify and protect the full range of marine communities and ecosystems with high biodiversity value by 2020	Deep reef features are identified at this site that would contribute to this objective
Identify and protect enough of each habitat type to ensure ecosystem integrity and resilience	Would provide protection for several habitat types, would contribute to this objective
Through these areas, develop a baseline to better understand the ecological integrity of ecosystems within the Hauraki Gulf Marine Park, including progressing the knowledge on impacts of human activities	Would contribute to this objective
Provide reference areas for marine research, monitoring and education	Would contribute to this objective
Provide opportunities for the enjoyment of restored marine environments through education, and sustainable recreation and tourism	Would contribute to this objective by allowing environmental restoration

Agency response to Sea Change Plan proposal

Agencies support this proposal, noting that it would enhance the existing reserve by increasing the extent of some soft sediment habitats and reefs, and providing a buffer for other reef habitats encompassed in the existing marine reserve.

Modifications to proposal

Agencies consider that in order to better deliver on the purpose and outcomes for MPAs in the Sea Change Plan, follow best-practice MPA design criteria as well as minimising potential effects on existing users, the following adjustment is recommended to the proposed extension:

- Adjust the western boundary of the extension to follow the bearing of the existing marine reserve.
- Adjust the northern boundary further offshore (approximately 900 m) to provide an effective buffer to the reefs included in the extension.
- Adjust the southern extension so that the boundary runs along the western Mahurangi Island (Goat Island) coastline and crosses from the southern point of the island towards Hahei Beach, to minimise potential effects on existing users.

The area of the proposed extension to progress is 14.6 km².

Alignment with existing legislation and policy

As the proposed marine reserve would have the same protection status as the current marine reserve, it is likely to be consistent with the Marine Reserves Act 1971 and will be referred to as a **marine reserve** in recognition of this (Fig. 30).

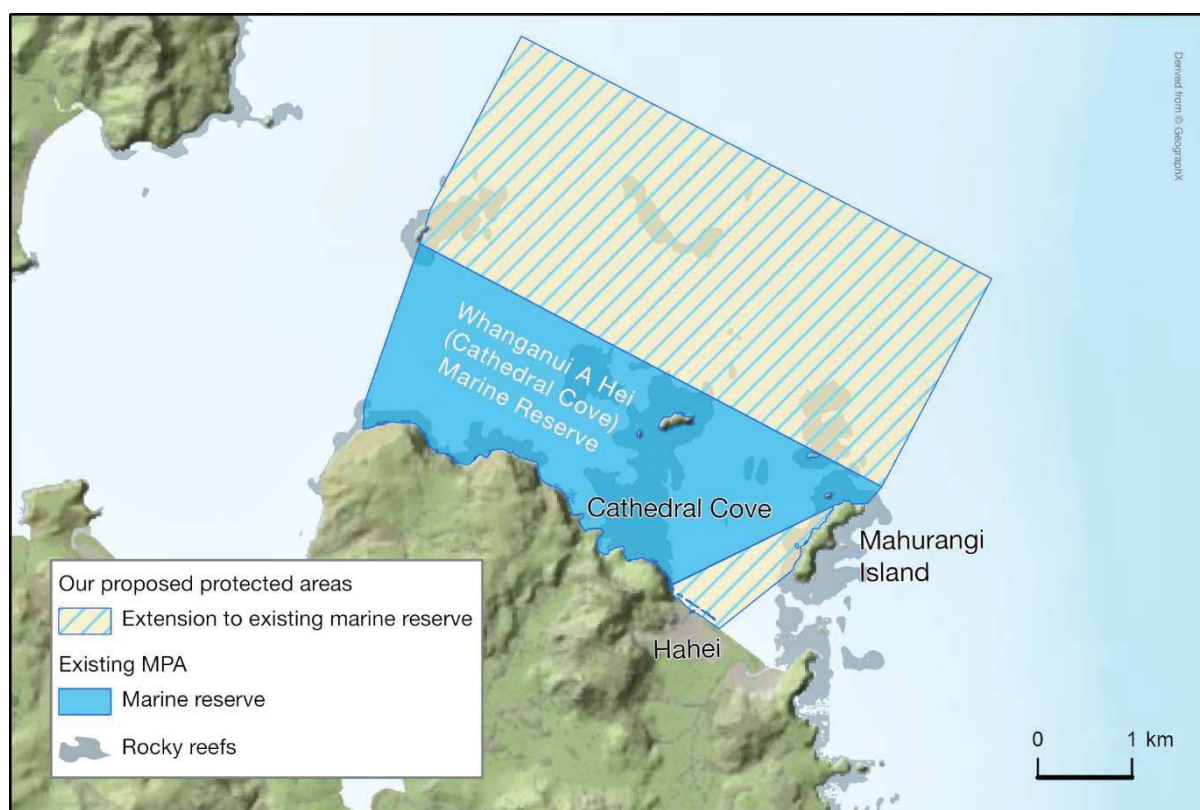


Figure 30. Preferred option for Whanganui A Hei (Cathedral Cove) Marine Reserve extension.

Activities that would be affected by the marine reserve extension

A summary of the existing users that may be affected by the proposal is given in Table 20.

Table 20. Assessment of affected users for the proposed Whanganui A Hei (Cathedral Cove) Marine Reserve extension.

ACTIVITY	MARINE RESERVE
Commercial fishing	<p>All commercial fishing would be prohibited.</p> <p>Based on the best available information used for the assessment, Fisheries New Zealand estimates the foregone revenue of displaced commercial catches from the site to be \$31,000 based on a total reported average yearly catch of 3.8 tonnes. The biggest displacement would be experienced by the snapper fishery, of which 1.5 tonnes per year would be displaced. The economic impact would be small and impact mostly the snapper fishery.</p>
Recreational fishing	<p>All recreational fishing would be prohibited.</p> <p>An analysis of the spatial distribution of recreational fishing effort (number of stationary boats actively fishing) and landed snapper and kahawai catch within the Hauraki Gulf Marine Park indicates that 0.34% of recreational fishing effort and 0.16% and 0.5% of snapper and kahawai landed catch would be displaced, respectively.</p>
Mining and petroleum exploration	<p>All mining and petroleum exploration would be prohibited. Foregone benefits from future potential mining or petroleum extraction in the area would not likely be significant as the area is not known to hold any significant deposits of Crown minerals.</p>
Extraction of any material for commercial use	<p>All commercial extractive activities would be prohibited. No current extraction of material is known to occur.</p>