7 Assessment of proposed Waitaki marine reserve



Figure 7-1: Location of the proposed Waitaki marine reserve

7.1 Introduction

The Application for this proposed marine reserve is presented on pages 82–86 of the Consultation Document¹⁷⁶ (see Appendix 1).

7.1.1 Site description

The proposed marine reserve would start approximately 2 km south of the Waitaki River and extend 14.8 km south along the coast to just north of Landon Creek. It would extend from mean high water springs¹⁷⁷ to approximately 8 km offshore, roughly aligning with the 20 m depth contour (Figure 7-1). The proposed site would cover approximately 101 km². While the Application proposed a landward boundary of mean high water springs, we note there are private property titles in this area that evidently extend seaward of mean high water springs in places. If the proposed marine reserve is approved, Te Papa Atawhai will engage a registered surveyor to work through establishing an exact legal boundary as part of the survey office plan process for the Order in Council.

7.1.2 Forum recommendations

- The proposed marine reserve corresponds to Site B1 as identified by the Forum. In its Recommendations Report¹⁷⁸ to Ministers, the Forum highlighted the strong influence of the Waitaki River in this area, as it carries both freshwater and sediment from land into the marine environment. The Forum specifically noted the importance of the boulder and gravel habitats at this site. They noted the kelp beds associated with the boulder habitat are likely a unique habitat in the region, due partly to the influence of the Waitaki River.
- Boulder and gravel habitats support many different species, including rhodolith beds (hard, calcified red algae) which are associated with high biodiversity and are likely to be found in this area. The Forum also noted that the site is likely to be a productive area, with species such as kororā/little penguins foraging in the area.

7.1.3 Activities proposed to be authorised to continue

- The Application proposes that some activities be allowed to continue if the proposed marine reserve is established. These are:
 - activities operating under existing resource consents
 - · fossicking of beach materials
 - retrieval of k\u00f6iwi t\u00e4kata¹⁷⁹
 - vehicle access to the foreshore (in limited circumstances).
- Our advice on providing for these activities through Order in Council conditions is set out in 7.8.1.

7.1.4 Chapter outline

This chapter:

po Department of Conservation and Fisheries New Zealand 2020. Proposed southeast marine protected areas: Appendices to consultation document (including marine reserve applications) June 2020. 126 p.

¹⁷⁷ Average of each pair of successive high waters when the range of the tide is greatest https://www.linz.govt.nz/sea/tides/introduction-tides/definitions-tidal-terms.

¹⁷⁸ South-East Marine Protection Forum. 2018. Recommendations to the Minister of Conservation and the Minister of Fisheries: Recommendations towards implementation of the Marine Protected Areas Policy on the South Island's south-east coast of New Zealand. Department of Conservation. Wellington. 314 p.

¹⁷⁹ Unidentified (Māori) human remains.

- outlines our assessment of the benefits of the proposed marine reserve
- outlines matters discussed during Treaty partner engagement
- presents the numbers of submissions that were received through statutory consultation
- describes the issues raised in these submissions
- provides our advice in relation to the tests under section 5(6) and section 5(9) of the Marine Reserves Act.

7.2 Assessment of the benefits of the proposed Waitaki marine reserve

- Sections 3.2.4 and 3.2.5 set out the framework for assessing whether any objections related to this proposed marine reserve should be upheld pursuant to the 'interfere unduly' and 'otherwise contrary to the public interest' tests in section 5(6) of the Marine Reserves Act.
- You should assess the objections in light of the purpose of the Marine Reserves Act and the benefits of the proposed site in terms of achieving that purpose. You also need to assess the values of the proposed marine reserve and the 'overall public advantages' that would come from this area being declared a marine reserve. This includes the site's contribution to the proposed Network and the assessment provided in 6.2 of the values and benefits of the proposed Network overall.
- The following section is a summary of our assessment of those benefits in relation to the proposed marine reserve. Much of this assessment is also relevant to your decision-making under section 5(9) as discussed further in 7.8, which includes an assessment of your obligations under the Treaty of Waitangi (as set out in 3.3). More detail is also available in section 4.1 of the Application.

7.2.1 Achieving the purpose of the Marine Reserves Act

As described in 3.2.1, the general purpose of the Marine Reserves Act is:

"...preserving, as marine reserves for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life, of such distinctive quality, or so typical, or beautiful, or unique, that their continued preservation is in the national interest."

A full assessment of the proposed marine reserve against these criteria is set out in section 4.1.2 of the Application.

7.2.1.1 Underwater scenery, natural features, and marine life

The waters around the mouth of the Waitaki River have regionally unique natural features due to the influence of freshwater and river sediments on the marine environment. The habitat types in the proposed marine reserve area are typical of the North Otago and South Canterbury coast.

Marine life associated with these habitats features biodiversity that is both distinctive, due to the influence of the Waitaki River, and typical of the region. Rhodoliths are thought to occur in the cobble and gravel habitats of the proposed marine reserve area. They have high ecological value as biogenic (living) habitat that supports many other species.

¹⁸⁰ CRA3 Industry Association Inc v Minister of Fisheries HC Wellington CP317/99, 24 May 2000, at [36].

7.2.1.2 Opportunities for scientific study

Representing the full range of New Zealand's habitats and ecosystems in marine reserves has high scientific value. It contributes to the scientific purpose of the Marine Reserves Act and is an essential aspect of the Marine Protected Areas Policy and Implementation Plan (MPA Policy). The natural features described above, and the particular habitats that would be represented by this proposed marine reserve, contribute to the value of this site for scientific study and research. Its proximity to a major river system or the presence of uncommon rhodolith beds, for example, may be of particular interest for future research.

7.2.2 Other values and advantages to the public

- The benefits to the public of establishing long-term protection of the representative habitats found in this proposed marine reserve, including benefits to fisheries, are expected to be considerable.
- It is also anticipated that the benefits of enhancing protection of the foraging area of the region's significant wildlife populations would be advantageous to these species. While opportunities for the public to experience wildlife directly at the proposed marine reserve are more limited due to access, it is expected that there would be broader benefits across the region for both the public and ecotourism industry.
- The health and resilience of marine life in the proposed marine reserve area can be expected to be enhanced by marine reserve protection. This will increase the ecosystem services (benefits from nature) it provides over time, which is of value to the public.

7.2.3 Contribution to the proposed Network of marine protected areas

- This proposed marine reserve contains representative areas of moderately exposed gravel beach and shallow gravel habitats, and moderately exposed shallow mud habitat. This is the only proposed marine reserve in the proposed Network that would protect moderately exposed shallow gravel habitat. This habitat is the third largest habitat type in the region, so is important to include in a representative network of protected sites. By protecting this range of habitats and their associated biodiversity, this proposed marine reserve makes an important contribution to a regional network of marine protected areas.
- This site adjoins the proposed Moko-tere-a-torehu Type 2 marine protected area. Protection would be provided across the habitats within these areas and link with other proposed sites to the south.

7.3 Consideration of Kāi Tahu views on the proposed marine reserve as heard through engagement

As outlined in 2.6.2, Te Papa Atawhai, Tini a Tangaroa and Kāi Tahu held a number of hui between July 2020 and July 2021. Further engagement has continued, including directly with Ministers. The purpose of this engagement has been to further understand Kāi Tahu rights and interests and views (including concerns) in relation to the establishment and management of the proposed southeast marine protected areas and to understand and work through the issues raised, including the measures proposed by Kāi Tahu to address their concerns. These views, proposed measures, our advice and recommendations are each set out in 6.3. Sections 7.8.1.1 and 7.8.2 list the recommendations that apply to the proposed Waitaki marine reserve.

7.4 Submissions received on the proposed Waitaki marine reserve

- In total 4,054 submissions on the proposed Waitaki marine reserve were received, with 89% in support of its establishment as proposed¹⁸¹. This included submissions on the proposed Network¹⁸² and on the proposed Waitaki marine reserve specifically. There were 146 submissions specifically on this proposed marine reserve with 54 (37%) objections (either outright objections or expressing partial support), 88 (60%) in support and 4 (3%) did not give a preference.
- Of the 146 submissions, 7 were from submitters identified as affected iwi, hapū or whānau under the Marine and Coastal Area (Takutai Moana) Act 2011 (te Takutai Moana Act). Two supported implementing the proposed marine reserve and five objected. A further five submissions (one in support and four in objection) were from other Māori submitters (i.e. those who do not whakapapa to the Kāi Tahu rohe¹⁸³ and therefore were not identified as affected iwi, hapū or whānau under te Takutai Moana Act, as set out in 5.2).
- Submitters in support of the proposed marine reserve being established gave the following main reasons¹⁸⁴:
 - the benefits of the proposed protection for marine species, habitats and ecosystems
 - the long-term ecological benefits of marine reserves for ecosystem and biodiversity recovery
 - an understanding that the community and scientific benefits would outweigh the
 costs.
- Submitters who did not support the proposed marine reserve being established or wanted changes before it was established, gave the following main reasons¹⁸⁵:
 - that the status quo is sustainable, and the area is not overfished
 - negative effects on recreational fishing
 - a reduction in the supply of food for the community
 - insufficient consultation was carried out
 - the proposal impinges on customary fishing rights.

¹⁸¹ This included submitters who qualified their support by suggesting changes but whose support was not conditional on the

¹⁸² See chapter 5 for detail on how submissions were classified, assigned and analysed.

¹⁸³ To descend genealogically to the region of the Kāi Tahu (Ngāi Tahu) tribal group.

¹⁸⁴ Bothwell, J., Long, D., Daddy, N., Hing, Z. 2020. Proposed southeast marine protected areas: Summary of submissions September 2020. Published by Public Voice. 209 p.

¹⁸⁵ Ibid.

7.5 Stage 1 assessment – objections from affected iwi, hapū or whānau

7.5.1 Obligations in relation to the Treaty of Waitangi

- As set out in 3.2.7, as part of your assessment of objections under section 5(6) of the Marine Reserves Act, you have obligations relating to the Treaty of Waitangi, including those under section 49 of te Takutai Moana Act and section 4 of the Conservation Act.
- Under section 49 of te Takutai Moana Act, you, as the decision-maker, 'must have particular regard to the views of those affected iwi, hapū, or whānau in considering the application' (see 3.3.2 for more information). To allow you to do so, the objections received from submitters who are affected iwi, hapū or whānau are set out below, along with our advice on these objections under section 5(6)(a)–(e) of the Marine Reserves Act. As described in 5.2, Te Papa Atawhai has proceeded on the basis that any submissions (including objections) received from submitters affiliated with Kāi Tahu are considered as being from 'affected iwi, hapū, or whānau' for the purpose of te Takutai Moana Act.
- The obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi when interpreting and administering the Marine Reserves Act is also relevant to your assessment of objections from submitters identified as affected iwi, hapū, or whānau. In order to give effect to the principle of informed decision-making, all objections received from these submitters are identified and analysed below. The principles of partnership and active protection are also relevant. For the proposed Waitaki marine reserve, these principles are primarily relevant to your assessment of the objections that relate to impacts on non-commercial fishing activities, including the ability to continue the customary harvest of seafood. Te Papa Atawhai considers these issues relate to the protection of non-commercial customary fishing rights (noting the relevance of the Treaty of Waitangi (Fisheries Claims) Settlement Act to this matter – see 3.3.4.3), and the ability of Kāi Tahu to exercise tino rangatiratanga and kaitiakitanga over the areas covered by the proposed marine reserves and taonga present (including those taonga and taonga fish species identified under the Ngāi Tahu Claims Settlement Act, see 3.3.3). In considering whether or not to uphold the objections relating to these matters, therefore, you must consider whether to do so would give effect to the Treaty principles of partnership and active protection.
 - In considering your Treaty obligations in relation to these objections, the direct engagement with Kāi Tahu and the recommendations reached as a result of that engagement are directly relevant. Our advice in relation to the direct engagement with Kāi Tahu, including our consideration of each of the measures proposed by Kāi Tahu to mitigate what Kāi Tahu consider to be the impacts of the proposed marine protected areas (including the proposed marine reserves) on Kāi Tahu rights and interests and our recommendations are set out at 6.3. As set out in 6.3.10, our assessment, prior to considering any objections received, is that to declare each of the proposed marine reserves (including Waitaki) on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty. This includes our assessment that to make these decisions would be consistent with the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi. In assessing the relevant objections below, therefore, we have considered whether there is anything additional that has been raised that means, in order to be consistent with Treaty obligations, an objection should be upheld (meaning that the proposed marine reserve should not be declared) or that additional mitigation measures are required. For this assessment, we have proceeded on the basis that our recommendations in relation to the direct Kāi Tahu engagement will be progressed.

Our assessment is that the issues raised in the objections described below do not raise anything additional to that traversed through the extensive engagement with Kāi Tahu. On that basis, in accordance with our conclusion in 6.3.10, we consider that a decision to not uphold any of these objections would also be consistent with your obligations under section 4 and other Treaty obligations, and would therefore fulfil the Crown's obligations in relation to the Treaty.

7.5.2 Section 5(6)(a) estate or interest in land

No objections that raised issues relating to any estate or interest in land in or adjoining the proposed reserve were received from submitters identified as affected iwi, hapū or whānau.

7.5.3 Section 5(6)(b) navigation

No objections that raised issues relating to any existing right of navigation were received from submitters identified as affected iwi, hapū or whānau.

7.5.4 Section 5(6)(c) commercial fishing

No objections that raised issues relating to commercial fishing were received from submitters identified as affected iwi, hapū or whānau.

7.5.5 Section 5(6)(d) recreational usage

No objections that raised issues relating to existing use of the area for recreational purposes were received from submitters identified as affected iwi, hapu or whānau.

7.5.6 Section 5(6)(e) public interest

7.5.6.1 Objections related to impacts on customary interests

Two objections from submitters identified as affected iwi, hapū or whanau stated that the proposed marine reserve would affect their customary rights or practices. One said the "proposal offends my customary rights to get a feed of fish when Every [sic] I choose". This submitter made the same submission in relation to each of the proposed marine reserves except for Papanui.

The other submission was from the Waitaha Taiwhenua o Waitaki Trust¹⁸⁶ and stated that "marine reserves have precluded tangata whenua in many cases from maintaining their customary fishing practices". It also said Waitaha whānau had traditionally used this site for mahinga kai (food gathering) and continued to do so.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

In terms of the objections concerning the submitters' rights to the customary harvest of seafood, it is acknowledged that the declaration of a marine reserve will prevent extractive fishing activities, including the non-commercial customary fishing activities currently undertaken by affected iwi, hapū and whānau. However, it is not currently the case that there is a general customary right to take fish from the coastal marine area 'where and when ever', as suggested by a submitter. Rather, there are already a range of regulatory measures that govern such activities. This includes the Fisheries (South Island Customary Fishing) Regulations which specifically provide for and regulate non-commercial customary fishing activities.

¹⁸⁶ A trust of Kāi Tahu hapū who whakapapa to the Rakaihautū and Uruao waka, and who practice Waitaha kawa and tikanga.

- We note that the proposed marine reserve would only preclude these activities within its boundaries, and that harvesting seafood would still be possible in other areas outside the boundaries. In addition, the boundary of the proposed marine reserve follows the Forum's recommendations which sought to minimise the effects on customary fishing in this case, by excluding the Waitaki River mouth and an area 2 km south of the river mouth. These areas were identified by Kāi Tahu as having particular cultural importance. As set out in the Application (on page 60), the Ministers' decision to proceed with statutory consultation processes to implement 'Network 1' took into account the Forum's recommendations and subsequent agency advice on those recommendations. The proposed sites in the Application (including Waitaki) therefore reflect these considerations.
- In regard to the submission from Waitaha Taiwhenua o Waitaki Trust, we again acknowledge the impacts that the proposed marine reserve would have on customary interests, but reiterate the point made above about the steps that were taken by the Forum to exclude the Waitaki River mouth and surrounds on the basis of the cultural importance of this area.
- We also consider that a number of the measures recommended as a result of the engagement with Kāi Tahu (see 6.3) may mitigate the issues raised by these submitters to some extent. In particular, the recommendation in relation to providing for the continued enhancement and transfer of mātauraka through wānaka will ensure that knowledge relating to customary practices can be maintained and practiced as appropriate within the marine reserves.

Submission in support

- We note one submission in support from an individual identified as affected iwi, hapū, or whānau. This submitter qualified their support by saying the proposed marine reserve should be extended to north of the Waitaki River mouth to "better represent exposed shallow and deep gravel, and moderate shallow sand" habitats, as well as capturing more kororā and pahu/Hector's dolphin foraging area.
- This issue was raised by a number of other submitters. Our advice is set out in 7.6.6.4.

7.6 Stage 1 assessment – objections from all other submitters

7.6.1 Obligations in relation to the Treaty of Waitangi

- Section 7.5 set out the views of submitters identified as affected iwi, hapū, or whānau. The following section sets out the objections received from all other submitters and provides our advice on the assessment of these objections in terms of the tests in section 5(6)(a)–(e) of the Marine Reserves Act.
 - The objections considered include objections received from Māori submitters who were not identified as affected iwi, hapū, or whānau on the basis that they were not affiliated with Kāi Tahu (see 5.2). The requirement under section 49 of te Takutai Moana Act to 'have particular regard' therefore does not apply to these views.
- As set out in 5.2, however, the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi when interpreting and administering the Marine Reserves Act may still be relevant to your consideration of objections received from these submitters. In order to give effect to the principle of informed decision-making, Te Papa Atawhai has identified the two objections received from other Māori submitters. As set out below, these objections referred to customary rights and Treaty rights. We have understood the comment referring to customary rights as relating to impacts on non-

commercial customary fishing activities. The comment relating to 'Treaty rights' is very broadly worded but could encompass impacts on commercial fishing in the context of the Fisheries Settlement Act in addition to impacts on wider customary interests. These objections should therefore be considered in terms of the principles of active protection and partnership. As with objections received from affected iwi, hapū and whānau (see 7.5.1), our consideration of these objections in relation to section 4 obligations is made in the context of our direct engagement with Kāi Tahu and the recommendations reached as a result of that engagement. As set out in 6.3.10, our assessment prior to considering any objections received, is that to declare each of the proposed marine reserves on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty of Waitangi. This includes our assessment that to make these decisions would be consistent with the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi. We are therefore considering whether there is anything additional that has been raised in the objections received from other Māori submitters that means, in order to be consistent with Treaty obligations, an objection should be upheld (meaning that the proposed marine reserve should not be declared) or that additional mitigation measures are required.

Our assessment is that the issues raised in the objections described below do not raise anything additional to that traversed through the extensive engagement with Kāi Tahu. We have also considered the fact that these views are received from Māori submitters who are not affiliated with Kāi Tahu. On that basis, in accordance with our conclusion in 6.3.10, we consider that a decision to not uphold any of the objections received from other Māori submitters would also be consistent with your obligations under section 4, and would therefore fulfil the Crown's obligations in relation to the Treaty of Waitangi.

7.6.2 Section 5(6)(a) estate or interest in land

7.6.2.1 Objections related to property value

An individual who objected to the proposed marine reserve identified themselves as an adjoining landowner. They said their purchase of land was related to the opportunities for recreational fishing and diving activities adjacent to the property. They stated that the proposed marine reserve would affect these activities and therefore their estate and its value. Another individual objector, identified as a recreational fisher, stated that establishing the proposed marine reserve would cause house values in Waitaki to fall due to "no salmon fishing or white baiting or surfcasting" activities.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with any estate or interest in land.

Two real estate agents were contacted to inform our assessment of the potential effect of the proposed marine reserve on property values. Both agents said it was not possible to discern any effect on house prices from implementing a marine reserve. Their reasons included the many variables that drive property prices and the lack of data from existing marine reserves. Carrying out a substantial customer survey would be one way to understand the potential effects of the marine reserve on property prices, but even this may not yield robust results. The real estate agents both said that property values were linked to consumer interest, so while some buyers would view a marine reserve as detracting from the value of a property, others may see it as a positive, bringing an increase in the potential sale price.

The proposed marine reserve covers 1.1% of the Forum region 187 and 1.9% of the coastline of the Forum region. It is the only proposed marine reserve in the Waitaki District, so we consider that there would be many opportunities to fish recreationally in nearby areas. Therefore, we consider there is no evidence that establishing the proposed marine reserve would be likely to decrease property values in the area.

7.6.2.2 Objections relating to Waitaki irrigation scheme discharges

An objection from the Lower Waitaki Irrigation Company Limited 188 set out the company's understanding that establishing the proposed marine reserve would not affect their existing resource consent to discharge bywash (excess) irrigation water to the coastal marine area. The company sought confirmation of this understanding before fully supporting the marine reserve. The submission highlighted the importance of the irrigation scheme to the Oamaru community and the detrimental effect of any changes to its operation.

Te Papa Atawhai advice

- We consider the proposed marine reserve would interfere unduly with the irrigation scheme if its establishment required the discharge of bywash water to stop.
- The Application omitted details of two relevant resource consents for discharges held by the company. One (RM2000.685.V1) was missed in error and the other (RM.15.300.02) was granted in 2019 after the list of relevant resource consents was supplied to Te Papa Atawhai from the Otago Regional Council. We have subsequently considered both consented activities.
- Resource consent RM.15.300.02 authorises the discharge of water into the Waitaki River from maintenance activities and race and drain cleaning. This activity occurs some distance from the proposed marine reserve. On that basis, our assessment is that this activity would not constitute an offence under the Marine Reserves Act. It therefore did not need to be considered further.
- We understand that resource consent RM 2000.685.V1 is the consented activity referred to by the Lower Waitaki Irrigation Company Limited in its submission. The consent authorises discharges of 'operational and emergency bywash water' at a number of sites on the Waitaki plains. Five of the sites are coastal and immediately adjacent to the boundary of the proposed marine reserve. The consented discharge of operational and emergency bywash water would constitute an offence under the Marine Reserves Act. This is because it allows for the discharge of a contaminant (degraded freshwater), which would reach the proposed marine reserve.
 - Information from the Otago Regional Council said the discharge could increase the amount of sediment entering the marine environment and increase the turbidity (cloudiness). The water quality could also be degraded by nutrient-rich runoff, stormwater and direct contamination by stock. The information described that the discharges, however, are short and intermittent, and are not known to have significant adverse effects on the coastal environment.

Given the land-use across this area, we consider the quality of the discharged water is likely to be comparable to the freshwater flowing from the Waitaki plains into the coastal marine area through natural processes including the Waitaki River. We therefore advise that this

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¹⁸⁷ The term used by the Forum to describe the area within which the Forum was tasked with providing recommendations for marine protection. Specifically: "...the marine coastal area (mean high water spring out to 12 nautical miles (NM) from Timaru in South Canterbury to Waipapa Point in Southland." Page 17, Forum Recommendations Report.

¹⁸⁸ The company that manages and operates the Lower Waitaki Irrigation Scheme, which delivers water from the Waitaki River to more than 200 shareholders.

discharge would not interfere with the proposed marine reserve achieving the purpose of the Marine Reserves Act. On that basis, and acknowledging the stated benefits of the irrigation scheme, we consider that preventing the activity would be likely to cause undue interference. In order to mitigate this interference, we recommend allowing this activity to continue. This can be achieved through the proposed condition in the Order in Council allowing for existing discharges of contaminants (see 7.8.1.3).

7.6.3 Section 5(6)(b) navigation

No objections that raised issues relating to any existing right of navigation were received.

7.6.4 Section 5(6)(c) commercial fishing

7.6.4.1 Objections related to commercial fisheries

Three objections were received from commercial fishing organisations (PauaMac 5 Incorporated 189, Southern Inshore Fisheries Management Company Limited 190 and a combined industry submission from New Zealand Rock Lobster Industry Council 191, Paua Industry Council 192 and Fisheries Inshore New Zealand 193). Four individual submissions from commercial fishers also objected to the proposed marine reserve.

The objectors said the fishery and fish stocks were doing well within the proposed marine reserve area. They also noted the cumulative impacts of establishing multiple sites across the region on commercial fishing. For this site in particular, they highlighted potential impacts on the mako/rig and mako/school shark set net fishery that were not assessed in the Consultation Document¹⁹⁴ analyses (but did not provide any further detail about this issue). The combined industry submission said there were "lower cost, more effective ways of managing any fishing-related threats to the identified values of the site" than marine reserves.

Southern Inshore Fisheries Management Company Limited stated that two fishers, both set netters, would be "impacted significantly". They said one fisher would have (ii) of their catch affected, (iii) by the proposed marine reserve and (iii) by the adjacent proposed Mokotere-a-torehu Type 2 marine protected area. They note that this impact would be additional to the "loss of approximately (iii) of his revenue" from restrictions put in place under the Hector's and Māui Dolphin Threat Management Plan. The other fisher uses the area less with an average of (iii) of their catch coming from the two proposed areas.

One individual submitter was a long-term fisher who used two small inshore trawlers for flounder. They said their wellbeing had been significantly affected by the suite of restrictions placed on inshore fishers (which include the recent coastal fishing regulations implemented through the Hector's and Māui Dolphin Threat Management Plan). The restrictions are "putting [them] out of business". The submitter provided no explanation or detail. Another

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¹⁸⁹ The regional commercial stakeholder group for Fiordland (PAU 5A), Stewart Island (PAU 5B) and Southland/Otago (PAU 5D). Members include owners of paua quota and Annual Catch Entitlement, as well as fishing vessel operators, processors, fish dealers and harvesters.

¹⁰⁰ A commercial stakeholder organisation that has a mandate to represent a range of fish stocks occurring primarily in the South Island. This includes operational and stock-specific matters such as setting total allowable commercial catch limits and deemed values.

¹⁹¹ The national representative organisation for the New Zealand rock lobster industry and the umbrella organisation for nine commercial stakeholder organisations operating in each of the rock lobster management areas in New Zealand.

¹⁹² The national agency for five commercial stakeholder groups that represent commercial pāua fishery interests.

¹⁹³ A commercial fisheries stakeholder organisation.

¹⁹⁴ Department of Conservation and Fisheries New Zealand 2020. Proposed southeast marine protected areas: Consultation Document June 2020, 52 p.

submitter stated that "We already have voluntary [sic] closed 1 [nautical] mile off from Banks Peninsula to oamaru".

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with commercial fishing.
- The main issues raised above relate to set netting activities for make/rig and make/school shark, and trawling activities for flounder.
- We note that the proposed marine reserve would only prevent set net fishing in 0.35 km² that is currently open to the set net fishery (see Figure 7-2). (The area of the proposed marine reserve is 101 km².)
 - Tini a Tangaroa estimates that four fishers have used this area over the 2019/20 to 2021/22 fishing years.

 9(2)(b)(ii)

9(2)(b)(ii)

9(2)(b)(ii) During fishing year 2021/22, four fishers landed catch from the site, the most affected fisher with 9(2)(b)(ii)

- We consider that establishing the proposed marine reserve would not significantly affect any individual fishers. While we note the issue of wellbeing raised by some individuals, our assessment showed the proposed marine reserve would cause minimal fishing displacement.
- Te Papa Atawhai notes that under the statutory requirements of the Marine Reserves Act, a marine reserve application must be considered as an individual proposal and be assessed as such. However, this does not preclude an assessment of the cumulative effects of multiple proposals on existing users. Moko-tere-a-torehu Type 2 marine protected area is proposed adjacent to this proposed marine reserve.
 - For the 2019/20, 2020/21 and 2021/22 fishing years, an additional seven fishers were recorded as fishing the combined areas of the proposed Waitaki marine reserve and the proposed Moko-tere-a-torehu Type 2 marine protected area. Across all of their fishing activities, the most affected fisher would have (ii) of their combined catch displaced (i.e. across all fisheries they are involved in). No other fisher would have more than 1% of their catch affected.
 - For the fish stocks that have been raised by submitters in relation to this proposed marine reserve, the combined displacement from the proposed marine reserve and the Moko-tere-atorehu Type 2 marine protected area, based on an average across the 2019/20, 2020/21 and 2021/22 fishing years, is 29 kg, 6,519 kg and 5,877 kg, for pātiki/flatfish, mako/rig and mako/school shark, respectively. The proportional catches for these species from these sites are 0.003%, 1.0% and 1.7% of the total catch for the quota management area. Additional information on cumulative effects on fishers is provided in the Network chapter (see 6.5.4 and 6.6.4).
- The relatively low displacement across both proposed marine protected areas indicates they largely avoid overlap with the pātiki trawl fishery and the mako/rig set net fishery. Te Papa Atawhai considers the low figures are because the proposed marine protected areas mostly

fall in areas with existing restrictions. Set net activity is prohibited within 4 nautical miles of shore in this area and a voluntary trawl ban extends 1 nautical mile from shore.

In regard to the cumulative impact of the restrictions implemented under the 2020 Threat Management Plan for Hector's and Māui Dolphins, we note that there are some discrepancies in the statements made by submitters. In particular, there were no additional trawling restrictions proposed in the South Island. The previous trawl measure put in place under the 2008 threat management plan remains and restricts trawling to low headline height trawls (<1 m high).

The 2020 Hector's and Māui Dolphin Threat Management Plan did bring in additional set net restrictions within the quota management areas of the main species mentioned by submitters (Figure 7-2). Within the Forum region, these set net prohibitions run from the northern boundary (offshore of Timaru) south to the Waitaki River mouth. This new area of set net prohibitions overlaps in a minor way with the two proposed Type 2 marine protected areas. These and the proposed marine reserve are in areas that were mostly already encompassed by the previous set net ban out to 4 nautical miles, although the proposed Moko-tere-a-torehu Type 2 marine protected area will displace additional set net fishing at its offshore extent. Additional set net prohibitions occur north of Banks Peninsula, within the quota management area of the main species mentioned by submitters.

eleasedunderin

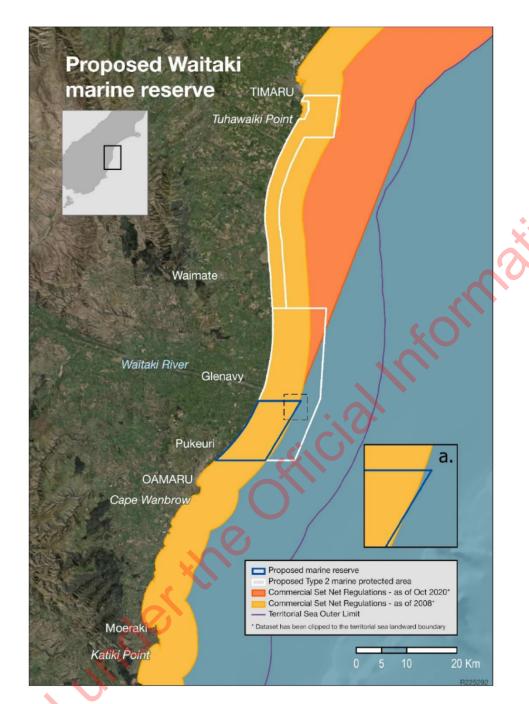


Figure 7-2: Location of set net prohibitions (introduced in 2008 and additional areas introduced in 2020) in relation to proposed Waitaki marine reserve and two proposed Type 2 marine protected areas

While we acknowledge there would likely be some additional cumulative impacts on fishers from the proposed marine reserve and the proposed Type 2 marine protected area, our assessment based on the information available indicates this will not be significant due to the relatively low displacement over the quota management area.

Overall, our position is that it is not possible to establish effective marine protection without displacing some fishing activity. The proposed marine reserve was selected to avoid the main fishing areas as much as possible while representing unique marine habitats that contribute to the proposed Network. No additional verifiable information was received from submitters to indicate that the assessment of fishery displacement in the Application was incorrect.

7.6.5 Section 5(6)(d) recreational usage

7.6.5.1 Objections related to recreational fishing activity and safety

Six objections from individuals said the proposed marine reserve would affect their recreational fishing activities and/or what they assert is their right to catch fish for recreation or to feed their families. One stated that the proposed marine reserve would "substantially affect" their "recreational boat fishing, shore fishing and diving activities". Another said displacing commercial and recreational fishing to adjacent areas would damage the environment and affect fishing grounds.

Two individual objectors expressed concerns that the proposed marine reserve would affect the safety of boat-based fishers using the area. These fishers would have to travel further offshore to fish and therefore be vulnerable to more dangerous water and weather.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational fishing.

We note that only a small proportion of area (1.1%) or coastline (1.9%) of the Forum region would be within this proposed marine reserve, so recreational fishing could still occur in most of the region. This is also true when considering the cumulative area of the six proposed marine reserves (4.5% of the Forum region). We also refer to the Forum's Recommendations Report (on page 122), which said this site was not known to be a high-value recreational fishing area. Instead, īnaka/whitebait, hāmana/salmon and kahawai were the focus of recreational fishing in this area, mostly around the mouth of the Waitaki River. The Forum's recommendations specifically excluded this area from the proposed marine reserve.

Shore-based fishing would still be possible north and south of the proposed marine reserve. These areas have the same habitats and species as the proposed marine reserve and are likely to provide a similar fishing experience. We consider that boat-based fishers would also still be able to access areas north, south or offshore of the proposed boundaries from vessel-launching points to the north or south. Also, navigation through the proposed marine reserve would still be allowed (including with fish onboard) under the Marine Reserves Act. Therefore, we do not agree that recreational fishers would have to travel further offshore as stated by objectors with concerns about safety.

Some displacement of recreational and commercial fishing activity is unavoidable when marine reserves are implemented. In the short term, this may affect the abundance of fish in adjacent areas to which recreational fishers are displaced. The magnitude of this effect is uncertain, however, as there is limited information about recreational fishing effort. Any displacement effect would ultimately be managed through the fisheries management system. It is also likely that the benefits of this proposed marine reserve and the proposed Network would mitigate these effects in the long term.

7.6.6 Section 5(6)(e) public interest

7.6.6.1 Objections related to impacts on customary interests

Two objections from Māori who were not identified as affected iwi, hapū or whānau, raised issues related to impacts on customary interests. One stated, "its our customary right", which we assume to refer to the right to harvest kaimoana from the proposed marine reserve. The other submitter stated it "breaches treaty rights".

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.
- We have understood the comment relating to 'customary rights' as referring to impacts on non-commercial customary fishing activities. As set out in 7.5.6.1, it is acknowledged that the declaration of a marine reserve will prevent extractive fishing activities, including non-commercial customary fishing activities currently undertaken. However, it is not currently the case that there is a general customary right to take fish from the coastal marine area, as suggested by the submitters. Rather, there are already a range of regulatory measures that govern such activities. This includes the Fisheries (South Island Customary Fishing) Regulations which specifically provide for and regulate non-commercial customary fishing activities. Moreover, the objections did not provide any specific detail to support the submission, such as information about the proposed site being particularly important for mahinga kai (food gathering) or customary use. Te Papa Atawhai notes that customary harvest will still be possible in areas adjacent to the proposed marine reserve. As mentioned above, the Forum explicitly excluded the Waitaki River mouth and an area 2 km south of the river mouth as these areas were identified by Kāi Tahu as having particular cultural importance.
- The statement that the proposed marine reserve would breach 'Treaty rights' is very broad and does not provide any detail as to how the proposed marine reserve would do so. We note, however, that in our advice relating to our direct engagement with Kāi Tahu (see 6.3) we provided a thorough analysis of the Crown's Treaty obligations and concluded that a decision to declare each of the proposed marine reserves on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty of Waitangi. This objection does not raise anything additional that causes us to reconsider that conclusion.

7.6.6.2 Objections questioning the need or benefit of the proposed marine reserve

- Seven objections from individuals were related to the lack of justification for, or benefit of establishing the proposed marine reserve. We consider these issues as arguing that if there is no clear need or benefit, then it would be contrary to the public interest to establish the marine reserve.
- Two individual objectors noted a voluntary commercial fishing closure out to one nautical mile in this area, stating "this has worked very well which has helped rejuvenate fish stocks".

 These submitters therefore did not see a need for the proposed marine reserve.
 - Three individual submitters who expressed partial support and one submitter who objected, said that recreational fishing activities were not an issue that needed addressing. Instead, they said the proposed area should "allow recreational fishing, set limits, exclude commercial activity". Another individual objector stated that the current quota management system was "good enough".
 - One individual objector commented that poor weather conditions (high winds, large swell) are usual along the southeast coast and already limit the amount of recreational fishing that can be undertaken in the area. They concluded that the weather self-regulates recreational fishing resulting in no detrimental impacts from this activity, and therefore the proposed marine reserve is not needed.
- An individual submitter who offered partial support said the proposed marine reserve was not the way to protect the marine environment, but there should be "energy [put] into

educating, not only to take the right amount to fish, but to develop a healthy attitude towards looking after our land".

The combined industry objection from the New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand argued that the attributes identified in the Consultation Document for this site did not support its preservation being of national interest. They stated that the "shoals of juvenile squat lobster are a common throughout the east coast. To the extent that the site may be 'typical' of gravel habitats, it is of regional rather than national interest".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

Some objectors regarded recreational fishing as having a very low impact on marine habitats, so establishing a marine reserve to achieve protection would be contrary to the public interest. They considered better management or a ban of commercial fishing would be a more appropriate approach. We note that the purpose of establishing this proposed marine reserve is to preserve the area for scientific study (section 3(1) of the Marine Reserves Act) and contribute to the protection of marine biodiversity through a comprehensive and representative marine protected area network (MPA Policy).

Marine reserves are not about fisheries management. They are a means to ensure a full range of biodiversity is adequately protected and that ecosystems are more resilient to environmental change. This has a high value for science particularly as a baseline for research and ecological monitoring.

Existing fisheries management measures (such as the voluntary closure, recreational limits and the quota management system) would complement the purpose of the proposed marine reserve. They are unlikely, however, to achieve the biodiversity and scientific benefits that occur with the protection afforded by a marine reserve.

This proposed marine reserve was recommended by the Forum as it protects representative habitats in the region and contains significant biodiversity. This is in line with the MPA Policy, which states 'Marine reserves are a core tool in the development of a representative network of MPAs'. Justification under the relevant Marine Reserves Act criteria is also described in the Application (section 3.6, page 75).

The view of recreational fishers that weather and sea conditions restrict the amount of recreational fishing activity is correct – there are many days when fishing is not possible. Regardless of the level of recreational fishing activity, marine reserves are to be 'preserved as far as possible in their natural state' and continued recreational fishing would not be consistent with this purpose. Therefore, we do not consider that the weather-induced limitations on recreational fishing activity are sufficient reason not to establish the proposed marine reserve.

We recognise that education is an important part of managing the marine environment, but education alone will not realise the level of protection proposed for this marine reserve. The main purpose of a marine reserve is not education but establishing this proposed marine reserve would provide educational opportunities of benefit to the local and regional communities. It could also improve an awareness of responsible fishing practices in the surrounding areas. Many local examples show the value of marine reserves for education,

including the Experiencing Marine Reserves programme¹⁹⁵ and the Sir Peter Blake Marine Education & Recreation Centre¹⁹⁶ at Long Bay-Okura Marine Reserve.

Our response to the combined industry submission is as follows. The mouth of the Waitaki River and surrounding area contains some regionally unique features – these make it of national interest and of interest for scientific study. While the proposed site excludes the river mouth itself (as recommended by the Forum), it does include a significant area to the south that is influenced by the river. This site is the only marine reserve in the proposed Network that covers moderately exposed and deep gravel habitats, and associated biodiversity typical of the North Otago and South Canterbury coast. The fact that juvenile squat lobster are "common throughout the east coast" is precisely why their inclusion in a marine reserve in this region is important. That the gravel habitats are "of regional rather than national interest" actually means they represent a 'typical' habitat of this area. The Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines sets out that similar habitat types occurring in different regions of New Zealand will support different biological communities. For that reason, the inclusion of the gravel habitats in this region in a marine reserve contributes to the variety of 'typical' habitat types across New Zealand being preserved, which is in the national interest.

Marine reserves have stimulated research and contributed to a significant increase in knowledge about marine ecosystems in New Zealand. They have also served as reference points for environmental and fisheries management, predator-prey interactions and ecosystem processes¹⁹⁸. By contributing to a network, this site would increase connectivity across habitats and increase the likelihood and success of marine conservation in the long term. This is in the national interest and in the interest of scientific study.

7.6.6.3 Objections questioning the management of land-based threats

Two objections (from the Southern Inshore Fisheries Management Company Limited and the combined industry submission from the New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand) stated that land-based runoff would not be managed by establishing the proposed marine reserve.

The combined industry submission stated, "the presence of threats that cannot be managed under the [Marine Reserves] Act means that the marine reserve cannot be preserved as far as possible in [its] natural state". Also that "the marine reserve will not improve or control the quality of freshwater entering the marine environment at the Waitaki River mouth, and that numerous other potential threats exist, including urban run-off from nearby Oamaru (e.g., contaminants in stormwater), discharges from the Alliance Pukeuri freezing works, and several resource consents for discharges (including sewage) into ocean waters adjacent to the proposed marine reserve".

Southern Inshore Fisheries Management Company Limited stated, "given the extent of agricultural development that has taken place on the Canterbury Plains and the runoff of nutrients and other agricultural impacts on the Waitaki River, the council will have no

¹⁹⁵ https://www.emr.org.nz

¹⁹⁶ https://merc.org.nz/

¹⁹⁷ Department of Conservation; Ministry of Fisheries 2008: Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines, Wellington. 54 p.

¹⁹⁸ Willis, T.J. 2013: Scientific and biodiversity values of marine reserves: a review. DOC Research and Development Series 340. Department of Conservation, Wellington. 70 p https://www.doc.govt.nz/globalassets/documents/science-and-technical/drds340entire.pdf.

prospect of maintaining the site in a natural state for research, one of the regulatory prerequisites for marine reserves".

One individual submitter who supported the proposed marine reserve and another who did not give a preferred position, also commented on this issue. They said the presence of threats (particularly runoff) that could not be managed under the Marine Reserve Act "precludes the ability to preserve the natural state of the area as a marine reserve". Specific mentions were the influx of agricultural nutrients and waste via the Waitaki River and "staggering volumes of discharge into the marine reserve area" from dairy factories and a freezing works. An individual submitter asked whether the water quality had been tested and what effect land-based pollution had on marine life.

Overall, objecting and supporting submitters said that land-based threats must be managed if this proposed marine reserve is to meet its objectives and be of value to the public interest.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

We agree that multiple stressors affect the proposed marine reserve area, including pollution from land-based activities (through direct discharges and in runoff). The protection afforded by a marine reserve does not immediately mitigate the effects of land-based stressors, however this does not mean that it would be contrary to the public interest to declare a marine reserve. The Marine Reserves Act does not require all threats to be eliminated, rather it requires that an area be preserved 'as far as possible' in its natural state. Moreover, other management measures via the Resource Management Act are either in place or being developed to manage or mitigate the effect of land-based stressors. These include:

- Regional council responsibility for developing and enforcing regional freshwater
 plans and coastal plans. These plans set rules to control discharges to coastal waters
 and improve land-use practices (including agricultural) that release sediment or
 contaminated runoff in river catchments.
- Policy 5 of the New Zealand Coastal Policy Statement199 directs regional councils
 to consider the effects on waters in the coastal environment that are held or
 managed under other acts such as the Marine Reserves Act. It also directs regional
 councils to avoid the adverse effects of activities that are significant in relation to
 the purpose of the marine reserve.
- The National Policy Statement for Freshwater Management 2020²⁰⁰ will influence activities that may affect the proposed marine reserve by setting freshwater limits and land-use regulations.

A dairy factory (Oceania Dairy) and a meat processing plant (the Pukeuri Plant) were named in the objection. Oceania Dairy is too far from the proposed marine reserve to constitute a direct or indirect discharge for the purpose of section 18I of the Marine Reserves Act. The discharges associated with Pukeuri Plant were listed in the Application as being activities that were likely to be unaffected by establishing the proposed marine reserve. Te Papa Atawhai has subsequently assessed these discharges and associated resource consents and

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¹⁹⁹ Department of Conservation 2010. New Zealand Coastal Policy Statement 2010. Department of Conservation, 30 p.

²⁰⁰ Ministry for the Environment 2020. National Policy Statement for Freshwater Management 2020. Ministry for the Environment. 70 p.

considers they would not interfere with the proposed marine reserve achieving the purpose of the Marine Reserves Act. We therefore recommend provision should be made in the Order in Council for these activities to continue (see 7.8.1.2).

Given the long history of fishing on the Otago coast and the region's land-use changes, the state of this area is undoubtedly not "natural". Marine reserves allow for recovery, and section 3(2) of the Marine Reserves Act requires that they be 'administered and maintained...as far as possible in their natural state'. Inputs like sediment and runoff are recognised as contributing to the state of health of a marine environment, but their effects are poorly understood and vary from place to place. This proposed marine reserve therefore provides an opportunity to enhance understanding of natural processes and such stressors in the absence of a number of other pressures on the environment, such as fishing. The proposed marine reserve would become a benchmark for how a more natural ecosystem in this region operates. Establishing a marine reserve is also likely to improve the area's resilience to stressors such as climate change and activities on land, by reducing other stressors like impacts from fishing.

7.6.6.4 Objections related to extending the marine reserve

Five objectors (four individuals and Christchurch Penguin Rehabilitation²⁰¹) stated they would only support the proposed marine reserve if it was extended. The submissions outlined that extending the area would achieve better habitat representation and increase protection over the foraging area of Threatened or At Risk species, notably holho/yellow-eyed penguin, pahu and kororā, and kāeo/sea tulips.

Suggestions included an extension south, offshore to 12 nautical miles, north to include the mouth of the Waitaki River, or a combination of these.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

The proposed marine reserve is considered to be large enough to protect the habitats it contains. We note there would be biodiversity and conservation value in extending the proposed marine reserve to include other habitats, including biogenic habitats known to occur in the area. Protecting more of these habitats and extending the site to 12 nautical miles would better represent and replicate habitats in the proposed Network. Such an extension would, however, substantially increase commercial fishing displacement, which is relatively small based on the boundaries of the proposed site.

The size of the proposed marine reserve was discussed extensively by the Forum. We note the Forum's Recommendations Report did not propose the site was extended northwards because of potential impacts on commercial fishers.

We agree with the Forum's recommendation for this site, noting it seeks to achieve a balance between protecting representative habitats and impacts on users. While the suggestions for extension are noted, our position is that this may cause further interference with commercial fishing, and that recommending the site in its proposed form would still be in the public interest.

Neither the MPA Policy, nor the Marine Reserves Act, specifically considers protected species management measures. This occurs via other processes such as threat management plans and (in the case of marine mammals) the Marine Mammals Protection Act. Marine

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²⁰¹ Provides a rehabilitation service for sick and injured penguins in Canterbury.

protected areas are also spatially limited in their ability to protect wide-ranging species. That said, the proposed Network is likely to provide some benefits to protected species like hoiho across a wider area by protecting their foraging habitat. The proposed Moko-tere-a-torehu Type 2 marine protected area extends 3 km further offshore and 18 km north of the proposed marine reserve. It would protect marine habitats from the physical disturbance associated with most fishing methods.

In addition, Te Papa Atawhai notes that recent protection measures for pahu have been introduced in the area with the Hector's and Māui Dolphin Threat Management Plan. Te Kaweka Takohaka mō te Hoiho²⁰² and Te Mahere Rima Tau²⁰³ were also finalised in June 2020, to better manage threats to hoiho.

Overall, the proposed marine reserve would cover representative and unique examples of the southeast coast habitat types, while minimising adverse effects on existing users. We consider that a larger marine reserve at this site could interfere unduly with the matters and uses listed in section 5(6) of the Marine Reserves Act. Extending a marine reserve into fishing areas that are not already closed to certain fishing methods would have a greater impact on these fisheries and on the cultural values associated with the Waitaki River mouth. Further, the Application for the proposed site must be considered on its merits, and the matters raised in these submissions do not demonstrate that to establish the marine reserve as proposed in the Application would be contrary to the public interest.

Submission in support

Submissions in support from 27 submitters also mentioned a preference for a larger area, for example:

- The proposed marine reserves "have been delayed far too long. I would prefer to see even more protection (e.g. larger area) but this is a satisfactory first step".
- "Bycatch of yellow-eyed penguins in setnets is known to have occurred in this area.
 A much larger marine reserve than is proposed would protect this species from fisheries impacts" (New Zealand Marine Sciences Society²⁰⁴).
- The Forest & Bird²⁰⁵ template used by 3,271 submitters stated that this site would be better if it was extended.
- An extension would "better represent exposed shallow and deep gravel & moderate shallow sand, [and] capture the effects of the Waitaki River mouth".
- Support for an extension "out 12 nautical mile and 16 nautical mile both north and south of the Waitaki River mouth to safeguard protected species [with a main reference to hoiho] at this important feeding area. As a minimum, this area should be covered by a Type 2 marine protected area to reduce fisheries impact".

7.6.6.5 Objection related to public access

The combined industry objection from the New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand expressed concern that "poor

https://www.doc.govt.nz/globalassets/documents/conservation/native-animals/birds/sea-and-shore/te-kaweka-takohaka-mo-te-

²⁰³ https://www.doc.govt.nz/globalassets/documents/conservation/native-animals/birds/sea-and-shore/te-mahere-rima-tau-2020.pdf.

²⁰⁴ NZMSS is a professional society with approximately 200 members. It provides access to and within the marine science community, and identifies emerging issues through annual conferences, annual reviews, a list serve and a website.

 $^{^{205}}$ An independent conservation charity that advocates to protect New Zealand's wildlife and wild places, to city, district and regional councils, central government and in courts.

public access means that the public will not be able to 'enjoy in full measure the opportunity to study, observe, and record marine life in its natural habitat" as stated in the Consultation Document. The objection stated that "the majority of the coastline is inaccessible to the public, with no road access via adjacent private farmland" and that "access from the nearest road end requires either a 4WD vehicle or a long walk along a deep gravel beach".

Te Papa Atawhai interpreted this objection to mean that if the public were unable to access the proposed marine reserve, declaring it would be against public interest.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

We acknowledge that land-based public access to the site is limited due to the remoteness of the site and because most of the adjacent land is privately owned. However, a certain level of public access is not a prerequisite for areas to be established under the Marine Reserves Act. Section 3(2)(d) of the Marine Reserves Act is permissive in that public access should not be restricted unless required for the 'preservation of marine life or welfare in general' of the area.

It is not proposed to restrict public access to the proposed marine reserve. While vehicle access over the foreshore of the proposed marine reserve would be prohibited under the Marine Reserves Act (see 7.8.1.2), we note the intertidal area is unsuitable for vehicles anyway due to the unstable nature of the gravel beaches in this area. Vehicles would, however, still be able to travel above the mean high water springs line.

There is public access, albeit limited, from the landward side of the proposed marine reserve. This includes the most popular access to this area of coast via Kaik Road followed by travelling south down the coast on foot or by four-wheel drive vehicle above mean high water springs. Other access within the area is possible via Simpsons Road, Corbett Road, McEneany Road, Works Road and McCulloch Road²⁰⁶. In these cases, access would be by a combination of car and on foot. We acknowledge the public would use these access points infrequently (noting that many are, in part, via unformed roads). However, we also anticipate that the declaration of the marine reserves would increase the public awareness of the area and would increase public engagement and educational opportunities for local and regional communities.

Access from the sea by vessels would be unaffected by establishment of the proposed marine reserve.

The proposed marine reserve is likely to increase public interest in the site as has been observed at many of New Zealand's other marine reserves. Te Papa Atawhai also notes that public benefit and enjoyment can be gained from marine reserves without physically visiting the site. This can be via remote or online education and public awareness activities.

7.6.6.6 Objection questioning the integrity of Forum or statutory consultation processes

The New Zealand Sport Fishing Council²⁰⁷ objected to the proposed marine reserve being established and noted that "there has been a 13% increase to the area" compared to the area it supported in the 2016 consultation carried out by the Forum. The submission expressed concern that no explanation was given for the increase and said it would be contrary to

²⁰⁶ New Zealand Walking Access Commission data (includes unformed road access to the foreshore).

²⁰⁷ A not-for-profit organisation with 55 affiliated member clubs. It advocates for responsible and sustainable management of the marine environment.

public interest to establish the marine reserve because the consultation process was flawed. The submission also stated, "there is insufficient information or time available to fully assess the impacts on recreational fishers".

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.
- Two alternative sites for the proposed Waitaki marine reserve were consulted on by the Forum during their 2016 consultation process. We assume the New Zealand Sport Fishing Council is referring to their preferred site from the earlier process, which was 13 km² smaller than this proposed marine reserve. The Forum made amendments to the boundaries of the proposed site in response to feedback from the 2016 public consultation. These were to make compliance easier for fishers and enforcers (i.e. straight east-west lines).
 - We note that the proposed marine reserve is 18 km² smaller than a larger option presented in the original network proposal. Te Papa Atawhai considers there were reasonable grounds for the Forum to amend this site as part of their recommendations. We also note that the June 2020 Consultation process provided an opportunity for submissions to be made on the proposed site.
- Therefore, we do not consider that changes made to the site during the earlier Forum process would cause this proposed marine reserve to be contrary to public interest.
- Te Papa Atawhai does not agree with the submitter's argument that insufficient time was available to fully assess the impacts on recreational fishers. The statutory time required by the Marine Reserves Act of 2 months was provided for in the current Consultation process. This was in addition to the work of the Forum in the previous 4 years, which included a round of public consultation.
- We do acknowledge that limited information is available on the pattern and level of recreational fishing activity in the region and in relation to this site specifically. However, we consider the Forum endeavoured to gain as much information as possible to inform its proposals. As described in 5.3.2, we consider that there is sufficient information about the impacts on recreational fishing to inform your decisions under the Marine Reserves Act. Regarding this site specifically, our advice on the objections made in relation to impacts on recreational fishing activities is set out above in 7.6.5.1.

7.7 Stage 1 assessment - Conclusion in relation to section 5(6) of the Marine Reserves Act

- Te Papa Atawhai has considered all objections made in relation to the proposed Waitaki marine reserve against the criteria of section 5(6) of the Marine Reserves Act. This includes objections to the proposed Network (these are relevant to your decision-making, as set out in 6.1.3) and objections to the proposed marine reserve.
- For the reasons set out in 7.6.2.2, our advice is that preventing the Lower Waitaki Irrigation Company's discharges from continuing would be likely to constitute undue interference in accordance with section 5(6)(a). In order to address this, we propose that provision is made in the Order in Council for this activity to continue as set out in 7.8.1.3.
- In all other respects, we conclude that while there would be some interference with other existing uses and interests specified in section 5(6) of the Marine Reserves Act if the

proposed marine reserve was established, the nature and magnitude of the interference would not be undue, nor contrary to the public interest. In reaching this conclusion we have considered the values of the proposed marine reserve and its value as part of the proposed Network, and the extent to which it is expected to fulfil the purpose of the Marine Reserves

We have also considered whether a decision to not uphold any objections received on the proposed Waitaki marine reserve would fulfil the Crown's obligations in relation to the Treaty of Waitangi, including under section 4 of the Conservation Act. This is considered in light of our assessment (as set out in 6.3.10) that to declare the proposed marine reserves with the recommendations resulting from the direct Kāi Tahu engagement to date would fulfil the Crown's obligation in relation to the Treaty of Waitangi. As recorded above in 7.5.1 and 7.6.1, Te Papa Atawhai considers that no additional matters have been raised in objections from submitters identified as affected iwi, hapū, or whānau or other Māori submitters that would change that assessment.

We therefore consider that no objection should be upheld for the purposes of section 5(6) Marine Reserves Act. If you agree, you should proceed to the second stage of decision-making under section 5(9) of the Marine Reserves Act.

7.8 Stage 2 assessment – Statutory considerations section 5(9) of the Marine Reserves Act

Section 5(9) provides that your recommendation to the Governor-General on the proposed marine reserve can be made unconditionally or subject to conditions. Our recommended conditions for the proposed Order in Council are set out in 7.8.1. We also recommend other measures as a result of Treaty partner engagement (outlined in 6.3). Our advice on these is set out in 7.8.2.

We have provided our assessment of the Application, including any recommended conditions and other measures, against the statutory criteria in section 5(9). As part of this assessment, we have considered the relevant obligations under the Treaty of Waitangi (as set out in 3.3). The information available to formulate this advice includes content in the Application, Consultation Document, Forum's Recommendations Report and new information provided by Kāi Tahu, Tini a Tangaroa and in submissions from the statutory consultation. Where submissions in support were made in relation to the proposed marine reserve and provide information in relation to the section 5(9) criteria, we also describe this below.

As set out in 6.8, in considering the s5(9) criteria, you will need to consider the advice provided in the Network chapter in relation to these criteria, in addition to the advice below.

7.8.1 Recommendation for Order in Council conditions for the proposed marine reserve

We recommend the conditions described below if the proposed marine reserve is established. These would be set out in the Order in Council creating the marine reserve and fall into the following categories:

- conditions arising from Treaty partner engagement
- conditions to provide for other activities that were identified in the Application
- conditions to mitigate interference with the criteria listed in section 5(6), in response to objections
- · condition arising from engagement with the Ministry of Transport.

7.8.1.1 Conditions arising from Treaty partner engagement

- As described in 6.8.1, as a result of Treaty partner engagement Te Papa Atawhai recommends the following provisions be set out in the Order in Council creating the marine reserve.
 - (a) Condition for continued enhancement of mātauraka Māori and wānaka
 - (b) Condition for the retrieval of kõiwi tākata and archaeological artefacts
 - (c) Condition for retrieval of dead marine mammals and marine mammal parts
 - (d) Condition to allow the removal of Undaria pinnatifida
 - (e) Condition to require generational reviews

7.8.1.2 Conditions to provide for other activities identified in the Application

- The Application proposes that a number of activities are allowed to continue if the proposed marine reserve is established. We recommend allowing for these through Order in Council Conditions pursuant to your power under section 5(9). The activities are:
 - fossicking of beach materials
 - activities operating under existing resource consents.
- The Application also lists retrieval of kōiwi tākata. This was discussed through engagement with Kāi Tahu, and the recommendation in respect of this activity is described in 6.8.1.
- The Application stated (Table A1.3, page 84) that driving over the foreshore would be prohibited in the proposed marine reserve. Other more general information (pages 74–75) about all proposed marine reserves stated that vehicle access to the foreshore was proposed to be allowed in limited circumstances. Due to the topography and dynamic nature of the foreshore of this proposed marine reserve, however, vehicle access below mean high water springs is not practical, so no provision in the Order in Council is recommended.
 - Also, the Application stated that driving on the foreshore for access by emergency services would be permitted. This activity does not need specific provision in the Order in Council as the 'reasonable excuse' aspect of section 18I of the Marine Reserves Act would apply and/or Te Papa Atawhai would not exercise its discretion to take enforcement action under either section 18I or section 21.
 - In terms of the activities operating under existing resource consents, Appendix 13 sets out those activities listed in the Application that we recommend providing for through Order in Council conditions. The proposed conditions are set out below. Our intention is that all listed activities would continue to be exempt from the operation of the Marine Reserves Act in the event of variation and/or replacements of the existing resource consents, so long as any variation or replacement did not substantially change the nature or adverse effects of the activity from the point at which the marine reserve is declared.
 - The Application also listed activities operating under existing resource consents that we do not propose making provision for through Order in Council conditions (see Appendix 13 for more detail). Our position is that these activities would not constitute an offence under the Marine Reserves Act and could therefore continue to occur if the proposed marine reserve was established.
 - (f) Condition for fossicking of beach materials
 - Te Papa Atawhai recommends a condition to allow for the non-commercial gathering of beach stones, non-living shells and driftwood on the foreshore of the proposed marine

reserve using only hand-held (non-mechanical) methods (as described in the Application, Table A1.4, page 85).

To ensure any fossicking activity would not be carried out in a manner that may interfere with the purpose of the Marine Reserves Act, the condition should also be drafted to include the following aspects (which are similar to those in the Marine Reserve (Kahurangi) Order 2014):

- A person who removes beach stones, non-living shell or driftwood must not use a method of collection that involves the use of machinery or cutting equipment.
- A person who removes beach stones, non-living shell or driftwood must not, in any
 one day, remove a greater weight than they can carry on their own in one trip.
- Beach stones are defined as stones that are no more than 256 mm in intermediate diameter including gravel and sand.

The condition should stipulate that any activities would be subject to all other legal requirements.

(g) Provision for existing discharges of contaminants and associated monitoring

Te Papa Atawhai recommends a condition to allow for the continuation of existing discharges of contaminants within the proposed marine reserve. This condition will apply to the Waitaki District Council's municipal wastewater treatment operation and Alliance Group Limited's meat processing plant and landfill. It will also apply to the discharges of bywash water undertaken by the Lower Waitaki Irrigation Company Limited (see 7.8.1.3).

The condition should be drafted as subject to compliance with the Resource Management Act and any other legal requirements relating to the discharge of the contaminant. This means that a breach of any of the conditions of consent would also constitute a breach of the condition in the Order in Council.

'Discharge' and 'contaminant' should be defined in accordance with s2(1) of the Resource Management Act.

The condition should make provision for any associated monitoring and sampling, such as required by the conditions of the resource consent. This means that no permits would be required under the Marine Reserves Regulations to undertake sampling or monitoring associated with discharges covered by this condition.

7.8.1.3 Conditions to mitigate interference with the criteria listed in section 5(6) of the Marine Reserves Act

As discussed in 7.6.2.2, we recommend providing for the discharge associated with the Lower Waitaki Irrigation Company Limited's irrigation scheme so this activity would not constitute an offence under the Marine Reserves Act if the proposed marine reserve was established. The condition described above, (g) Provision for existing discharges of contaminants and associated monitoring, would cover this activity.

7.8.1.4 Condition arising from engagement with the Ministry of Transport

(h) Condition for pollution response

Te Papa Atawhai recommends a condition to allow responses to emergency oil spill or pollution incidents. We have engaged with the Ministry of Transport to inform the following advice on this matter.

In certain emergency situations, vessel users or operators may be required to respond to an emergency oil spill or pollution incident. Action may also be required by the local authority

or other central government agencies. Our position is that in such a situation, any action would likely to be considered a 'reasonable excuse' under section 18I(3) and/or would not result in Te Papa Atawhai exercising its direction to take enforcement action in respect of either section 18I(3) (offence for certain discharges) or section 21(a) (infringement offence for certain discharges).

In recent marine reserve Orders in Council, however, a provision has been included to confirm 'for avoidance of doubt' that action can be taken in these circumstances, and that the declaration of the marine reserve does not affect or limit the powers of any person under the Maritime Transport Act 1994 in response to these events or the risk of an event. For consistency, we recommend the inclusion of a similar provision in the Order in Council.

7.8.2 Recommendations for other measures arising from Treaty partner engagement

As described in 6.8.2, as a result of Treaty partner engagement Te Papa Atawhai recommends the following measures for the proposed marine reserve.

- (i) Recommendation for establishing formal co-management with Kāi Tahu
- (j) Recommendation for the establishment and support of Kāi Tahu rangers
- (k) Recommendation for periodic reviews
- (1) Recommendation to use te reo Māori name confirmed by Kāi Tahu
- (m) Recommendation that pou whenua be established for any new marine reserves
- (n) Recommendation to record that marine reserve declaration is unlikely, and not intended, to pre-empt or negatively impact on the Ngāi Tahu Whānui application for customary marine title

7.8.3 Section 5(9) criteria – in the best interests of scientific study, for the benefit of the public and expedient

As set out in 3.2.3, under section 5(9) you must decide whether declaring each of the marine reserves will be in the best interests of scientific study, for the benefit of the public and expedient. Our advice on these criteria as relevant to the proposed marine reserve is described below. As part of this advice, we have included reference to additional information raised in submissions of support that is relevant to each of the section 5(9) criteria. Note that objections are not considered at this stage, as these views have already been considered in our advice on section 5(6) in accordance with the statutory framework.

7.8.3.1 Obligations in relation to the Treaty of Waitangi

In considering whether the declaration of the proposed marine reserve would be in the best interests of scientific study, for the benefit of the public and expedient, you must consider your obligations in relation to the Treaty of Waitangi.

As set out in 3.2.7, in accordance with your obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi, you must consider the views provided by Kāi Tahu in respect of the proposals received through direct engagement in making your assessment under section 5(9). The obligation to have 'particular regard' to these views in accordance with section 49 of te Takutai Moana Act also applies to these views. Our advice and conclusions in respect of the Crown engagement with Kāi Tahu and the corresponding obligations under the Treaty of Waitangi is set out in the Network chapter in 6.3.10. While this advice is provided in the context of the proposed Network, it applies equally to each of the proposed marine reserves, including Waitaki, on the basis that the recommendations arising from the engagement apply to this site. Based on this assessment, Te Papa Atawhai considers that the declaration of the proposed marine reserves

(therefore including Waitaki) on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

In addition to the engagement with Kāi Tahu, as set out in 5.2, submissions in relation to the proposed marine reserve (including objections and submissions in support) were made through the statutory process by submitters who are 'affected iwi, hapū, and whānau' for the purposes of te Takutai Moana Act and from other Māori submitters (i.e. those not affiliated with Kāi Tahu).

In terms of your decision under section 5(9), the obligation to have 'particular regard' applies to the views received from affected iwi, hapū or whānau through the statutory consultation process. The obligation in section 4 of the Conservation Act also applies to your consideration of these views, and may still be relevant to submissions from other Māori (although the obligation to have particular regard does not apply to the views from other Māori). In order to allow you to have 'particular regard' to the relevant submissions, and in accordance with the principle of informed decision-making, in our advice below we have therefore identified where submissions have been made from affected iwi, hapū or whānau and/or other Māori submitters that are relevant to the specific section 5(9) criteria. None of the submissions identified raise matters that are inconsistent with our conclusion set out above at paragraph 1061 - that the declaration of the proposed marine reserves (including Waitaki) on the basis of the recommendations made in relation to the engagement with Kāi Tahu would fulfil the Crown's obligations in relation to the Treaty of Waitangi, including the obligation under section 4 to give effect to the principles of the Treaty.

Te Papa Atawhai therefore considers that to declare the proposed marine reserve would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

7.8.3.2 Consistency with statutory planning instruments

As set out in 3.2.8, also relevant to your assessment as to whether the declaration of the proposed marine reserves cumulatively and as part of the proposed Network would be in the best interests of scientific study, for the benefit of the public and expedient, is whether to do so would be consistent with the relevant provisions of any relevant statutory planning instruments. The relevant statutory planning instruments are the Conservation General Policy and the Otago Conservation Management Strategy. Our full assessment of which provisions are relevant to your assessment, and how a decision to declare each of the proposed marine reserves with the recommendations listed in 6.8.1 and 6.8.2 and the subsequent site chapters (for the purposes of the proposed Waitaki marine reserves, therefore, the recommendations listed in 7.8.1 and 7.8.2) would be consistent with those provisions, is set out in Appendix 12.

In summary, Te Papa Atawhai considers a decision to declare the proposed Waitaki marine reserve with the recommendations listed would be consistent with all relevant provisions of these statutory planning instruments.

7.8.3.3 In the best interests of scientific study

For the reasons set out below and in light of our conclusions in 7.8.3.1 and 7.8.3.2, we consider that establishing the proposed marine reserve, with the recommended conditions and measures set out in 7.8.1 and 7.8.2, would be in the best interests of scientific study.

- In considering whether a marine reserve would be 'in the best interest of scientific study', it is appropriate to assess the area that is recommended for marine reserve status against the criteria in section 3(1) of the Marine Reserves Act²⁰⁸. This is described in 7.2.1.
- By protecting a range of representative habitats and unique features, we consider this proposed marine reserve's inclusion in a network of marine protected areas to be in the national interest. The area is also considered to contain unique natural features due to the influence of freshwater and river sediments from the Waitaki River.
- Further information supporting a conclusion that the proposed marine reserve would be in the best interests of scientific study is evident from points raised in submissions of support. For example:
 - The New Zealand Marine Sciences Society noted that due to the "riverine input and habitat type" the area is likely to be important for primary production, which emphasises a degree of uniqueness. The submission also agreed that "the marine reserve would protect the biodiversity associated with shallow gravel habitats, the only reserve in the proposal to do so".
 - Otago Museum²⁰⁹ said marine reserves can be used to "study natural variation and abundance and as a control site to better understand non-fishery effects, such as sedimentation, contamination, ocean warming and acidification. Along the South East coast, no control sites currently exist to help to build data to understand how our marine environment is being affected by direct human impacts".

For the benefit of the public 7.8.3.4

- For the reasons set out below and in light of our conclusions in 7.8.3.1 and 7.8.3.2, we consider that establishing the proposed marine reserve, with the recommended conditions and measures set out in 7.8.1 and 7.8.2, would be for the benefit of the public.
- These benefits include those associated with establishing long-term protection of representative habitats, benefits to the surrounding area (including for fisheries) by improving the health of the site and benefits to the region's wildlife and therefore ecotourism opportunities (see 7.2.2).
- Further information supporting a conclusion that the proposed marine reserve would be for the benefit of the public is evident from points raised in submissions of support. For example:
 - An individual identified as affected iwi, hapū or whānau argued that fisheries would be negatively affected if the proposed marine reserve was not established because of the loss of biodiversity and that "marine protected areas are necessary for maintaining the stability of fisheries and tourism".
 - Stewart Island Adventures Snorkelling²¹⁰ said "protection will only add to the ecosystem and recreational resources" and citing Ulva Island-Te Wharawhara Marine Reserve as an example of how "protection can lead to a healthy and sustainable recreational area".

²⁰⁸ See chapter 3. Section 3(1): It is hereby declared that the provisions of this Act shall have effect for the purpose of preserving, as marine reserves for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life of such distinctive quality, or so typical or beautiful or unique that their continued preservation is in the natural interest.

²⁰⁹ A museum in Dunedin that shares the natural, cultural and scientific stories of Otago and the world.

²¹⁰ A company offering snorkel tour activities in Stewart Island.

- Other submitters noted the likelihood of "improved recruitment and availability of fish" outside the proposed marine reserve, the "decimation" or "destruction" observed from existing management practices, as well as the longer-term and intergenerational benefits that were likely to arise from the establishment of the proposed marine reserve.
- Twenty-six submissions noted likely benefits to the region's wildlife and populations of protected species at this site.

7.8.3.5 It is expedient

- For the reasons set out below, and in light of our conclusions in 7.8.3.1 and 7.8.3.2, we consider that establishing the proposed marine reserve, with the recommended conditions and measures set out in 7.8.1 and 7.8.2, would be expedient.
- Making progress towards New Zealand's commitments to protect marine habitats and biodiversity under *Te Mana o te Taiao: Aotearoa New Zealand Biodiversity Strategy 2020*²¹¹ is expedient. Establishing this proposed marine reserve as part of a regional network would represent a significant step towards realising the goals in this strategy. It is also consistent with the support for this proposed marine reserve indicated by 89% of submitters in the public consultation process.
- While protected species conservation is not the primary reason for establishing marine reserves, the likely habitat and biodiversity benefits would also benefit these species. Many of these species are either Threatened or At Risk, so we consider any steps to aid their recovery is expedient.
- Further information supporting a conclusion that the proposed marine reserve would be expedient is evident from points raised in submissions of support. For example:
 - An individual identified as affected iwi, hapū or whānau said "marine reserves and representative reserves will increase the resilience of our marine biodiversity to withstand climate change".
 - One submitter stated, "Many of the species in these ecosystems occur naturally nowhere else in the world".
 - Many submitters highlighted the importance of the area as foraging or breeding habitat for the protected species pahu, hoiho, kororā and koau/Otago shags.

7.9 Naming of the proposed marine reserve

The proposed marine reserve would be named in accordance with the requirements of the New Zealand Geographic Board. Te Papa Atawhai has discussed the naming of this proposed site with Kāi Tahu. Kāi Tahu have endorsed the name to be taken forward for review by the New Zealand Geographic Board as 'Waitaki Marine Reserve'.

7.10 Conclusion – proposed Waitaki marine reserve

Our overall assessment in relation to the proposed Waitaki marine reserve is that:

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²¹¹ New Zealand Government, 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020*. Department of Conservation, Wellington, 73p.

- the procedural requirements of section 4 and section 5 of the Marine Reserves Act have been met
- we do not recommend upholding any objections received under section 5(6) of the Marine Reserves Act on the proviso that the recommended conditions listed below are implemented
- to declare the area a marine reserve will be in the best interests of scientific study, will be for the benefit of the public and will be expedient (in accordance with section 5(9) of the Marine Reserves Act), including with our recommended conditions to be included in the Order in Council [(a)-(h) as set out in 7.8.1] and our recommendations for other measures arising from Treaty partner engagement [(i)-(n) as set out in 7.8.2]
- to declare the proposed marine reserve on the basis of the recommendations listed above would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

7.11 Recommendation – proposed Waitaki marine reserve

We recommend that you proceed to seek the concurrence of the Minster for Oceans and Fisheries and the Minister of Transport²¹² to recommend to the Governor-General the making of an Order in Council (subject to conditions) to declare the proposed area a marine reserve.

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²¹² As under section 5(9) of the Marine Reserves Act.

8 Assessment of proposed Te Umu Koau marine reserve

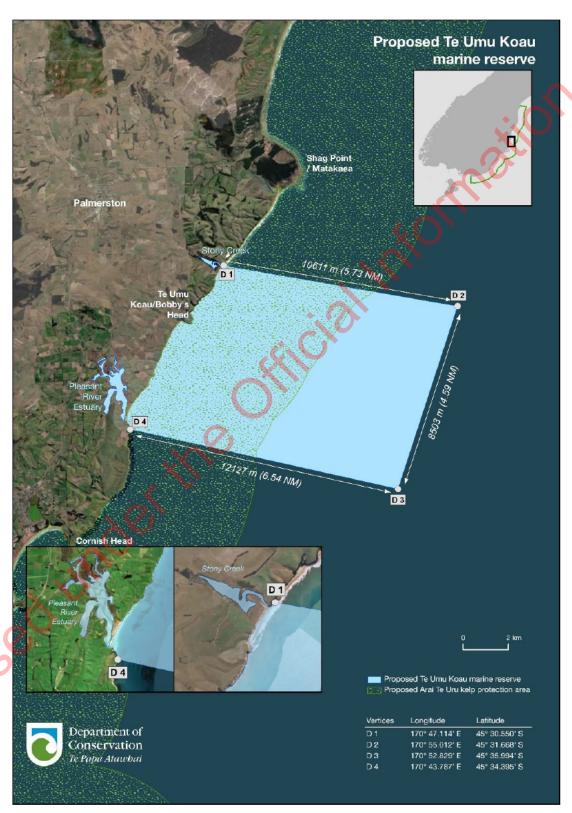


Figure 8-1: Location of the proposed Te Umu Koau marine reserve

8.1 Introduction

The Application for this proposed marine reserve is presented on pages 86-91, of the Consultation Document²¹³ (see Appendix 1).

8.1.1 Site description

The proposed marine reserve boundary would start approximately 100 m north of the mouth of the Stony Creek estuary and extend south to approximately 400 m south of the mouth of the Pleasant River estuary. It would span approximately 8 km along the coast (Figure 8-1). The proposed marine reserve would extend from mean high water springs²¹⁴ to a straight-line outer boundary that ranges between 10 km and 12 km offshore. It includes the entirety of the Stony Creek and Pleasant River estuaries up to the coastal marine area boundary. ²¹⁵ The proposed site would cover approximately 96 km².

8.1.2 Forum recommendations

- The proposed marine reserve corresponds to Site D1 as identified by the Forum. The boundary of the proposed marine reserve as described in the Application has been altered slightly from that in the Forum's Recommendations Report²¹⁶, specifically at the Pleasant River estuary. Part of the Pleasant River estuary was not initially included in the Forum's recommendation due to an outdated coastal boundary. This area was re-established as part of the estuary in 2009 through the removal of a groyne. Therefore, since the intent of the Forum's recommendation was to protect the entire estuary, this section has now been included in the proposed marine reserve.
- The Forum recommended this site because of the diverse range of habitat types found in close proximity, meaning the proposed marine reserve would protect a number of representative habitats, including two estuaries. The Forum highlighted the kelp forests (particularly *Macrocystis*) found in this area, the rare examples of volcanic rock reefs, and the underwater features such as reef shelves and sea caves. The Forum considered this proposed site was of a size needed to ensure it would meet the objectives of the *Marine Protected Areas Policy and Implementation Plan*²¹⁷ (MPA Policy) while recognising its establishment would lead to some impact on commercial fishing, and recreational and customary values.

8.1.3 Activities proposed to be authorised to continue

The Application proposes that some activities be allowed to continue if the proposed marine reserve is established. These are:

- activities operating under existing resource consents
- fossicking of beach materials

²¹³ Department of Conservation and Fisheries New Zealand 2020. Proposed southeast marine protected areas: Appendices to consultation document (including marine reserve applications) June 2020. 126 p.

^{**} Average of each pair of successive high waters when the range of the tide is greatest. https://www.linz.govt.nz/sea/tides/introduction-tides/definitions-tidal-terms.

²¹⁵ The landward boundary of the two estuaries is the boundary of the Coastal Marine Area as defined in Schedule 1 of the Regional Plan: Coast for Otago: Otago Regional Council 2012.

²¹⁶ South-East Marine Protection Forum. 2018. Recommendations to the Minister of Conservation and the Minister of Fisheries: Recommendations towards implementation of the Marine Protected Areas Policy on the South Island's south-east coast of New Zealand. Department of Conservation. Wellington. 314 p.

²¹⁷ Department of Conservation; Ministry of Fisheries 2005: Marine Protected Areas: policy and implementation plan. Department of Conservation and Ministry of Fisheries, Wellington. 25 p.

- retrieval of kōiwi tākata²¹⁸
- vehicle access to the foreshore (in limited circumstances).
- Our advice on providing for these activities through Order in Council conditions is set out in 8.8.1.

8.1.4 Chapter outline

1087. This chapter:

- outlines our assessment of the benefits of the proposed marine reserve
- outlines matters discussed during Treaty partner engagement
- presents the numbers of submissions that were received through statutory consultation
- describes the issues raised in these submissions
- provides our advice in relation to the tests under section 5(6) and section 5(9) of the Marine Reserves Act.

8.2 Assessment of the benefits of the proposed Te Umu Koau marine reserve

- Sections 3.2.4 and 3.2.5 set out the framework for assessing whether any objections related to this proposed marine reserve should be upheld pursuant to the 'interfere unduly' and 'otherwise contrary to the public interest' tests in section 5(6) of the Marine Reserves Act.
- You should assess the objections in light of the purpose of the Marine Reserves Act and the benefits of the proposed site in terms of achieving that purpose. You also need to assess the values of the proposed marine reserve and the 'overall public advantages' that would come from this area being declared a marine reserve. This includes the site's contribution to the proposed Network and the assessment provided in 6.2 of the values and benefits of the proposed Network overall.
- The following section is a summary of our assessment of those benefits in relation to the proposed marine reserve. Much of this assessment is also relevant to your decision-making under section 5(9) as discussed further in 8.8, which includes an assessment of your obligations under the Treaty of Waitangi (as set out in 3.3). More detail is also available in section 4.2 of the Application.

8.2.1 Achieving the purpose of the Marine Reserves Act

As described in 3.2.1, the general purpose of the Marine Reserves Act is:

"...preserving, as marine reserves for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life, of such distinctive quality, or so typical, or beautiful, or unique, that their continued preservation is in the national interest."

A full assessment of the proposed marine reserve against these criteria is set out in section 4.2.2 of the Application.

²¹⁸ Unidentified (Māori) human remains.

²¹⁹ CRA3 Industry Association Inc v Minister of Fisheries HC Wellington CP317/99, 24 May 2000, at [36].

8.2.1.1 Underwater scenery, natural features, and marine life

- This site is a moderately exposed sedimentary section of coastline, which is bordered by two estuaries. The shallow reef areas are dominated by a variety of algal species, the most obvious is the bull kelp fringing the shoreline. Typically for this coastline, the bull kelp extends to depths of approximately 3 m and incorporates an understorey assemblage often dominated by coralline algae. Further down the shore, the kelp *Lessonia variegata* tends to become more dominant, occurring with a diverse assemblage of other brown algae species and red foliose algal species.
- Transitioning from shallow reef (<10 m) that is dominated by communities of smaller seaweed species, to deeper areas (10-20 m), the giant kelp *Macrocystis pyrifera* dominates much of the natural character of the reef. Rising from the seafloor to the surface and extending out to form a canopy akin to a terrestrial forest, giant kelp defines the reef ecosystem in this depth zone. Kelp forests have been likened to terrestrial forests in their structure and ability to support many other species, including kōura/rock lobster (particularly the settling puerulus larvae), rāwaru/blue cod and matahoe/greenbone (butterfish). They are one of the most productive types of habitat worldwide and this kelp forest is considered to be of outstanding value and to contribute significantly to the biodiversity of the region. Kelp forests also provide some of the most spectacular underwater scenery for divers, and the reefs at this site have a distinctive quality and natural beauty.
- Studies of the southern coasts show large variation in the organisation of algal assemblages with depth across most sites, with algal biomass generally declining with depth²²⁰. Beyond the depth where giant kelp dominates the seascape and light struggles to penetrate, different habitats emerge. What was dominated by seaweeds, the depths become dominated by invertebrates such as sponges, bryozoans (bryozoans are tiny colony-forming animals) and ascidians (or sea squirts), and encrusting coralline algae.
- The deeper reef area provides an extensive three-dimensional structure, which can support biodiversity not seen at shallower depths. The rock formations are densely covered in coralline algae communities, which have been shown to provide habitat, protection and important settlement cues to a range of invertebrate species, including kōura. This habitat is called 'deep reef' under the MPA Policy's coastal classification²²¹ and is defined as being deeper than 30 m. This habitat type is a notable feature in this proposed marine reserve as it is not represented in a viable example in any of the other proposed marine protected areas.
 - The Dunedin City Council District Plan²²² defines the edge of the Pleasant River estuary, within the proposed marine reserve, as an Area of Significant Conservation Value. It is also listed as a Regionally Significant Wetland with a 'high degree of wetland naturalness' value in the Regional Plan: Water for Otago²²³.
 - This site is undisputedly of distinctive quality, typical and beautiful, with diverse and iconic natural features, marine life and species associated with the coastline. Department of Conservation Te Papa Atawhai considers that the protection of the underwater scenery and

²²⁰ Shears, N.T., Babcock, R.C., 2007. Quantitative description of mainland New Zealand's shallow subtidal reef communities. Science for Conservation 280. 126 p.

²²¹ Department of Conservation, Ministry of Fisheries, 2008: Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines, Wellington. 54 p.

²²² Dunedin City Council 2006. Dunedin City District Plan 2006. Dunedin City Council.

²²³ Otago Regional Council 2020. Regional Plan: Water – Schedule 9. https://www.orc.govt.nz/media/5815/schedule-9-schedule-of-identified-regionally-significant-wetlands-and-wetland-management-areas.pdf.

natural features at this site is consistent with section 3(1) in that they are so typical, or beautiful, or unique that their continued preservation is in the national interest.

8.2.1.2 Opportunities for scientific study

Given the features set out above, the proposed marine reserve would provide opportunities to undertake scientific study to improve Aotearoa New Zealand's understanding of the structure and functioning of the marine environment. Scientific studies would also contribute to the understanding of how the impacts of human use and development on marine environments can be managed. Pressures on the marine environment are varied and widespread and generally there is a poor understanding of the capacity of the marine environment to withstand these. By removing some of these pressures, a better understanding of how habitats and ecosystems in the southeast region operate in the absence of some pressures can be gained.

Kōura are an important component of the ecosystem at this site. Establishing an area that would allow for some recovery of their populations is therefore of significant ecological and scientific value. While it is unknown how kōura populations associated with the reefs in the proposed marine reserve would respond to protection, this question is of scientific interest. The effects of the proposed marine reserve on populations at a larger scale along the southeast coast are also of interest.

The site is highly accessible to the research facilities at the University of Otago with research and surveying already being undertaken along this part of the coast. The ability to study an ecosystem in the absence of one of the major anthropogenic influences (i.e. fishing) is of exceptionally high value. Evidence of this is shown by the high research output from the Cape Rodney-Okakari Point Marine Reserve (Goat Island) at the doorstep to the University of Auckland research facility.

8.2.2 Other values and advantages to the public

The proposed marine reserve would create enduring protection for representative habitats, and bring benefits for the public, both now and for future generations. Ecosystem services (benefits from nature) are likely to be enhanced by protecting the area against current and future threats that may otherwise degrade the habitats. Two examples include increased carbon sequestration provided by maintaining or enhancing the health of the kelp forests; and increasing the productivity of species that humans harvest for food by protecting habitat important for juvenile life stages.

Various species will utilise different parts of the reef system at different times of the year and/or different stages of their life. For example, kōura puerulus (post larval stage) are known to settle on giant kelp, and as they grow move from shallower areas to deeper parts of the reef. From here, at the outer reef, large scale migrations can occur where they travel 100's of kilometres south to Stewart Island and Fiordland to spawn. These life stage shifts (ontogenic migrations) are known to occur in many species. Protecting areas important for the different life stages of species is a key component of effective marine reserve networks, and areas where these habitats occur together are disproportionately important as they provide for direct connectivity.

Habitat connectivity is critical for maintaining healthy populations of organisms, as it promotes biological diversity through the exchange of genes (i.e. reproduction), provides for recovery from disturbance, and provides greater resilience in the face of environmental change.

The proposed marine reserve would provide protection for important habitats that strengthen the resilience, health and productivity of coastal ecosystems. These qualities are

recognised as important contributors to wellbeing and prosperity for current and future generations. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020*²²⁴ recognises the connectedness of healthy nature and thriving people. This proposed marine reserve would contribute towards all of the five outcomes set out in the strategy.

The proposed marine reserve extends from the coast and is accessible from the two estuaries, which have direct road access. Parts of the coastal area are accessible on foot and the public would also be able to enjoy the marine reserve from the adjacent Tavora Reserve walking track. The native vegetation in this area is being restored to improve breeding habitat for hoiho/yellow-eyed penguin.

8.2.3 Contribution to the proposed Network of marine protected areas

The proposed marine reserve contains a combination of deep and shallow soft-sediment habitats; deep, shallow and intertidal reef habitats; estuarine habitats; and biogenic habitats such as kelp and seagrass. Other habitats include volcanic rock reefs, exposed reef shelves, sea caves and seaweed gardens.

Including a site with such a diverse range of habitats in the proposed Network would enhance the connectivity between shallow and deep reef habitats, as well as between sand and reef habitats across different depths, making this site unique in the proposed Network. It would also have high value related to the protection of ecosystem processes across habitats, due to the relatively high number of habitat types in close proximity.

Six of the 22 coastal habitat types in the Forum region²²⁵, one biogenic habitat (kelp forest) and all the estuarine habitats included in this proposed marine reserve are uniquely represented in this proposed marine reserve. The deep reef habitat at this site is considered typical of the deep reefs associated with this section of the coast. Neither the deep reef nor the deep mud habitat types are represented in viable examples in any of the other proposed areas in the Network (although there is a small patch of deep reef within the proposed Kaimata Type 2 marine protected area).

Along the Otago coast, there are only three locations where it is possible to have continuous protection from shallow coastal to deep reef habitats. Those being the proposed site at Te Umu Koau, at Tow Rock (off the Otago Peninsula), and at several headlands in The Catlins. Neither The Catlins sites or Tow Rock were included in the Forum's Recommendations Report due to their cultural, commercial and recreational significance (noting that a site in The Catlins (Long Point) and Tow Rock were put forward by the Forum during their consultation phase in 2016). Instead, Te Umu Koau marine reserve was proposed as it would encompass many different habitats in close proximity, providing an opportunity to protect several habitats in one marine reserve.

Te Umu Koau would not only protect the reef ecosystem from intertidal to deep reef, but also provide for connectivity with the Pleasant River estuary, the only place this can occur in the proposed Network. In addition, the site provides for soft substrate habitats, in particular shallow and deep mud habitats that are not identified anywhere else in the region.

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²²⁴ New Zealand Government, 2020. *Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020*. Department of Conservation, Wellington, 73 p.

²²⁵ The term used by the Forum to describe the area within which the Forum was tasked with providing recommendations for marine protection. Specifically: "...the marine coastal area (mean high water spring out to 12 nautical miles (NM) from Timaru in South Canterbury to Waipapa Point in Southland." Page 17, Forum Recommendations Report.

8.3 Consideration of Kāi Tahu views on the proposed marine reserve as heard through engagement

As outlined in 2.6.2, Te Papa Atawhai, Tini a Tangaroa and Kāi Tahu held a number of hui between July 2020 and July 2021. Further engagement has continued, including directly with Ministers. The purpose of this engagement has been to further understand Kāi Tahu rights and interests and views (including concerns) in relation to the establishment and management of the proposed southeast marine protected areas and to understand and work through the issues raised, including the measures proposed by Kāi Tahu to address their concerns. These views, proposed measures, our advice and recommendations are each set out in 6.3. One of these measures applies only to this proposed marine reserve and is discussed in more detail below in 8.3.1. Sections 8.8.1.1 and 8.8.3 list the recommendations that apply to the proposed Te Umu Koau marine reserve.

8.3.1 Boundary amendment to the proposed Te Umu Koau marine reserve

8.3.1.1 Views expressed through engagement

As set out in 6.3.6.4, Kāi Tahu views on this proposed measure, the Agency position and outcomes of engagement are set out at section 4.6 of the Rōpū Report.

In summary, Kāi Tahu have indicated through engagement that they consider the proposed Network would potentially have significant impacts on their commercial fishing interests, and that the proposed Te Umu Koau marine reserve is of most concern. As set out in 6.3.6.4 and described further below, the proposed Te Umu Koau marine reserve falls within the CRA7²²⁶ quota management area and extends over areas of offshore reef that are seasonally important for kōura. Kāi Tahu are concerned that prohibiting commercial fishing on these grounds would impact on their people, particularly those members of the Moeraki, Ōtākou and Puketeraki rūnanga whose families are involved in kōura fishing, processing, and export. It may also impact the associated tribal quota asset.

As part of Rōpū discussions on this issue, Kāi Tahu tabled three alternative boundaries to be considered by Te Papa Atawhai (which we have labelled D1-A, D1-B and D1-C) for the proposed Te Umu Koau marine reserve. All three proposed amendments avoid an area of deep reef (referred to locally as 'The Church') which is particularly important to commercial kōura fishing in CRA7. The first proposal (D1-A) was put forward by Kāi Tahu at the 29 July 2020 hui. At the time, Kāi Tahu felt that the amendment would address their concerns about the impacts of the proposed marine reserve on CRA7 fishers and that it was supported by those fishers. However, during subsequent Rōpū discussions, Kāi Tahu refined their position. They expressed that their preference, and the preference of commercial kōura fishers with whom they had spoken to, was boundary amendment D1-B or D1-C. Through the Rōpū engagement, Agencies confirmed that they were open to hearing the views of Kāi Tahu on potential boundary amendments, while reiterating that any decisions would sit with Ministers as part of the statutory process.

At a hui on 30 November 2021²²⁷ and in their subsequent letter to the then Minister of Conservation and the former Minister for Oceans and Fisheries of 15 December 2021, Kāi Tahu confirmed their preferred boundary option as D1-C, with D1-B also acceptable. In their view, D1-A would represent too great an economic impact on Kāi Tahu to be acceptable to

²²⁶ The kõura/rock lobster quota management area from the Waitaki River to Long Point.

²²⁷ At the request of Kāi Tahu, a hui was held on 30 November 2021 between the then Minister of Conservation, the former Minister for Oceans and Fisheries and Kāi Tahu, to directly hear Kāi Tahu views on rebalancing prior to making any decisions on the proposed Network.

them. At the 30 November hui, and acknowledging that the preferred boundary option of Kāi Tahu would exclude deep reef from this proposed marine reserve and the entire proposed Network, consideration of alternative sites to protect this habitat type was briefly discussed. No sites were suggested by Kāi Tahu or Agencies. In their letter of 15 December 2021, Kāi Tahu confirmed that a boundary amendment in line with their preferred boundary options is a matter which Kāi Tahu seek Ministerial agreement to as part of decision-making on the proposed marine reserve. Kāi Tahu identified this measure as one of two measures they consider as necessary to rebalance the economic impacts of the proposals.²²⁸ The implication is that if these measures are not implemented as proposed, Kāi Tahu will consider the outcome to be inadequate in terms of what they consider as necessary to rebalance the economic impacts of the proposed Network.

For ease of reference, the three alternate boundaries for the proposed marine reserve put forward by Kāi Tahu during engagement with Te Papa Atawhai and Tini a Tangaroa between July 2020 and July 2021 are shown in Figure 8-2²²⁹. The intensity of kōura fishing at the site can be seen in Figure 8-3, along with the boundaries of the site as proposed in the Application and the three alternate boundary options put forward by Kāi Tahu.

²²⁸ As noted at 6.3.4.3, the other being the measures to manage the recreational take of pāua in the PAU₅D fishery management area.

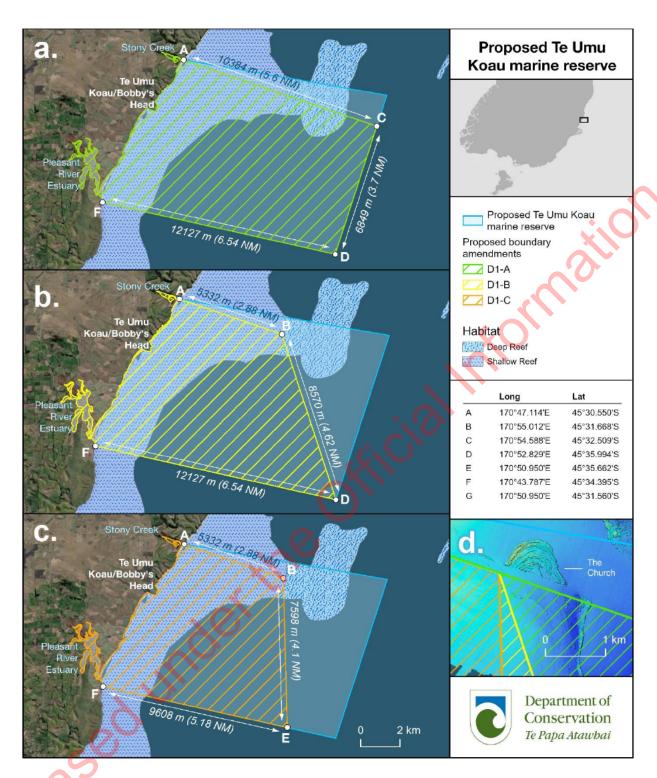


Figure 8-2: Alternate boundary proposals for the proposed Te Umu Koau marine reserve
a. D1-A proposed by Kāi Tahu July 2020, b. D1-B proposed by Kāi Tahu April 2021, c. D1-C proposed by
Kāi Tahu April 2021, d. the three proposed boundary amendment lines in relation to 'The Church' reef
structures (as mapped through multibeam surveying).

8.3.1.2 Te Papa Atawhai further advice

A number of submissions received through the statutory consultation process also raised objections to the proposed marine reserve on the basis of impacts on the commercial kōura fishery. These objections must be considered under section 5(6)(c) in terms of whether or not the Minister is satisfied that the proposed marine reserve would unduly interfere with commercial fishing. Due to them being similar in nature, however, these objections and our associated advice are relevant to the consideration of the issues and proposed boundary amendments raised by Kāi Tahu.

In summary, our advice under section 5(6)(c) in respect of objections (as set out in 8.5.4.1 and 8.6.4.2) is that we consider the level of interference with commercial fishing is likely to be undue but that the interference would be significantly reduced by excluding a key kōura fishing area from the proposal (reef habitat in the northeastern part of the site, including the area known as 'The Church'), as suggested by some submitters and by Kāi Tahu. Te Papa Atawhai considers that a boundary amendment in line with the initial proposal put forward by Kāi Tahu (D1-A) would reduce the level of interference on the commercial fishery sufficiently for it to no longer be undue. Our conclusion is that a larger boundary amendment is not recommended. This is on the basis that boundaries D1-B and D1-C would reduce the level of deep reef habitat represented to an extent that the proposed site, and therefore the proposed Network, no longer includes a viable example of this habitat. This would mean that some of the key values for which the Application for this site was made (as

set out in 8.2) would not be included. For the purposes of the analysis under section 5(6)(c), therefore, we consider any larger boundary amendment beyond D1-A to reduce the potential impact on commercial fishing would be more than is required to ensure the interference is not undue. Our analysis and discussion are set out in 8.6.4.2.

The starting point for our advice on the Kāi Tahu boundary amendment measure, therefore, is that Te Papa Atawhai's recommendation in response to the objections received in relation to impacts on commercial fishing is to amend the boundary of the Te Umu Koau marine reserve in line with proposed boundary D1-A. The question we have focused on for this part of the advice is whether an analysis of the Crown's Treaty obligations, in particular section 4 of the Conservation Act, mean that a *larger* boundary amendment (i.e. in line with proposed boundaries D1-B or D1-C) would be the appropriate outcome for you to reach in your decision under section 5(9) on the proposed Te Umu Koau marine reserve.

The rights and interests relevant to this proposed rebalancing measure are primarily those identified at 6.3.2 in relation to Kāi Tahu's concerns about the impacts of the marine protected areas on their commercial fishing interests. Kāi Tahu have clearly articulated that they see the potential impacts in terms of decreased quota value and/or reductions in total allowable catch to be particularly significant in relation to the proposed Te Umu Koau marine reserve. The key impacts therefore are the 'economic impacts' referred to by Kāi Tahu in their letter of 15 December 2021.

As set out further below and in the advice on objections received in relation to impacts on the commercial kōura fishing industry (section 8.6.4.2), Te Papa Atawhai acknowledges that the original boundary as proposed in the Application overlaps with an area of deep reef that is important to the commercial kōura fishing industry. Te Papa Atawhai acknowledges that there would be a corresponding economic impact on the commercial kōura fishing industry, and recognises that this includes Kāi Tahu quota holders and associated industries. In terms of your obligations in relation to the Treaty of Waitangi, therefore, of particular relevance are the obligations under section 4 of the Conservation Act, and in relation to the Treaty of Waitangi (Fisheries Claim) Settlement Act.

As is shown in Figure 8-2 above, all three boundary amendments proposed by Kāi Tahu would allow an important area of kōura habitat (including the area known as 'The Church') to remain in the CRA7 fishery (i.e. that area would be removed from the marine reserve). We consider, therefore, that any of the proposed boundaries, including D1-A, would significantly reduce the economic impacts anticipated by Kāi Tahu.

This analysis is supported by reviewing Table 8-1 (also see Appendix 8). Table 8-1 shows the estimated proportion of CRA7 catch that would be affected by each of the proposed boundary amendments. Note that these figures represent the total level of catch estimated to be affected, some of which will be caught through quota held by Kāi Tahu individuals or companies, and some caught through quota held by individuals and companies not affiliated with Kāi Tahu. The proportion of kōura catch affected by the proposed marine reserve would drop from an annual average of 13.1% to 5.1% with the D1-A boundary amendment – a reduction of 8.0%. This would reduce to 1.6% and 1.5% for D1-B and D1-C respectively While the D1-A boundary amendment would not reduce the amount of affected catch as greatly as D1-B or D1-C, we consider it would still significantly reduce the potential economic impact from the original boundary as proposed in the Application (as described in 8.6.4.2). By excluding the most important reef areas (as described by Kāi Tahu and submitters and shown by electronic reporting data), including 'The Church' as shown in Figure 8-2, the loss of fishing opportunity to individual fishers and across the fishery, including flow on effects to the wider community as identified by Kāi Tahu, would be much

reduced. This in turn would mean less displacement to other fishing grounds and therefore less effect on catch per unit effort, total allowable commercial catch and quota value.

Table 8-1: Comparison of the effects of alternate boundaries for proposed Te Umu Koau marine reserve (annual average from 2020/21, 2021/22 and 2022/23 CRA7 fishing years)²³⁰

	Original site as proposed in Application	D1-A	D1-B	D1-C
Habitat information				
Area of deep reef	7.3 km²	3.7 km²	0.3 km²	0.1 km²
Proportion of Forum region deep reef	4.5%	2.3%	0.2%	0.1%
Area of proposed marine reserve	~ 96 km²	~ 87 km²	~70 km²	~61 km²
CRA7 electronic reporting data (annual average)				
Estimated landings greenweight	14,273 kg	5,575 kg	1,751 kg	1,660 kg
Estimated proportion of affected catch	13.1%	5.1%	1.6%	1.5%
Annual port value of estimated affected catch	\$1,237,975	\$490,673	\$153,030	\$144,569
Annual export value ²³¹ of estimated affected catch	\$1,620,556	\$632,986	\$198,808	\$188,476

Correspondingly, the extent of deep reef habitat protected within each of the three proposed boundary amendments would be significantly reduced to varying degrees as compared to the original Application (see Table 8-1). This would have an effect in terms of the extent to which the proposed marine reserve and accordingly the proposed Network represents the biodiversity associated with this habitat type, and for this area to preserve this typical habitat in accordance with the purpose of the Marine Reserves Act.

As described in 8.6.4.2, while the proposed alternate boundary D1-A reduces the area of deep reef habitat in the proposed marine reserve and accordingly the proposed Network, it would still protect a viable example of this habitat type and its associated values. The D1-B and D1-C boundary amendment proposals exclude almost all of the deep reef habitat. These boundary amendments would mean the site, and the entire proposed Network, would no longer include a viable example of this habitat type and mean that some of the key values for which the Application for this site was made (as set out in 8.2) would not be included. Of particular note is the inclusion of many different habitat types in close proximity and the direct connectivity across shallower habitats to kelp forest and further to the deep reef invertebrate-dominated habitats, which plays a key role in supporting different life-stages of some species.

In considering Kāi Tahu's proposed boundary amendments for this measure, in terms of your obligations under section 4 of the Conservation Act the principles of active protection and partnership are of primary relevance. As recorded above, Te Papa Atawhai acknowledges that the original boundary as proposed in the Application would have an economic impact on the commercial kōura fishing industry and recognises that this includes Kāi Tahu quota holders and associated industries. Although any customary basis

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²³⁰ Note that these estimates are based on the more spatially accurate electronic reporting data. Previous estimates, such as those used in the Application, were based on historical CatchMapper data that are unreliable for potting methods (although at the time this was the best available information). The CatchMapper data are included in Appendix 8. For more information on data limitations, see 5.3.2.

²³¹ Export value for the period April 2020 - March 2021, provided by Tini a Tangaroa in May 2022 (\$113.54).

for commercial fishing rights was substituted by the settlement benefits received under the Treaty of Waitangi (Fisheries Claim) Settlement Act, those benefits (particularly quota holdings), are nevertheless important interests of Māori requiring due consideration (see 6.3.9.4). However, you must also consider the broader statutory framework, in particular the purpose of the Marine Reserves Act. Section 4 does not operate in a vacuum, and your decision must reconcile Treaty principles with other relevant values. Reasonableness is a key component of partnership and active protection requires informed decision-making and judgement by the Crown as to what is reasonable in the circumstances (see 3.3.1). As stated in 3.3.1, the Supreme Court in Ngãi Tai ki Tāmaki Tribal Trust v Minister of Conservation²³² confirmed that: 'what is required is a process under which the meeting of other statutory or non-statutory objectives is achieved, to the extent that this can be done consistently with s4 in a way that best gives effect to the relevant Treaty principles.'233. In light of:

- The significant reduction in economic impact on the commercial koura industry (including Kāi Tahu interests) that would result from progressing the D1-A boundary as opposed to the original boundary;
- The relatively minor additional reduction in economic impact on the commercial kōura industry (including Kāi Tahu interests) that would result from progressing the D1-B and D1-C boundaries; and
- The loss in values and benefits of the proposed site (including the effects on the proposed Network) due to the removal of deep reef from the site in light of the purpose of the Marine Reserves Act that would result from a larger boundary amendment than the D1-A boundary.

Te Papa Atawhai's view is that a decision to progress the D1-A boundary rather than the boundaries preferred by Kāi Tahu would give effect to the principle of active protection and partnership and would be consistent with your obligations under section 4. A larger boundary amendment than D1-A would go beyond what is required to give effect to Treaty principles. As part of that view, we also consider that such a decision would not be inconsistent with the Treaty of Waitangi (Fisheries Claim) Settlement Act. This is because any impacts on the benefits from this settlement (i.e. the potential impacts on Kāi Tahuowned quota) have been properly understood and our recommendation would afford a level of protection to these benefits that is appropriate in the context of the proposals.

We note that the above assessment focusses on the economic impacts of the proposed marine reserve as this is what has been raised through engagement with Kāi Tahu, including at the hui on 30 November 2021 and in their subsequent letter to the then Minister of Conservation and the former Minister for Oceans and Fisheries of 15 December 2021. Throughout engagement on the Application, Kāi Tahu have not raised any other considerations in addition to the economic impacts that would provide further rationale for the D1-B or D1-C boundary amendments being more appropriate than D1-A.

While Kāi Tahu did not specifically raise additional concerns, Te Papa Atawhai has still considered what other impacts on Kāi Tahu interests may be relevant. Te Papa Atawhai understands that non-commercial customary take of koura and paua (including take authorised under the Fisheries (South Island Customary Fishing) Regulations) occurs in the area proposed as a marine reserve. As recorded in the Kāi Tahu cultural assessment in the Forum's Recommendation Report (page 141), there are a number of culturally significant areas including areas of 'high customary fisheries interests' to the north and south of the

²³² Ngãi Tai ki Tāmaki Tribal Trust v Minister of Conservation [2018] NZSC 122.

²³³ Ibid. at [54].

proposed site and 'there are known to be good fishery and kaimoana resources within the proposed marine reserve'. Our recommendation to exclude a key area of kōura fishing habitat with the D1-A boundary amendment would ensure the potential impact on noncommercial customary take of kōura is also reduced. In terms of pāua, we expect there to be no change to the level of potential impact on non-commercial customary take of pāua across any of the proposed boundary options, due to pāua habitat generally being in shallower and more inshore areas, which are unaffected by the three boundary amendment proposals. However, this aligns with what Kāi Tahu emphasised during engagement on the Te Umu Koau boundary, which was the impacts to the commercial kōura fishery. The changes sought in relation to recreational take of pāua in PAU5D²³⁴ (see 6.3.8.1) would also contribute to addressing the potential displacement impacts of the establishment of the proposed marine reserves for commercial and non-commercial customary pāua take more generally.

The discussion above sets out our substantive reasons as to why we consider that a decision to progress the D1-A boundary is appropriate in light of your obligations in relation to the Treaty. From a procedural perspective, we also note, as described above at paragraphs 1124–1125, that the larger boundary amendments D1-B and D1-C represent a significant departure from the Application as consulted on, both in terms of size of the proposed marine reserve and the values that would be protected. Good public process and section 5 of the Marine Reserves Act would, therefore, limit your ability to immediately progress these alternative boundaries under the current process. Further consideration of such proposals would likely require you to make a decision to reject the existing Application for the proposed Te Umu Koau marine reserve under section 5(9) and give a direction to initiate a new application. At the very least you would need to seek further advice about what additional consultation would be required. If you wish to progress these alternative boundaries therefore, we recommend you seek further advice from the Te Papa Atawhai as to next steps.

As mentioned above, consideration of alternative sites to protect similar values to those found in the proposed Te Umu Koau marine reserve was briefly discussed at the 30 November 2021 hui, however no alternative sites were specifically put forward. Te Papa Atawhai's view is that it is not necessary to investigate alternative sites at this stage because for the reasons set out above we consider the recommendation for the D1-A boundary amendment represents an appropriate outcome that would be consistent with your obligations under the Treaty. As an additional procedural point, we note that consideration of an alternative site would require a decision to reject the existing Application and for a new application to be initiated. This is because no alternative sites were proposed as part of the current Application. Section 5 of the Marine Reserves Act requires the Minister to make a decision on the Application, and the Act makes no provision for another area to be 'substituted' during the process. While in no way seeking to advise on the outcome should an alternative process be initiated, Te Papa Atawhai's current view is that there would be considerable uncertainty in undertaking a new process and no guarantee that an appropriate alternative site would be identified. This is due to the fact the Forum recommended the proposed Te Umu Koau marine reserve after significant input from Kāi Tahu, affected users and the community. The Forum identified two other areas (Tow Rock and Long Point) that have similar features in terms of connectivity from shallow coastal to deep reef habitats, however they did not progress sites in these areas due to their cultural, commercial and recreational significance.

Overall, our assessment is that a decision to progress the D1-A boundary would be consistent with your obligations under section 4 and would fulfil your obligations in relation to the Treaty in respect of this proposed measure.

²²⁴ The pāua fishery management area from the Taieri River in the north to Slope Point in the south.

8.4 Submissions received on the proposed Te Umu Koau marine reserve

In total 4,193 submissions on the proposed Te Umu Koau marine reserve were received, with 86% in support of its establishment as proposed²³⁵. This included submissions on the proposed Network²³⁶ and on the proposed Te Umu Koau marine reserve specifically. There were 285 submissions specifically on this proposed marine reserve with 190(67%) objections (either outright objections or expressing partial support), 87 (30%) in support and 8 (3%) did not give a preference.

Of the 285 submissions, 17 were from submitters identified as affected iwi, hapū or whānau under the Marine and Coastal Area (Takutai Moana) Act 2011 (te Takutai Moana Act). Two supported implementing the proposed marine reserve and 15 objected. A further ten submissions (one in support, eight in objection and one not indicating a position) were from other Māori submitters (i.e. those who do not whakapapa to the Kāi Tahu rohe²³⁷ and were therefore not identified as affected iwi, hapū or whānau under te Takutai Moana Act, as set out in 5.2).

Submitters in support of the proposed marine reserve being established gave the following main reasons²³⁸:

- the benefits of the proposed protection for marine species, habitats and ecosystems
- the long-term ecological benefits of marine reserves for ecosystem and biodiversity recovery
- an understanding that the community and scientific benefits would outweigh the
 costs.

Submitters who did not support the proposed marine reserve being established or wanted changes before it was established, gave the following main reasons²³⁹:

- the impact of displacement of fishing effort to other areas
- effects on recreational and commercial fishers
- increased risks to recreational fishers' safety
- that the status quo is sustainable and the area is not overfished
- that the evidence to support the proposed site is unsound.

This included submitters who qualified their support by suggesting changes but whose support was not conditional on the

²³⁶ See chapter 5 for detail on how submissions were classified, assigned and analysed.

²³⁷ To descend from the Kāi Tahu (Ngāi Tahu) tribal group.

²⁵⁸ Bothwell, J., Long, D., Daddy, N., Hing, Z. 2020. Proposed southeast marine protected areas: Summary of submissions September 2020. Published by Public Voice. 209 p.

²³⁹ Ibid.

8.5 Stage 1 assessment – objections from affected iwi, hapū or whānau

8.5.1 Obligations in relation to the Treaty of Waitangi

As set out in 3.2.7, as part of your assessment of objections under section 5(6) of the Marine Reserves Act, you have obligations relating to the Treaty of Waitangi, including those under section 49 of te Takutai Moana Act and section 4 of the Conservation Act.

Under section 49 of te Takutai Moana Act, you, as the decision-maker, 'must have particular regard to the views of those affected iwi, hapū, or whānau in considering the application' (see 3.3.2 for more information). To allow you to do so, the objections received from submitters who are affected iwi, hapū or whānau are set out below, along with our advice on these objections under section 5(6)(a)–(e) of the Marine Reserves Act. As described in 5.2, Te Papa Atawhai has proceeded on the basis that any submissions (including objections) received from submitters affiliated with Kāi Tahu are considered as being from 'affected iwi, hapū, or whānau' for the purpose of te Takutai Moana Act.

The obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi when interpreting and administering the Marine Reserves Act is also relevant to your assessment of objections from submitters identified as affected iwi, hapū, or whānau. In order to give effect to the principle of informed decision-making, all objections received from these submitters are identified and analysed below. In addition to the principle of informed decision-making, the principles of partnership and active protection are also relevant. For the proposed Te Umu Koau marine reserve, these principles are primarily relevant to your assessment of the objections that relate to impacts on commercial (primarily in relation to impacts on commercial koura fishing activities) and noncommercial fishing activities (including the ability to continue the customary harvest of seafood), the transfer of mātauraka Māori, and a desire for co-management and 'customary rangers' for the proposed marine reserve. Te Papa Atawhai considers these issues relate to the protection of Kāi Tahu fishing rights and interests, both in terms of their commercial interests and non-commercial customary rights (noting the relevance of the Treaty of Waitangi (Fisheries Claims) Settlement Act to these matters - see 3.3.4.3), and the ability of Kāi Tahu to exercise tino rangatiratanga and kaitiakitanga over the area covered by the proposed marine reserve and taonga present (including those taonga and taonga fish species identified under the Ngāi Tahu Claims Settlement Act, see 3.3.3). In considering whether or not to uphold the objections relating to these matters, therefore, you must consider whether to do so would give effect to the Treaty principles of partnership, active protection and informed decision-making.

In considering your Treaty obligations in relation to these objections, the direct engagement with Kāi Tahu and the recommendations reached as a result of that engagement are directly relevant. Our advice in relation to the direct engagement with Kāi Tahu, including our consideration of each of the measures proposed by Kāi Tahu to mitigate what Kāi Tahu consider to be the impacts of the proposed marine protected areas (including the proposed marine reserves) on Kāi Tahu rights and interests and our recommendations are set out in 6.3. As set out in 6.3.10, our assessment, prior to considering any objections received, is that to declare each of the proposed marine reserves (including Te Umu Koau) on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty. This includes our assessment that to make these decisions would be consistent with the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi. In assessing the relevant objections below, therefore, we have considered whether there is anything additional that has been raised that means, in order to

be consistent with Treaty obligations, an objection should be upheld (meaning that the proposed marine reserve should not be declared) or that additional mitigation measures are required. For this assessment, we have proceeded on the basis that our recommendations in relation to the direct Kāi Tahu engagement will be progressed.

Our assessment is that the issues raised in the objections described below do not raise anything additional to that traversed through the extensive engagement with Kāi Tahu. On that basis, in accordance with our conclusion in 6.3.10, we consider that a decision to not uphold any of these objections would also be consistent with your obligations under section 4 and other Treaty obligations, and would therefore fulfil the Crown's obligations in relation to the Treaty.

8.5.2 Section 5(6)(a) estate or interest in land

No objections that raised issues relating to any estate or interest in land in or adjoining the proposed reserve were received from submitters identified as affected iwi, hapu or whanau.

8.5.3 Section 5(6)(b) navigation

No objections that raised issues relating to any existing right of navigation were received from submitters identified as affected iwi, hapū or whānau.

8.5.4 Section 5(6)(c) commercial fishing

8.5.4.1 Objections related to general impacts on commercial fisheries

Six objections from submitters identified as affected iwi, hapū or whānau raised issues related to commercial fishing.

Two individual submitters stated that the proposed marine reserve should be amended to avoid the kōura fishing area known as 'the Church' or changed to the smaller alternative site D2 proposed by the Forum as part of 'Network 2'240'.

One individual submitter stated that the commercial fishery assets of their iwi (Kāi Tahu) would be affected and that these had not been considered by the Forum during its process. They also said that displacement of fishing effort to other areas could further devalue their fishery assets and have flow-on employment and economic effects on the local community. They suggested that changing the northern boundary to exclude the reef habitat of importance to the commercial kōura industry would alleviate some of their concerns.

Other individual objectors, who self-identified as commercial fishers, stated that there would be impacts on the CRA7 industry through displaced catch, direct effects on fishers' costs and indirect effects on processors and exporters. They did not provide details or further information. One submitter argued that it was "too simplistic" to suggest the displaced catch from this area could be caught elsewhere.

In relation to the CRA7 quota owned by Kāi Tahu, another submitter stated that the "commercial impact on the iwi will be significant and the distributions to the hapu less than currently available".

Ezifish Charters Ltd²⁴¹ stated that adding further restrictions to an already heavily regulated industry "is not in anyone's best interests" but made no detailed comments.

²⁴⁰ The Forum's site D2 extended 2 km offshore rather than site D1 proposed in this Application, which extends 10–12 km offshore.

²⁴¹ A Dunedin-based charter fishing company.

Te Papa Atawhai advice

These objections highlight the high value of the site's reef structures to the kōura fishery. The same or similar issues were raised by other submitters as described in 8.6.4.2, and our full advice is provided there. In summary, we consider the interference with the commercial kōura fishery with the current proposed boundary would likely be undue. We consider it is possible to reduce this interference to a level that would not be undue by amending the boundary of the proposed marine reserve, while still maintaining the integrity and values of the proposed marine reserve in accordance with the purpose of the Marine Reserves Act. The recommended boundary excludes a key kōura fishing area from the proposed marine reserve (the reefs in the northeastern part of the site, including the area known as 'The Church'). It aligns with boundary D1-A as identified through the engagement with Kāi Tahu.

These issues have also been raised in engagement between Te Papa Atawhai, Tini a Tangaroa and Kāi Tahu, and our advice and recommendation are provided in 8.3.1. In that context, the question we focused on was whether an analysis of the Crown's Treaty obligations, in particular section 4 of the Conservation Act, meant that a *larger* boundary amendment (i.e. larger than the boundary amendment recommended to mitigate undue interference under section 5(6)(c)) would be appropriate. For the reasons set out in 8.3.1, our assessment is that a decision to progress the D1-A boundary, rather than Kāi Tahu's preferred boundaries (D1-B or D1-C) would be consistent with your obligations under section 4 and would fulfil your obligations in relation to the Treaty in respect of this proposed measure.

The issue raised by Ezifish Charters Ltd concerns the management of commercial fishery resources. We acknowledge that the proposed Te Umu Koau marine reserve would place a further restriction on commercial fishing activity. However, the submitter did not provide further detail to enable an assessment of how the issue would cause undue interference with commercial fishing.

Submission in support

We note a submission in support of the site was received from an individual identified as affected iwi, hapū or whānau. It described how they viewed marine protected areas as important for maintaining the "stability of fisheries", with further benefits for the endangered endemic species of the area. They argued that fisheries would be negatively affected if the proposed marine reserve was not established due to loss of biodiversity. We agree that protecting biodiversity and habitats by establishing marine reserves can have benefits for fisheries in the medium to long term.

8.5.4.2 Objections related to negative impacts on koura recruitment

One objection from a submitter identified as affected iwi, hapū or whānau stated that the analyses did not consider the relationship between adult and juvenile kōura. This commercial fisher said their Master of Science thesis (1971–1973) had shown that adult kōura compete for food with juveniles. The submitter said that the "prolific juvenile numbers [specifically in the area proposed as a marine reserve] relate to the extraction from the area of adult individuals who are competing for food". The premise for this objection appears to be that the higher abundance of adult kōura in a marine reserve would suppress the numbers of juvenile kōura. This would affect the number of harvestable fish available through reduced recruitment into the fishery outside the proposed area.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would interfere unduly with commercial fishing.

- There is little evidence that a restored population of koura (as would happen in a marine reserve over time) would suppress the number of juvenile koura to an extent that would have a wider fisheries effect.
 - Research has shown that the abundance of juvenile k\u00f6ura increased in all but one of
 eight New Zealand marine reserves studied²⁴². This indicates there was enhanced
 recruitment, survival and/or movement of juvenile k\u00f6ura into marine reserves.
 - In areas where the intensity of fishing is low, the density of k\u00f6ura and egg
 production per unit area can reach high levels²⁴³. This indicates there is potential for
 increased recruitment into the fishery from an increased breeding population.
 - Different habitat is required for different life-stages of koura, younger year classes
 generally live separately from the adult breeding population. While competition for
 food or adult predation of juveniles is likely to occur at some level, it is highly
 unlikely to be widespread to the point of limiting juvenile recruitment.

8.5.5 Section 5(6)(d) recreational usage

8.5.5.1 Objections related to the displacement of recreational fishing

- Three objections from submitters identified as affected iwi, hapū or whānau raised issues related to recreational fishing.
- Two submitters using a fishing club template raised an issue about safety concerns for fishers in small boats if they were required to travel further to fishing areas because of the proposed marine reserve. The template also stated that there would be "tremendous fishing pressure put on the small reef structures from Pleasant Point Matanaka, the Taiapouri [taiāpure²⁴⁴] and the Shag Point areas". It described that there are at least 30 boats that fish at the site proposed as a marine reserve, and that they would ultimately be displaced to other areas.
- In their submission, Ezifish Charters Ltd noted that adding further restrictions to an already heavily regulated industry "is not in anyone's best interests", in relation to recreational fishing. They also said that opportunities to harvest koura and paua near the proposed marine reserve were limited, and that establishing the proposed marine reserve would "put pressure" on other areas.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.

Alternate reef areas (the habitat typically favoured by recreational fishers) exist on either side of the proposed marine reserve. Boat-based fishers would therefore pass through these areas from the closest launching sites, which are north and south of the proposed marine reserve.

²⁴² Freeman, D. J. et al., 2012. Trajectories of spiny lobster *Jasus edwardsii* recovery in New Zealand marine reserves: is settlement a driver? Environmental Conservation 39: 295-304.

²⁴³ MacDiarmid, A. B. et al., 2013. Rock lobster biology and ecology: contributions to understanding through the Leigh Marine Laboratory 1962–2012. New Zealand Journal of Marine and Freshwater Research 47: 313–333.

²⁴⁴ Taiāpure are areas that have customarily been of special significance to iwi or hapū, as a source of food, or for spiritual or cultural reasons, and are now established under the Fisheries Act 1996.

- Regarding the safety concerns, previous mapping has shown there is no reef directly offshore from the proposed site, so we consider that recreational fishers would not be forced further offshore to find suitable fishing grounds.
- The effect of displaced fishing activity from this proposed site on recreational or customary fishing, or the East Otago Taiāpure, is uncertain, because of limited information about recreational fishing effort (see 5.3.2). For this site specifically, anecdotal information about recreational fishing effort came from submitters and through the Forum's engagement and consultation. Information from submitters was variable, with some saying the level of recreational effort was high and others low. Many stated that weather and sea conditions put natural restrictions on the activity. The fishing club template submission, for example, indicated that 30 boats used the proposed site but that their fishing activities were restricted by weather and sea conditions.
- We consider that while pressure on adjacent areas may increase to some extent in the short term, a marine reserve is likely to benefit recreational fishing in the medium to long term.

 This is because species targeted by fishers generally increase in size and abundance within a marine reserve and may move into adjacent areas that are accessible to fishers.
- The Forum's Recommendations Report (page 80) identified 26 areas in the Forum region that were known to be used for boat-based recreational fishing. Of those 26 areas, only part of one of these areas (Arai-te-uru/Danger Reef) is reported to be within the area proposed as a marine reserve, and at least five are directly north and south of the proposed marine reserve. We consider that the displacement of recreational fishing effort from the relatively small area known to be fished, to these adjacent areas, is unlikely to have significant detrimental effects on those alternate recreational fishing areas.
- We also consider our recommendation to amend the boundary of the proposed marine reserve, as set out in 8.6.4.2, would likely reduce impacts of fishing displacement as less reef habitat (that is favoured by recreational fishers) would be included in the marine reserve. In addition, in their letter to the then Minister of Conservation and the former Minister for Oceans and Fisheries of 15 December 2021, Kāi Tahu proposed measures to manage the recreational take of pāua in the PAU5D fishery management area (as set out in 6.3.8.1). If implemented, these measures would reduce any impact of displacement of recreational pāua fishing pressure from the proposed marine reserve on adjacent areas.

Submission in support

A submission in support from an individual identified as affected iwi, hapū or whānau endorsed the need for the proposed marine reserve, believing that the current level of recreational take was too high. As above, there is insufficient information available to verify this statement.

8.5.6 Section 5(6)(e) public interest

8.5.6.1 Objections related to impacts on customary interests

- Five objections from submitters identified as affected iwi, hapū or whānau raised issues related to impacts on customary interests.
- One submitter stated, "it is my custom to fish where and when ever [sic] I choose". This submitter made the same submission in relation to each of the proposed marine reserves except for Papanui.
- Ezifish Charters Ltd stated that this site was "one of the main areas [to] exercise Customary harvest for reef species fish such as Crayfish, blue cod and Paua".

- Another raised the issue of fishing effort displacement to the nearby East Otago Taiāpure and the area north of the proposed marine reserve.
- Another individual submitter said that the impacts on customary fishing rights had not been fully considered. They stated that consideration should be given to "rebalancing of quota and customary use", providing for "customary rangers" (including for marine pest management) and allowing for the "transfer of matauranga to future generations".
 - Three submitters stated a desire for co-management if the proposed marine reserve was established.

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.
- In terms of the objections concerning the submitters' rights to the customary harvest of seafood, it is acknowledged that the declaration of a marine reserve will prevent extractive fishing activities, including non-commercial customary fishing activities currently undertaken by affected iwi, hapū and whānau. As recorded in the Kāi Tahu cultural assessment in the Forum's Recommendation Report (page 141), there are a number of culturally significant areas including areas of 'high customary fisheries interests' to the north and south of the proposed site and 'there are known to be good fishery and kaimoana resources within the proposed marine reserve'. However, it is not currently the case that there is a general customary right to take fish from the coastal marine area "where and when ever", as suggested by a submitter. Rather, there are already a range of regulatory measures that govern such activities. This includes the Fisheries (South Island Customary Fishing) Regulations which specifically provide for and regulate non-commercial customary fishing activities.
 - Some of these submissions did not provide any detail as to how or why the proposed site was considered particularly important to the submitters for mahinga kai (food gathering) or customary use as opposed to the wider area. Ezifish Charters provided additional detail, by stating that the area was "one of the main areas [to] exercise Customary harvest for reef species fish such as Crayfish, blue cod and Paua". It is understood that this is likely to include reference to customary take authorised under the Fisheries (South Island Customary Fishing) Regulations. As noted above in the preceding paragraph and in 8.1.2, the Forum recognised that the establishment of the marine reserve would lead to some impact on customary values. Te Papa Atawhai also acknowledges that impact. However, the Forum consulted on two other sites (Tow Rock and Long Point) that would also provide continuous protection from shallow coastal to deep reef habitats. These sites were not recommended by the Forum due to feedback about their cultural, commercial and recreational significance. As such, the site was chosen on the basis that it would cause the 'least impact' on customary values. The proposed site in the Application therefore reflects these considerations.

In respect of all of these submissions, our recommendation to amend the boundary of the proposed marine reserve (as set out in 8.6.4.2) would mean that more of the offshore reef area would remain available for fishing (customary, recreational and commercial). The recommended boundary amendment is therefore likely to reduce the impacts on the customary harvest of kōura and rāwaru. Te Papa Atawhai acknowledges that the boundary amendment is unlikely to change the level of impact on the customary harvest of pāua due to pāua habitat generally being in shallower and more inshore areas, which are unaffected by the proposed boundary amendment. However, the changes sought by Kāi Tahu in relation to recreational take of pāua in PAU5D (see 6.3.8.1) would also contribute to

addressing the potential displacement impacts of the establishment of the proposed marine reserves for commercial and non-commercial customary pāua take more generally. In addition, areas adjacent to the proposed site would remain available for this customary harvest.

Te Papa Atawhai considers that fishing pressure on adjacent areas may increase to some extent. However, the extent of this increase is difficult to determine because while there is detailed information about commercial fishing there is only limited information about the level of recreational fishing effort in this area. As stated above, the Forum found that only a small part of the proposed marine reserve (an offshore reef area) was used for recreational fishing. The fishing effort in this area would most likely be displaced to reef areas adjacent to the proposed marine reserve, with some potential for it to be displaced into the East Otago Taiāpure 6 km south of the proposed reserve boundary. We note that the area from which fishing would be displaced is small compared with the available reef area that would remain. With the potential for long-term benefits of the proposed marine reserve on fish abundance we consider the impact of fishing displacement on adjacent areas is likely to be low. The recommended boundary amendment will also mean there will be less displacement of fishing activity generally as a result of the marine reserve.

The remaining issues raised in the objections above were also discussed during engagement with Kāi Tahu and are described in 6.3. These are:

- co-management
- rebalancing for impacts on quota and customary use
- providing for Kāi Tahu ("customary") rangers
- allowing for the continued transfer of matauraka Māori.

Our recommendations in relation to these measures, as set out in 8.8, would mitigate the issues raised in these objections.

8.5.6.2 Objections questioning the management of land-based threats

One objection from a submitter identified as affected iwi, hapū or whānau stated that the "long term negative effects" of land-based threats (like sedimentation and nutrient runoff) on the coastal marine environment had not been adequately considered.

Te Papa Atawhai advice

Our advice on this issue, along with similar issues raised by other submitters, is presented in 8.6.6.6.

8.6 Stage 1 assessment – objections from all other submitters

8.6.1 Obligations in relation to the Treaty of Waitangi

Section 8.5 sets out the views of submitters identified as affected iwi, hapū, or whānau. The following section sets out the objections received from all other submitters and provides our advice on the assessment of these objections in terms of the tests in section 5(6)(a)–(e) of the Marine Reserves Act.

The objections considered include objections received from Māori submitters who were not identified as affected iwi, hapū, or whānau on the basis that they were not affiliated with Kāi Tahu (see 5.2). The requirement under section 49 of te Takutai Moana Act to 'have particular regard' therefore does not apply to these views.

As set out in 5.2, however, the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi when interpreting and administering the Marine Reserves Act may still be relevant to your consideration of objections received from these submitters. In order to give effect to the principle of informed decision-making, Te Papa Atawhai has identified all objections received from other Māori submitters. Of these, we consider that objections relating to commercial and non-commercial customary fishing activities (including the ability to continue the customary harvest of seafood for nourishment, for maintaining wellbeing, and for teaching tikanga and for tangihanga) should be considered in terms of the principles of active protection and partnership. As with objections received from affected iwi, hapū and whānau (see 8.5.1), our consideration of these objections in relation to section 4 obligations is made in the context of our direct engagement with Kāi Tahu and the recommendations reached as a result of that engagement. As set out in 6.3.10, our assessment prior to considering any objections received, is that to declare each of the proposed marine reserves on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty of Waitangi. This includes our assessment that to make these decisions would be consistent with the obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi. We are therefore considering whether there is anything additional that has been raised in the objections received from other Māori submitters that means, in order to be consistent with Treaty obligations, an objection should be upheld (meaning that the proposed marine reserve should not be declared) or that additional mitigation measures are required.

Our assessment is that the issues raised in the objections described below do not raise anything additional to that traversed through the extensive engagement with Kāi Tahu. We have also considered the fact that these views are received from Māori submitters who are not affiliated with Kāi Tahu. On that basis, in accordance with our conclusion in 6.3.10, we consider that a decision to not uphold any of the objections received from other Māori submitters would also be consistent with your obligations under section 4, and would therefore fulfil the Crown's obligations in relation to the Treaty of Waitangi.

8.6.2 Section 5(6)(a) estate or interest in land

8.6.2.1 Objections related to property value

Two objecting submitters stated they had recently purchased properties due to the recreational opportunities, notably fishing, afforded by the adjacent Pleasant River estuary. One specifically said.

9(2)(a)

9(2)(a) to the next closest area where they could fish for flounder. Other adjacent landowners stated that their recreational use of the area near their properties would be affected by the proposed marine reserve.

One of these objectors also stated a belief that their property boundary fence was included in the proposed marine reserve area.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with any estate or interest in land.

Landowners with property adjacent to the proposed marine reserve would be affected more directly by its establishment than those living further away. They would need to travel outside the proposed marine reserve to carry out the recreational activities mentioned,

which would be less convenient. The area, however, would remain accessible for non-extractive recreational activities. We do not consider this interference would be undue when considered against the purpose of the Marine Reserves Act.

The thickness of the lines on the maps in the Application may have given the impression that the proposed site encroaches on private land. Once a marine reserve is approved, part of the gazettal process is to undertake a full survey to create exact boundaries. The final boundaries of a marine reserve would not overlay any private land as per cadastral (official boundary) data.

8.6.3 Section 5(6)(b) navigation

8.6.3.1 Objections relating to boat access

Two submitters partially supported the proposed marine reserve but wanted changes to the proposal. They were concerned that using vehicles to launch boats from the foreshore would be prohibited if the Pleasant River estuary was included. They indicated that they "would have to travel a lot farther" to access the ocean. They suggested allowing for "vehicle access for boat launching from the existing private launch sites".

Te Papa Atawhai advice

The Application proposed (on pages 74 and 75) that vehicle access for launching or retrieving a vessel be allowed. Under the Marine Reserves Act, driving vehicles on the foreshore is prohibited so a condition in the Order in Council would be required to allow this activity to continue.

We recommend a condition in the Order in Council to provide for this activity if the proposed marine reserve is established (see 8.8.1.2). Vehicular access can, however, cause damage to biodiversity, particularly in estuarine systems such as the Pleasant River estuary. Therefore, to ensure the purpose of the Marine Reserves Act is met, we recommend limiting the condition authorising vehicular access to access for vessel launching and retrieval, requiring that access must be by the most direct route across the foreshore to the nearest feasible vessel launch or retrieval site. This measure would minimise disturbance caused by vehicles and if implemented, would prevent the undue interference with access raised in submissions. Vehicle access to the foreshore by the public for other purposes would not be allowed.

8.6.4 Section 5(6)(c) commercial fishing

8.6.4.1 Objections related to commercial fisheries generally

The New Zealand Conservation Authority²⁴⁵ partially supported the proposed marine reserve. It "encourage[d] a mutual resolution to the establishment of D1 to ensure longevity in the marine protection of this area and note that the core issue highlighted by Ngāi Tahu is in the scale of the D1 proposal". They would only support the proposed marine reserve if it was either:

- reduced in area, or
- changed to a Type 2 marine protected area so that there was "no damage to habitats" and recreational, customary and commercial koura fishing is not affected.

²⁴⁵ A national statutory body that provides strategic policy advice to Te Papa Atawhai and the Minister of Conservation.

- A combined industry objection from the New Zealand Rock Lobster Industry Council²⁴⁶, Paua Industry Council²⁴⁷ and Fisheries Inshore New Zealand²⁴⁸ stated that the impacts on commercial fisheries of the proposed marine reserve would be significant. They considered the figure of \$2 million per year (as per Tini a Tangaroa data presented in the Application) to "significantly under-estimate" the export value of potentially displaced commercial catch across all fisheries in the proposed marine reserve. The combined industry objection did not include any detail to support this statement. They referred instead to detail provided in the following industry-specific submissions:
 - Otago Rock Lobster Industry Association²⁴⁹ (kōura)
 - PauaMac 5 Incorporated²⁵⁰ (pāua)
 - Kina Industry Council ²⁵¹(kina)
 - South Island Eel Industry Association²⁵² (matamoe/eel)
 - Harbour Fish South Island Seafood²⁵³ (finfish).
- The objections from these organisations are discussed in the separate sections below for each fishery.
- The combined industry objection also expressed concern that the proposed marine reserve may displace additional fishing effort into the nearby Moeraki Mātaitai²⁵⁴ or East Otago Taiāpure, which could lead to more extensive fishery restrictions in those areas and have a greater impact on commercial fishers overall. They also expressed concerns that the displacement of fishing pressure from within the proposed marine reserve would negatively affect other surrounding fishing grounds and create environmental damage. The submitters concluded that this could be detrimental to commercial and recreational fishing overall.
 - In total, 18 submissions mentioned the potential economic impact of the proposed marine reserve on the commercial fisheries operating in the general area.

Te Papa Atawhai advice

With the exception of objections relating to impacts to commercial koura fishing, which are discussed in 8.6.4.2, for the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with commercial fishing.

The recommendation by the New Zealand Conservation Authority that the proposed marine reserve should be changed to a Type 2 marine protected area would compromise the

²⁴⁶ The national representative organisation for the New Zealand rock lobster industry and the umbrella organisation for nine commercial stakeholder organisations operating in each of the rock lobster management areas in New Zealand.

²⁴⁷ The national agency for five commercial stakeholder groups that represent commercial pāua fishery interests.

²⁴⁸ A commercial fisheries stakeholder organisation.

²⁴⁹ A fully constituted and incorporated society which is recognised as the commercial stakeholder organisation representing the interests of the commercial kōura/rock lobster industry on the Otago Coast, the CRAMAC7 (CRA7) fishery.

The regional commercial stakeholder group for Fiordland (PAU 5A), Stewart Island (PAU 5B) and Southland/Otago (PAU 5D). Members include owners of pāua quota and Annual Catch Entitlement, as well as fishing vessel operators, processors, fish dealers and harvesters.

²⁵¹ A national body representing commercial kina fishers.

²⁵² Organisation representing commercial eel fishermen who utilise the eel resource (shortfin and longfin eels) in the South Island.

²⁸³ A seafood company operating along the Otago-Southland coast, harvesting, processing and distributing wild-caught fish.

²⁵⁴ The customary fishery management area established in 2010 around Moeraki Point, east Otago. Mātaitai are identified traditional fishing areas for tangata whenua. The kaitiaki (guardians) sustainably manage fisheries there through bylaws. They are now established under the Fisheries Act 1996.

conservation outcomes of the proposed marine reserve and the overall effectiveness of the proposed Network. A Type 2 marine protected area that only regulated the use of fishing gear to reduce species bycatch or avoid mechanical damage to the seafloor, would not allow for maintenance and recovery of the area to a natural state. This would undermine the objectives of creating a marine reserve at this site and the proposed Network as a whole. Kōura have an important function in reef ecosystems but their spawning biomass (mature individuals) in CRA7 has been estimated to be as low as 20% of that in 1963²⁵⁵. More recent analysis shows that for the combined CRA7 & CRA8 fishery (noting CRA7 makes up only 8.2% of the combined fishery), 2021 vulnerable biomass was 21% of the unfished level, and total biomass was 38% of the unfished level. Spawning biomass in 2021 was estimated as 48% of the unfished level²⁵⁶. Allowing for the continued fishing of this species in a Type 2 marine protected area would not be consistent with protecting the area in a natural state, especially when kōura are known to provide an important ecosystem function.

The suggestion of reducing the size of the proposed marine reserve did not include details, so could not be assessed. It is, however, likely to relate to impacts on commercial koura fishing, which are addressed in 8.6.4.2.

We consider that displaced commercial and recreational fishing effort may result in some additional pressure on fished species in adjacent areas, at least in the short term. It is unlikely to have a significant effect on the Moeraki Mātaitai or East Otago Taiāpure because:

- There is a significant amount of fishable reef between the proposed marine reserve and the East Otago Taiāpure (approximately 6 km to the south) and the Moeraki Mātaitai (approximately 10 km to the north).
- The abundance of fished species responds positively to protection both in marine reserves and in their surrounding areas according to New Zealand and global research²⁵⁷.
- The recovery of exploited species within the proposed marine reserve is likely to
 enhance fishing adjacent to the site. Evidence of this effect is seen at many marine
 reserves where 'fishing the line' (fishing along a marine reserve boundary) is
 observed. Fishing effort could therefore be expected to increase immediately
 outside the proposed marine reserve, rather than in customary fishing areas that are
 further away.
- All commercial fishing in the Moeraki Mātaitai is currently prohibited, so the displacement of commercial fishing from the proposed marine reserve would not directly affect this area.

More generally, it is uncertain what effect displaced fishing effort would have on areas adjacent to the proposed marine reserve. This is partly because information on recreational fishing activity is limited (see 5.3.2). However, our recommendation in 8.6.4.2 to amend the boundary of the proposed marine reserve, to reduce the level of interference with the commercial koura fishery, would reduce the amount of commercial and recreational fishing effort displaced by the proposed marine reserve. It would reduce the level of commercial

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²⁵⁵ Ministry for Primary Industries (2017). Fisheries Assessment Plenary, November 2017: stock assessments and stock status. Compiled by the Fisheries Science Group, Ministry for Primary Industries, Wellington, New Zealand. 500p

²⁵⁶ Review of Rock Lobster Sustainability Measures for 2022/23. Proposal to Alter Total Allowable Catches, Allowances, and Total Allowable Commercial Catches. Fisheries New Zealand Discussion Paper No: 2021/27 ISBN No: 978-1-99-101994-3 (online) ISSN No: 2624-0165 (online) December 2021.

²⁵⁷ Partnership for Interdisciplinary Studies of Coastal Oceans, 2007. The Science of Marine Reserves (2nd edition, International Version). www.piscoweb.org. 22 p.

kōura catch affected, and therefore displaced, from 13.1% to 5.1% of the CRA7 catch. Similarly, as the recommended boundary amendment would exclude a greater area of reef habitat (preferred by recreational fishers) from the marine reserve, the amount of recreational fishing affected and displaced would also be reduced.

Submission in support

A submission in support provided an opposing view. "The concept of displacement of fisheries is given too much credit when examining marine reserves. Fishermen are constantly "displaced" from specific sites or fish species all the time, for example due to market shifts, fuel costs, quota changes etc. Most of these adjustments in fishing are not recorded or acknowledged, but the fishers adapt to change and continue to catch fish. The fish are still available to be fished outside of a reserve and if not, their progeny will be available as spillover". This submission highlights that many factors affect the operation and economics of commercial fishing and the difficulty of determining the impact of any one factor.

8.6.4.2 Objections related to the commercial koura fishery

A number of objections highlighted:

- the importance of this area to the commercial koura fishery
- possible impacts on the operation of the CRA7 fishery
- · economic impacts and potential impacts from the displacement of fishing effort.
- Te Ohu Kaimoana²⁵⁸ (a Māori submitter not identified as affected iwi, hapū or whānau) objected to the proposed marine reserve stating that the economic impact on the kōura fishery was not acceptable from the perspective of a Treaty partnership. It stated that the displacement of fishing effort would cause the localised depletion of several species in the surrounding areas, and force fishers to move into different fishing areas. They further emphasised the importance of this site to the kōura fishery and noted that the associated economic impacts would "severely affect fishers and their families".
- The combined submission from the New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand stated that the "direct impacts on the CRA7 fishery are significant". The objection also noted that this site was critical to the fishery and that the adverse impacts described in the Application were significantly underestimated. The Fiordland Lobster Company²⁵⁹ also emphasised the contribution of this area to the profitability of CRA7.
- The objection by the Otago Rock Lobster Industry Association was based on the importance of specific reef structures required by current patterns of commercial koura fishing. The submission described information gained through interviews carried out with all koura fishers in the CRA7 quota management area. In summary, these fishers noted:
 - The importance of the "Karitane and East/West Ledges" and that their operations
 "can only reliably occur on reef or rock structures" particularly the areas where koura
 gather before migrating.
 - Any loss of reef or rocks used by fishers "will have a very significant displacement effect".

²⁵⁸ A national organisation that works to advance Māori interests in the marine environment, including customary fisheries, commercial fisheries and aquaculture as well as providing policy and fisheries management advice to iwi and the wider Māori community.

²⁵⁹ A rock lobster receiving and export company based in Fiordland.

- That "there are no alternative reefs that can support the level of fishing that is
 occurring in the northern fishing area [which the proposed marine reserve is
 within]".
- The submission also provided a series of statutory declarations from the nine fishermen currently working in CRA7. These included annotated maps showing their general areas of fishing, including some vessel movement data from a short period during the 2019/20 season.
- One individual objector stated that the proposed Network "includes a marine reserve on the most abundant and profitable rock lobster ground in the fishery". They also stated that "the lobsters accumulate at the edge of the reef in D1 known as 'the Church'. It's like a big horseshoe of foul. There is nowhere else quite like this in CRA7 with such a holding capacity. So much of CRA7 is dependent on settlement at the Church".
- The Otago Rock Lobster Industry Association highlighted that their members were commonly part of "family businesses" with some "following in their parents and grandparent's footsteps", and who hope to pass on "generational knowledge". They stated that implementing the proposed marine reserve would be a "generational loss".
- The importance of this site to the commercial koura fishery was a strong theme from submitters identified as affected iwi, hapū or whānau (see 8.5.4.1) and other submitters as described above. It has also been articulated in our engagement with Kāi Tahu (see 8.3.1).

Te Papa Atawhai advice

- Te Papa Atawhai considers the level of interference with commercial koura fishing, if the proposed marine reserve is established, would be high. For the reasons set out below, despite the significant benefits of the proposed marine reserve, as set out in 8.2, we consider this would likely amount to the interference being undue.
- Interference with the commercial kōura fishery would likely be undue

 Firstly, as outlined in 8.3.1, a significant proportion of CRA7 catch would be affected by the marine reserve as proposed in the Application. The relevant estimate is 13.1% for the period April 2020 to March 2023 based on electronic reporting data (data for three fishing years)²⁶⁰. Submitters' statements supported this view and noted that the reefs in the northeastern part of the site, including the area known as 'The Church', were particularly important for the CRA7 fishery. Fisheries data from electronic reporting confirms that the site and the area adjacent to it are important areas for the fishery (as can be seen in Figure 8-3 and Figure 8-4).

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²⁶⁰ As set out in 5.3.2, CatchMapper data was presented in the Application but is no longer considered the best available information due to the more spatially accurate electronic reporting data now being available (albeit for three fishing years for kōura). For comparison, CatchMapper data provides an estimated proportion of CRA7 catch that would be affected by the proposed Te Umu Koau marine reserve of 20.8% (based on an annual average between 2007/08 to 2018/19).



have variable impacts on individual fishers, with a few fishers being disproportionately affected in terms of where they catch their fish. The six CRA7 fishers reported to have fished this site over the 2020/21 to 2022/23 fishing years were estimated to have caught an annual average of 9(2)(b)(ii)

This

demonstrates that some fishers would have to adjust their fishing to a greater degree than others fishing the general area.

Secondly, due to its high value, the koura catch from this proposed marine reserve makes a disproportionately greater contribution to the overall financial value of commercial fishing of all species at this site; i.e. it comprises only 26.1% of the total volume caught but accounts for 90.5% of the total value based on port prices. The port price of koura for the 2020/21 fishing year was \$68.2344/kg, compared to the next three highest port prices for paua (\$39.47), rāwaru/blue cod (\$11.13) and kina (\$10.00), and is ten or more times higher value than any other species targeted in the region. Therefore, the potential economic effects on individual fishers, the fishery, and the wider industry are more pronounced than if considering just the level of catch alone. This is particularly so when considering the export value of kōura, with the majority of the CRA7 catch exported. The export price for the 2020/21 fishing year was \$113.54/kg which relates to \$1,462,883 in terms of the export value of the estimated catch that would be displaced by the proposed marine reserve, for that year. Export prices fluctuate and have gone as low as \$108.19/kg and back up again during 2022 to \$137.33/kg. Based on the highest export price of \$137.33, the updated data averaged over three years could have an export value as high as \$1,960,056 per annum.

Thirdly, the specific reef habitat in the proposed marine reserve appears to have a strong influence on the catch per unit effort²⁶¹ of the fishery (i.e. a greater amount of catch is caught at these reefs for the same effort compared to elsewhere). The reefs in the northeastern part of the proposed site, including 'The Church', have been specifically highlighted as important. The fishers' statutory declarations, maps and statements indicated that four out of nine vessels currently operating in the CRA7 fishery used these reefs heavily as part of their seasonal fishing activity, and two others used the area to a lesser extent. (The remaining three vessels reportedly do not fish in the proposed marine reserve area.) This information, along with catch information provided by Tini a Tangaroa, indicates that these reef structures are a 'hotspot' for the fishery, and contribute disproportionately to the overall landings for CRA7. As raised by submitters, the high abundance and sought-after size of koura found in this area means that fishers can achieve their target catch more quickly and with less effort, whilst also getting the best value. Displacement of fishing from these reefs, therefore, may result in a reduced catch per unit effort for the fishery overall, and subsequently a potential reduction in total allowable commercial catch²⁶² in subsequent fishing years. It may also increase the operating costs for fishers because of the ability to catch high value koura at this site with less effort than in other areas.

Finally, as set out in 3.2.4, the question of whether the marine reserve would unduly interfere with the commercial koura fishery must be assessed in light of the purpose of the Marine Reserves Act and the overall public advantages of the proposal. Section 8.2.2 sets out the values of the site, a key component of which is the protection of deep reef habitat and the direct connectivity between deep reef habitat and shallower habitats. Given the high value and public advantages of protecting deep reef habitat at this site, therefore, Te Papa Atawhai considers that a significant level of interference with the commercial koura fishery would be required in order for it to be undue. However, the judicial guidance is also clear that unduly means 'more than what is warranted'. 263 It is therefore relevant to consider whether the identified values can be protected without having the identified level of impact on the commercial kōura fishery. For the reasons set out below, Te Papa Atawhai considers that a

²⁶¹ A stock abundance index derived from dividing the total catch of a species by the total amount of effort used to harvest that catch.

²⁶² The total quantity of each fish stock that the commercial fishing industry can catch in a given year. Tini a Tangaroa.

²⁶³ See cases discussed in 3.2.4.

boundary amendment to remove the reefs identified by the commercial koura fishery as of most importance would still provide some ability for the deep reef habitat within the proposed site to be protected, and therefore the identified values of the site (including in terms of its contribution to the proposed Network) maintained in accordance with the purpose of the Marine Reserve Act. On that basis, and in light of the impacts outlined above, Te Papa Atawhai's view is that the impact on the commercial koura fishery by the marine reserve as proposed in the Application is likely 'undue'.

There is uncertainty in the magnitude of impact on the commercial koura fishery. While our assessment is that the level of interference with the commercial koura fishery would likely be undue, we note that there are a number of uncertainties associated with the information on which we have based that conclusion.

Firstly, while a significant proportion of CRA7 catch is estimated to come from the proposed marine reserve (13.1% from electronic reporting data), the loss of fishing space does not directly relate to a loss in catch. It is reasonable to expect that at least some of the catch that would be displaced by this site would still be able to be caught from other reef areas, albeit potentially at a higher operating cost. Specific points to note are as follows:

- As the boundary crosses directly through the fished reef there is expected to be a significant edge effect, where rock lobster populations near the boundary are still susceptible to fishing pressure (edge effects have been shown to occur at other marine reserves²⁶⁴). As such, a proportion of the fish that are in the reserve are still available to be caught by 'fishing the line'.
- In addition, as stated in information received from fishers as part of the Otago Rock Lobster Industry Association's²⁶⁵ submission, at times there can be a high degree of onboard grading, where kōura are returned to the sea when they are not the optimal size for the overseas market. The submission stated that at times 70-80% (and up to 95%) of their catch is returned to the sea in order for them to land higher value kōura (referred to as high grading). This implies that the 'loss' of fish within the reserve can be mitigated to some degree by reduced onboard grading (i.e. retaining a higher proportion of the catch). Te Papa Atawhai accepts, however, that the resulting catch may have a reduced export value overall as the optimal size for overseas markets may not be met. As such, even if the total allowable commercial catch is largely caught, there would still be an economic cost to the fishers due to a lower port price.
- Also, a significant proportion of currently fished habitat would remain available to
 the fishery. Electronic reporting data estimates that 13.8% of CRA7 catch comes from
 all six proposed marine reserves (13.1% from this proposed marine reserve). This
 means that approximately 86% of catch is estimated to be taken from other areas
 that would remain available to be fished. However, as noted above, the value
 achieved for that catch may be less than if caught from this proposed marine
 reserve.

Secondly, while the proposed marine reserve may cause a future loss of opportunity, the upward trend in both the export value of kōura and the total allowable commercial catch may mean there is not a significant financial setback for the industry. For example, the total allowable commercial catch for the CRA7 fishery is reviewed and adjusted regularly, with an

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²⁶⁴ Freeman, D. J., Macdiarmid, A.B., Taylor, R., 2009. Habitat patches that cross marine reserve boundaries: consequences for the lobster *Jasus edwardsti*. Marine Ecology Progress Series 388: 159–167.

²⁶⁵ A fully constituted and incorporated society which is recognised as the commercial stakeholder organisation representing the interests of the commercial kōura/rock lobster industry on the Otago Coast, the CRAMAC7 (CRA7) fishery.

increase of 9% to 106,200 kg in April 2020²⁶⁶, and a further increase to 111,500 kg in 2022. Further, an economic analysis included with the Otago Rock Lobster Industry Association's submission described that the total allowable commercial catch is anticipated to be able to remain unchanged if the proposed Network is established (reflecting the fishery "currently being in very good shape"). We consider that if the total allowable commercial catch was reduced as a result of the displacement caused by the proposed marine reserve, it would clearly have economic effects on the industry in terms of future potential, however the scale of displacement (noting displacement does not equal loss) would not render the industry financially compromised.

Thirdly, according to the Otago Rock Lobster Industry Association's submission and as described above, only four vessels use the proposed marine reserve area to a high degree. Te Papa Atawhai acknowledges that besides the impact on the operations of these fishers, there is potential for some flow-on effects to the wider supply chain, but the extent of these impacts is uncertain because of other variables. These include changes to catch limits, ability to catch quota in other locations and variation in export price.

Recommendation to reduce the level of interference by amending the boundary

As set out in 3.2.1 and following, in considering objections under section 5(6) of the Marine
Reserves Act you may consider whether the imposition of a condition in the Order in
Council or other mitigation would be appropriate to respond to any objection raised, so that
the objection does not need to be upheld. Any mitigation must, however, remain consistent
with the purpose of the Marine Reserves Act. If the impacts cannot be appropriately
mitigated, then the consequences of a finding of undue interference is that the objection is
upheld and the marine reserve shall not be declared.

Some submitters suggested modifying the boundary of the proposed marine reserve to reduce the effect on the fishery. As described in 8.3.1, Kāi Tahu also suggested amending the boundary to reduce impacts on their commercial and non-commercial customary interests and put forward three proposals over the course of engagement. For the reasons set out below, Te Papa Atawhai considers that the impacts on the kōura industry that Te Papa Atawhai has concluded are likely undue, can be mitigated by a boundary amendment, while still maintaining the integrity and values of the proposed marine reserve in accordance with the purpose of the Marine Reserves Act.

As described above, the reef habitat in the northeastern part of the site is particularly important for the koura fishery. We consider a proposal to exclude part of these reefs from the reserve will have the most effective result in terms of minimising impacts on CRA7, while optimising the area and habitats to be included in the site. We recommend modifying the boundary at these reefs, as suggested by submitters and in line with the initial proposal of Kāi Tahu, D1-A. This would exclude those reef areas identified as most important to the fishery, including the area known as 'The Church'. This boundary amendment would significantly reduce the impacts on the CRA7 industry compared with the marine reserve as originally proposed, as follows:

- The proportion of CRA7 catch affected would be reduced from 13.1% to 5.1% and correspondingly, the export value of catch affected reduced from \$1,620,443to \$632,986 (see Table 8-1).
- The level of individual fisher's catch that would be affected would be reduced; the most impacted fisher would have a reduction in their affected koura catch from

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²⁶⁶ Fisheries New Zealand. March 2020. Review of Rock Lobster Sustainability Measures for 2020/21 Final Advice Paper, Fisheries New Zealand Information Paper 2020/02, and associated decision letter https://www.mpi.govt.nz/dmsdocument/40055-B20-0163-Sustainability-Measures-ministers-decision-letter.pdf.

9(2)(b)(ii) with no other fisher having greater than 9% of their kōura catch affected.

 The significantly lower level of catch displaced would be expected to have far less influence on the catch per unit effort and total allowable commercial catch of the fishery.

While the proposed alternate boundary D1-A reduces the area of deep reef habitat in the proposed Network, it would still protect a viable example of this habitat type. This finding is supported by a January 2021 survey²⁶⁷ that showed the reef habitats in both D1-A and the marine reserve as proposed in the Application had comparable biodiversity values. A marine reserve based on the D1-A boundary would retain viable protection for deep reef habitat and therefore still provide protection for the significant values identified at this site (as set out in 8.2). Te Papa Atawhai considers that the proposal would remain consistent with the purpose of the Marine Reserves Act.

In summary, Te Papa Atawhai considers that habitat representation and biodiversity protection would still be achieved with the D1-A boundary amendment, allowing the purpose of the Marine Reserves Act to be met, while sufficiently reducing the level of interference on the commercial koura fishery.

A larger boundary amendment is not recommended

Te Papa Atawhai does not consider a larger amendment to the boundary, as suggested by some submitters and Kāi Tahu (as set out in 8.3.1), is necessary or appropriate in terms of the statutory test under section 5(6)(c).

As set out in 8.3.1.2, the larger boundary amendments proposed by Kāi Tahu (D1-B and D1-C) would reduce the estimated affected CRA7 catch to 1.6% and 1.5% respectively).

Correspondingly, these proposals would reduce the level of deep reef habitat represented to an extent that the site, and therefore the proposed Network, no longer includes a viable example of this habitat. This would mean that some of the key values for which the Application for this site was made (as set out in 8.2) would not be included. We consider the additional reduction in potential impact on the commercial fishing industry, particularly in light of the uncertainties in the level of impact described above, would not outweigh this loss of biodiversity value. We consider any larger boundary amendment beyond D1-A to reduce the potential impact on commercial fishing would therefore be more than is required to ensure the interference is not undue.

As noted above in 8.3.1.2, consideration of a larger boundary amendment (as suggested by some submitters and in the D1-B and D1-C proposals put forward by Kāi Tahu) would represent a significant departure from the Application as consulted on. We therefore do not recommend that you progress a larger boundary amendment as part of your decision-making without seeking further advice from Te Papa Atawhai as to next steps, including consultation. If you conclude that the proposed marine reserve will unduly interfere with the commercial kōura fishery, and that the recommended boundary amendment is insufficient to alleviate the undue interference, you have the option of upholding the objections. In that case the marine reserve would not be declared.

Other points made in objection to the proposed marine reserve Submitters raised other points in objection that Te Papa Atawhai does not consider would cause undue interference.

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²⁶⁷ Kluibenschedl, A., Desmond, M., 2021. Benthic assessment of the proposed Te Umu Koau reserve. Report prepared for the Department of Conservation. University of Otago, 15 p.

Some submitters raised that displacement of fishing effort from the proposed marine reserve may cause the localised depletion of kōura stocks elsewhere. We agree this is possible in the short term, given the specific habitat kōura use and where fishing occurs. However, information in submissions describing the proportion of catch returned to the sea and the potential for the fishery to sustain a 25% increase in catch, indicates considerable uncertainty that depletion would occur. However, the recommendation to amend the boundary would also result in significantly less catch being displaced from this area and therefore a lower risk that remaining areas would be depleted.

Another issue raised was of spatial conflict and safety issues if the fishable area was reduced by establishing the proposed marine reserve. The Otago Rock Lobster Industry Association's submission described that the nine fishers spread their effort throughout almost all of the fishable area within the CRA7 Quota Management Area, from Oamaru in the north to Nugget Point (The Catlins) in the south. Although removing the proposed marine reserve area from the fishery would cause a change in the current pattern of fishing effort, we consider that existing strategies to manage conflict between fishers for space and for avoiding pot line entanglement would be able to be maintained. Amending the boundary of the proposed marine reserve as recommended would also significantly reduce the chance of this issue arising as only 5.1% of the fishery's catch would be displaced into other areas.

Impacts on the intergenerational and family-orientated nature of the CRA7 fishery were also highlighted in objections. According to fishers' statutory declarations included with Otago Rock Lobster Industry Association's submission, three of the six fishers using the proposed marine reserve area have had previous generations of their families involved in the CRA7 fishery. If the proposed marine reserve was established, there would be some changes in fishing practices and traditions for these families as to where they fish, but we expect the fishing activity would still be able to be carried out in different locations. Our recommendation for boundary amendment D1-A would also mean less change to fishers' current fishing practices is required.

Submissions in support

A number of submissions raised points that are relevant to your decision-making on these objections.

The submissions below highlight the importance of protecting the habitat types found within the proposed marine reserve. They also noted that in recommending the site, the Forum had already sought to minimise impacts on the fishery:

- WWF-New Zealand²⁶⁸ wrote, "the offshore boundary cuts through a reef system to avoid closing the whole reef to commercial fishing. This should allow fishing of koura papatea [rock lobster] to continue within the greater reef system, thus reducing the impact on fishers. Koura papatea are migratory and are also likely to be available at some other stage of their life when they move outside the reserve. This potential benefit for fishers should be conveyed in advice to Ministers".
- Forest & Bird²⁶⁹ stated that the impact of the proposed marine reserve on commercial rock lobster fishers would not be undue and wrote that, "Further concessions would compromise the biodiversity values of this area. There are no viable alternatives for either moderate shallow or deep reefs that would be likely to have less impact as Network 1 has been designed to limit negative impacts on

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²⁶⁸ A branch of an independent conservation organisation dedicated to protecting nature and looking after the planet.

²⁶⁹ An independent conservation charity that advocates to protect New Zealand's wildlife and wild places, to city, district and regional councils, central government and in courts.

important commercial fisheries [as stated in the Forum's Recommendations Report]". They also said the proposed marine reserve is "likely to facilitate movement [of kōura] outside the reserve as has been shown at Te Tapuwae o Rongokako Marine Reserve".

- The New Zealand Marine Sciences Society²⁷⁰ also supported the proposed marine reserve highlighting this site as "the only deep reef site within the proposed network, and a nationally significant area of [...] kelp forest". (Te Papa Atawhai notes that while there is a small area of deep reef habitat within the proposed Kaimata Type 2 marine protected area, it is not of a size or protection level to be considered to effectively contribute to the proposed Network.) This submission acknowledged the concerns from Kāi Tahu regarding the proposed marine reserve's impact on current commercial kōura fishing and community livelihoods but "urge[d] that solutions be found to ensure that the biodiversity of this proposed marine reserve is not compromised by allowing the take of rock lobster from this reserve. Kōura/Rock lobster are one of the dominant predators inhabiting subtidal reef ecosystems in New Zealand".
- The Otago Branch of the Ornithological Society of New Zealand Inc.²⁷¹ also commented on the importance of the deep reef habitat being included at a scale that is "scientifically useful". They stated that the "proposal as it stands is minimal" and that it was designed to minimise impacts on users by keeping a number of other areas open to fishing, as well as other efforts. While they acknowledged some impacts on a few fishers they also stated the "impact should be short term because no fish are removed by protection".
- Some submitters in support suggested that Government assistance for the affected kōura fishers should be made available. They suggested support to transition fishers to other types or areas of fishing, assistance with shifting fishing operations, or a transition package such as an interest-free loan.
- We consider that any form of 'transitioning' help to fishers would be difficult due to the high value of the koura fishery compared to other fisheries. Another factor is that the productive reef areas enable more cost-effective fishing than other areas. Any transition to other species or other areas is unlikely to be as profitable.
- Financial compensation has not been considered in this advice. Ministers, in the context of discussions with Kāi Tahu in 2020 and 2021, gave a directive that this was not available as part of this process (see also 6.3.7.1).

8.6.4.3 Objections related to the kumukumu/gurnard and make repe/elephant fish trawl fishery

Harbour Fish South Island Seafood²⁷² objected to the proposed marine reserve, stating that kumukumu/gurnard and make repe/elephant fish fisheries could not be moved to other fishing areas "due to the specificity of elephant fish habitat". They said five trawl fishermen operate on these "northern grounds" and estimated that (ii) of these fishers' trawl activity would be affected if the proposed marine reserve was implemented. They stated, "the direct financial loss of revenue would be in excess of (2)(b)(ii) from trawling in this area alone".

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²⁷⁰ NZMSS is a professional society with approximately 200 members. It provides access to and within the marine science community, and identifies emerging issues through annual conferences, annual reviews, a list serve and a website.

²⁷¹ The primary organisation concerned with the study of birds in New Zealand and the dissemination of this knowledge to assist the conservation and management of birds.

zra A seafood company operating along the Otago-Southland coast, harvesting, processing, and distributing wild-caught fish.

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would interfere unduly with the commercial kumukumu and mako repe fishery.
- The main trawl areas in the Forum region are not within the proposed marine reserve. Of the trawling catch at the proposed site, six species were caught at more than 1 tonne per year on average over the 2019/20 to 2021/22 fishing years. These included kumukumu at 2.4 tonne and make repe at 1.1 tonne. The estimated average annual catch displacement for these two species is 0.16% and 0.33% of the total catch of the quota management area respectively.
- The annual average value displaced in the kumukumu and mako repe trawl fisheries combined is estimated as \$9,380. When including catch from all fishing methods, this totals an estimated \$16,847. We are unable to reconcile this figure with the submitter's figure of 9(2)(b)(ii)
 - It is possible that some fishers who sell fish to Harbour Fish South Island Seafood use the area more than others and may therefore be more inconvenienced. However, the figures above indicate that the proposed marine reserve is not particularly important for the kumukumu and mako repe fisheries, so it is anticipated that these fishers would be able to move their activities elsewhere. No further information was provided with the submitter's statements to allow Te Papa Atawhai to relate their figures with those provided by Tini a Tangaroa.

8.6.4.4 Objections related to the commercial matamoe/eel fishery

- The South Island Eel Industry Association's objection stated that several local fishers would be severely affected by the cumulative restrictions imposed by the four estuarine protection proposals within the SFE15 quota management area²⁷³. They stated that the closures would be in addition to the "9 estuaries that already have prohibitions imposed on the fishery", which they list as the Waikouaiti and Waikawa Harbour mātaitai reserves and seven estuaries on gazetted public conservation land.
- The submission stated that "any further closures will risk the fishery becoming uneconomic". It also noted that the fishery operated on a "rotational nature" and that "the more estuaries available to fish, the longer the rotations can be, allowing eel size, condition and numbers to increase".

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with the commercial matamoe/eel fishery.
- This assessment is based on the existence of other areas where the activity could continue and the uncertainty in the level of affected catch. Six estuaries were considered by the Forum as proposed marine protected areas. The Forum acted to minimise the impact on the local commercial matamoe fishery while balancing the requirements of the MPA Policy to represent habitats. It excluded the two estuaries identified by commercial fishers as having the highest potential impact²⁷⁴.
- As described in the South Island Eel Industry Association's submission, a number of areas are not accessible to the commercial matamoe fishery in the southeast region due to

²⁷³ Pleasant River and Stony Creek estuaries in the proposed Te Umu Koau marine reserve, Akatore estuary in the proposed Whakatorea Type 2 marine protected area, and Tahakopa estuary in the proposed Tahakopa Type 2 marine protected area.

²⁷⁴ Tautuku and Haldane Estuaries that yielded maximum annual catches of short-finned eels of 7.5 and 6.8 tonnes, respectively.

mātaitai reserves (in one lagoon and two estuaries) or public conservation land (in five lagoons, four estuaries and one creek). Other areas besides these would remain open to commercial fishing, including those the industry indicated were most important.

We note the industry's submission stated that two fishers regularly use the proposed marine reserve area and at least three others fish there irregularly (not every year). While the Pleasant River and Stony Creek estuaries may be the preferred areas for the two regular fishers, we note the submitter states that these fishers are based in Balclutha and Owaka. This indicates they travel a reasonable distance (more than 100 km) to these estuaries to fish and could likely travel to alternate areas (including the two areas excluded by the Forum) without a significant effect on their operating costs.

Establishing the proposed marine reserve would however cause some displacement of this fishing activity into other rivers or estuaries within the SFE15 quota management area. Tini a Tangaroa does not hold data that would allow a quantitative assessment of this displacement. The quota management area for this fishery is large and encompasses all of the Otago and Southland regions, with reporting of catch made in two sub-areas. It is therefore not possible to determine the level of catch at an individual estuary.

In their earlier submission to the Forum in 2016, the South Island Eel Industry Association included information from fisher interviews describing the level of catch for the two estuaries that are within the proposed marine reserve. The information estimated the annual median catch was 9(2)(b)(ii) of the total allowable commercial catch of 29 tonnes for SFE15 (noting that at times catch can be as high as submission also described the estimated level of catch for the two other estuaries included in the proposed Network as Type 2 marine protected areas (Tahakopa and Akatore estuaries). This information states that, from all four estuaries, the annual median catch was which equates to ((b)(ii)) of the total allowable commercial catch of 29 tonnes for SFE15. We have no information to verify these figures, and the submissions did not provide information to show how they were derived.

The importance of matamoe to freshwater ecosystems in New Zealand has been well documented²⁷⁵. Typically, they function as apex predators, and have a strong influence on the ecology²⁷⁶. The effects of harvesting on the population structure of eels in estuaries, however, has never been examined. Also, their importance in estuarine environments has received little research attention. This lack of information means that the effects of removing matamoe on species composition and food webs is not known.

Establishing the proposed marine reserve would be beneficial to scientific research by providing a good reference site to study estuarine habitats. The Pleasant River estuary is the only estuarine habitat open to the sea included as a marine reserve in the proposed Network. The estuary would provide a valuable reference area for future scientific study on the ecosystem values of matamoe in a more natural environment and could help fill the knowledge gaps noted above.

The edge of the Pleasant River estuary is listed as an Area of Significant Conservation Value in the Dunedin City District Plan²⁷⁷. It is also a regionally significant wetland in Schedule 9

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²⁷⁵ Chisnall B.L., Hicks, B.J., 1993. Age and growth of longfinned eels (*Anguilla dieffenbachii*) in pastoral and forested streams in the Waikato River basin, and in two hydroelectric lakes in the North Island, New Zealand. New Zealand Journal of Marine and Freshwater Research 27: 317-332.

²⁷⁶ Jellyman, D. J., Glove, G.J., Bonnett, M.L., McKercher, A.I., Allen, K.R., 2000. The Horokiwi Stream 50 years on: a study of the loss of a productive trout fishery. NIWA Technical Report 83.

²⁷⁷ Dunedin City Council 2020. Areas of Significant Conservation Value. Dunedin City Council.

of Otago Regional Council's Regional Plan: Water for Otago. These listings highlight that the area is already recognised for its high natural and biodiversity values.

Stony Creek is partially closed to the sea and is also the only example of this habitat type in a marine reserve as part of the proposed Network. In their submission in support, Forest & Bird wrote, "Representation of a partially closed estuary (Stony Creek) although a common habitat type within the SEMPF region this is the only one of its kind in the proposed network. Stony Creek provides feeding habitat for gulls, terns and little shags, spoon bills, and large numbers of estuarine waterfowl and waders".

Te Papa Atawhai considers that establishing the proposed marine reserve and including two estuaries within it, is of high value for scientific and ecological reasons, both on its own and as part of the proposed Network. We acknowledge there would be some displacement of fishing activity for up to five commercial eel fishers, but that the greater public benefit from the establishment of the proposed marine reserve would outweigh these impacts, meaning that any interference would not be undue.

8.6.4.5 Objections related to kina harvesting areas

The Kina Industry Council²⁷⁸ objected to the proposed marine reserve because of its potential impact on commercial kina harvest. They stated that "not many areas outside proposed Marine Reserve areas D1 [Te Umu Koau] and K1 [Okaihae] are suitable for kina harvest. This is because there needs to be suitable water conditions for harvest, which are mainly found in D1 and K1. Other areas either do not have sufficient kina present, have poor water visibility, or are not safe to free-dive. Consequently, if D1 and K1 are gazetted as marine reserves, the ability to lightly harvest kina in SUR3 is lost, and the SUR3 fishery will be rendered worthless".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would interfere unduly with the commercial kina fishery.

Based on data from electronic reporting, Tini a Tangaroa advises that no kina catch was reported over the 2019/20 fishing year for this site, ^{9(2)(b)(ii)} in 2020/21, and ^{9(2)(b)(ii)} in the 2021/22 fishing year. The quota management area for kina (SUR3) extends from Kaikoura to The Catlins, and the proposed reserve site occupies only a small fraction of the reef within the quota management area. The combined catch over the three years of fishing equates to ^{9(2)(b)} of the quota.

Two fishers landed kina catch from this site. One fisher landed an average of two fishing years, equating to (ii) of their combined catch (i.e. all fish stocks landed). The other fisher landed (iii) during the 2021/22 year, which made up (iii) of their combined landings (i.e. all fish stocks landed).

The submission mentioned other areas where kina harvest was possible but did not elaborate further, stating only that oceanographic conditions may make them less favourable. We also note, as above, that it would not be feasible to establish effective marine protection without some displacement of fishing activities.

8.6.4.6 Objections related to the commercial pāua fishery

An objection from the industry body PauaMac 5 Incorporated stated that the proposed marine reserve would affect the commercial pāua fishery by disrupting the overall fishing

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²⁷⁸ A national body representing commercial kina fishers.

pattern in PAU5D. PAU5D is the fishery statistical area that the proposed marine reserve falls within. The industry body stated that catch displacement, which they said was not an insignificant amount, would lead to localised depletion in other areas, threaten the rebuild of the fishery and cause spatial conflict among fishers.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would interfere unduly with commercial paua fishing.

Information on catch from the 2019/20 to 2021/22 fishing years estimates that one fisher had catch from the site 9(2)(b)(ii) in 2019/20, which made up an estimated 9(2)(b)(ii) of their pāua catch for that year, and 9(2)(b) of their combined catch (i.e. all fish stocks landed) across all three years. This site was the only site in the proposed Network with catch reported in any of the three reporting years. Across three fishing years, the 9(2)(b)(ii) catch equates to 9(2)(b) of the pāua quota management area (PAU5D) catch. There were no reports of pāua catch from any of the proposed marine reserves in 2020/21 or 2021/22. Based on historical data from the 2007–2019 fishing years, the displacement of commercial pāua catch from this proposed marine reserve was estimated as 0.32% of the total catch for the quota management area.

It is not possible to establish effective marine protection in this region without displacing some commercial pāua fishery activities. We consider that the Forum sought to minimise fishing displacement in their recommendations of proposed sites. We expect that most of the commercial pāua fishery's activities would remain unaffected by this proposed marine reserve.

8.6.4.7 Objections related to future aquaculture

One individual submitter who identified as an owner of land adjacent to the proposed marine reserve, objected to its establishment because time had been invested in developing the idea of an "aquaculture business" in the Pleasant River estuary.

Sanford Limited²⁷⁹ made a submission about a proposal called Project East, for which they have lodged an application for resource consent with the Otago Regional Council. They pointed out that this project did not exist in 2016 and asked, "that Ministers when deciding on the South-East Marine Protection Forum's recommendations not only consider the views of current users in an area but also consider future uses that were not part of the stakeholder considerations back in 2016, such as aquaculture and in particular the potential for salmon farming in Otago waters".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with future aquaculture developments.

Aquaculture is not generally permitted in a marine reserve, so establishing the proposed marine reserve would prevent the future development of aquaculture within Pleasant River estuary, as raised by the individual submitter. Regardless of the proposed marine reserve, Te Papa Atawhai considers the impacts of aquaculture development would not be compatible with the high ecological values of the Pleasant River estuary and therefore resource consent would be unlikely to be granted for this activity. However, since there were no active or

²⁷⁹ A fishing company devoted entirely to the harvesting, farming, processing, storage, and marketing of seafood.

pending applications for aquaculture in this area at the time of the Application or currently, this issue does not need to be considered further.

The Project East proposal is for offshore open ocean salmon farms that, although they would not overlap directly with the proposed marine reserve area, may impact on the marine reserve or network objectives. Alternatively, if established, this proposed marine reserve may interfere with the project if it is deemed during their resource consent application that the impacts of a marine farm on the nearby marine reserve are environmentally unacceptable.

Future aquaculture applications for resource consent will be assessed and completed under the Resource Management Act process regardless of the establishment of the proposed marine reserve.

The proposed marine farm sites do not overlap with the proposed marine reserve and are not in close proximity (they are more than 7 km away). Modelling described in the application for this aquaculture activity estimates the depositional footprint extending to a maximum of 1.6 km from the farm sites, but that generally deposition will remain within the farming area boundary. The ecological changes to the seafloor expected beneath salmon farms would therefore be unlikely to have any direct effects on the proposed marine reserve.

One submitter in support wrote, "Open sea aquaculture is proposed for areas north of Dunedin. The reserve will be important in informing the design of these proposals and understanding their impacts".

Te Papa Atawhai cannot assess further whether there may be impacts of the proposed marine reserve on future development of these marine farms. Based on the available information, we do not consider that the objections raised would create undue interference.

8.6.5 Section 5(6)(d) recreational usage

8.6.5.1 Objections related to recreational fishing and gamebird hunting in the estuaries

Six individuals who identified as owners of land adjacent to the proposed marine reserve objected and three gave partial support (would only support if some changes were made).

The main objection raised in these submissions was related to prohibiting recreational fishing and gamebird hunting in Pleasant River estuary from, or on the shore of, their properties. This was described as an "extremely strong family tradition" by some submitters, who stated that they "would be unable to access food for our family from the shores on our own property, we should have the right to do so". One of the objectors wrote, "we purchased the farm adjacent to the estuary a year ago and the estuary and the fishing that it offered was one of the main reasons to purchase the property". The submitters requested changes to the proposal, including to "allow recreational fishing in the Pleasant River Estuary" or simply removing the estuary from the proposed marine reserve.

A similar objection was made by another individual submitter with a recreational fishing interest, who requested that fishing for matamoe/eel and <code>\text{inaka/whitebait}</code> be allowed. Another individual submitter would only support the proposed marine reserve if Stony Creek was removed from the proposal so "they can keep game bird hunting there". Notably, an objector wrote, "over the past 74 years three generations of our family have enjoyed game bird hunting at the Stoney [sic] creek area. The descendants of the three men that returned from War in 1946 still to this day continue their legacy on looking after the Stony creek area and have not missed a game bird season at Stoney [sic] creek since the beginning". Another objection (from a Māori submitter not identified as affected iwi, hapū or whānau) stated, "I have recreationally hunted waterfowl in Stony Creek and the lower reaches of the Pleasant

River for over ten years with my family, and would like to continue doing so with my future children".

The Otago Fish and Game Council²⁸⁰ also objected to the proposed marine reserve on the grounds of impacts on sports fishing and gamebird hunting in Stony Creek and Pleasant River estuary. They suggested that "if existing recreational hunting and trout fishing can't be accommodated within Marine Reserve then Wildlife Management Reserve (WMR) status should used for the lagoon and estuary area identified for protection".

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.
- Under the Marine Reserves Act, all forms of fishing are prohibited in a marine reserve.

 This includes freshwater sports fish, such as taraute/trout.
 - There are numerous other rivers where matamoe/eeling, taraute/trout fishing and kohikohi īnaka/whitebaiting can be carried out. The Shag and Waikouaiti Rivers in particular are both more accessible for recreational fishers than the Pleasant River estuary. Floundering is also possible at Waikouaiti, Blueskin Bay and Shag River, all of which are more accessible than Pleasant River estuary.
- While gamebirds (bird species targeted for hunting such as ducks and swans) are not marine life²⁸², they are a 'natural material or thing of any kind' and therefore their removal from a marine reserve would be prohibited²⁸³. The discharge of a firearm is also prohibited in or into a marine reserve²⁸⁴. Other activities that may be associated with gamebird hunting (littering, disturbance of marine life and/or natural features and erection of structures such as maimais) are also prohibited under the Marine Reserves Act. Gamebirds can be hunted at many sites in Otago, including ponds on private land adjacent to the proposed marine reserve.
- This site is the only marine reserve in the proposed Network that includes the habitat diversity in a gradient from shallow estuarine to deep reef habitats. Including the estuaries in the proposed marine reserve is what gives it such high scientific and biodiversity values. While some members of the public, particularly adjacent landowners, may be more affected by the proposed marine reserve than others, it would still be possible to carry out these activities in other nearby areas.
- We do not consider that the interference with these recreational activities is undue and therefore do not recommend the exclusion of the estuaries on the basis raised in these objections.
 - Te Papa Atawhai does note the issues raised about the need for continued hunting of gamebirds and unprotected waterfowl species within these estuaries for ecological and agricultural reasons. This issue is discussed further in 8.6.6.4. Our advice and

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Represents the interests of anglers and hunters, and provides coordination of the management, enhancement, and maintenance of sports fish and game.

²⁸¹ Sections 18I(1) and 21(d).

²⁸⁸ Gamebirds are 'wildlife' under section 2 of the Wildlife Act. The definition of 'marine life' in section 2 of the Marine Reserves Act excludes 'wildlife' within the meaning of the Wildlife Act.

²⁸³ Section 18I(3)(d).

²⁸⁴ Section 18I(4)(a).

recommendation on that issue addresses the concerns raised by the adjacent landowners regarding recreational hunting in Pleasant River and Stony Creek estuaries.

8.6.5.2 Objections related to managing fishing activity instead of establishing a marine reserve

Six objectors (including those who would only support the proposed marine reserve if recreational fishing was allowed) stated that better fishing management was required rather than a ban on recreational fishing. Most (including a Māori submitter not identified as affected iwi, hapū or whānau) commented that only commercial fishing should be banned, and that recreational daily catch limits be reduced and minimum fish sizes increased to more sustainable levels.

One of the objectors commented that commercial fishing could continue if measures to improve fishing management included decreasing quotas. It was also mentioned that estuarine species such as clams should have a quota imposed.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.

The marine reserve is not proposed as a fishery management tool, and we do not consider that the suggestions raised by submitters would meet the required level of protection for this site. The purpose of establishing the proposed marine reserve is to preserve the area for scientific study (section 3(1) of the Marine Reserves Act) and to contribute to the protection of marine biodiversity through a comprehensive and representative marine protected area network (as in the MPA Policy). Rather than protection against a specific activity such as fishing, marine reserve protection aims to safeguard habitats and associated species against a number of current and future potential impacts and preserve the area for scientific study.

8.6.5.3 Objections related to recreational fishing locations

The combined industry objection from New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand pointed out that although the Application stated, "other suitable locations are available nearby" for recreational fishing, these other locations were not identified.

They also disagreed with the statement in the Application that the adverse effects on overall recreational opportunities would be moderated by the availability of alternate fishing locations. They stated that it is "contrary to MRA s.5(6)(d) which requires that an objection must be upheld if there are adverse effects on existing recreational usage of the area. The reported existence of other suitable locations nearby (which the applicant has not identified) is irrelevant to the consideration of whether there are adverse effects on existing recreational fishing in the area of the proposed marine reserve" (submitter's emphasis).

One objector raised concerns that "this reserve and other proposed reserves would almost entirely remove the ability to gather seafood by diving/spearfishing in Dunedin/Otago".

An individual objector, identifying as general public, said they would support the proposed marine reserve only if Danger Reef was entirely excluded from the proposal. This is assumed to be in relation to recreational fishing as the submitter also stated that "even though they [the reefs] can be hit quite hard by people fishing I don't support the closure of some coastal areas to recreational fishermen".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.

The area of the proposed marine reserve, apart from the estuaries, would normally be accessed by boat for recreational fishing. As discussed in 8.5.5.1, areas adjacent to the proposed marine reserve would remain available for fishing, which would minimise disruption to these activities. Boat-based fishers would either be:

- travelling from the north (e.g. Shag Point) and would encounter suitable fishing grounds before reaching the site of the proposed marine reserve or
- coming from Ōtākou/Otago Harbour and would either encounter suitable fishing grounds before the site of the proposed marine reserve or have to extend their boat trip by up to 9 km to reach the area to the north of the proposed marine reserve.

Numerous rivers and estuaries are available for taraute/trout fishing and kohikohi Inaka/whitebaiting in Otago. These include Shag and Waikouaiti Rivers, both of which are more accessible for recreational fishers than Pleasant River estuary. Floundering is available accessible at Waikouaiti, Blueskin Bay and Shag Point, all of which are also more accessible than Pleasant River estuary.

Te Papa Atawhai disagrees with the assertion made in the combined industry submission that the existence of other suitable locations nearby is "irrelevant" to the assessment under section 5(6)(d). Firstly, we note the submission refers to "adverse effects" on recreational fishing. As noted in 3.2.4, the High Court in Akaroa Marine Protection Society Incorporated v The Minister of Conservation [2012] NZHC 933 confirmed that the approach to 'adverse effect' in section 5(6)(d) must be approached on the same basis as 'undue interference'. Therefore, it is not the case that an objection must be upheld if there is any scale of adverse effect on existing recreational users. The Minister must be satisfied that the adverse effect must be both 'excessive and unjustified' 285.

Secondly, as a matter of logic, the availability of nearby locations must be relevant to the assessment of whether that adverse effect/undue interference threshold is met. It forms part of the factual context in which the assessment must be made. If no other locations for similar recreational uses were available nearby, this would likewise need to be taken into account in assessing the severity of the effects of a proposed marine reserve. The *Akaroa* case also confirms that in making the assessment under section 5(6)(d), it is appropriate to consider the merits of the proposal, including the wider public interest, and that the benefits may extend beyond the area of the proposed marine reserve.²⁸⁶

The objection stating concern about additional restrictions was not accompanied by further detail to allow an assessment of how this would lead to impacts on recreational use. Changes to fisheries regulations or spatial management measures are a standard part of marine environmental management. We do not consider the changes related to the proposed marine reserve would cause undue interference or adverse effects on recreational use.

Submitters variously described a number of areas inside and outside the proposed marine reserve, as Danger Reef. Land Information New Zealand shows Danger Reef on nautical charts as a small reef around a set of rocks outside the proposed marine reserve. However, across all known definitions, most of the Danger Reef system is excluded from the proposed

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²⁸⁵ Akaroa Marine Protection Society Incorporated v Minister of Conservation [2012] NZHC 933, at [53].

²⁸⁶ Ibid. at [57].

marine reserve. Recreational fishers would still be able to fish on parts of reef outside the proposed marine reserve. Further, our recommendation to amend the boundary of the proposed marine reserve, as set out in 8.6.4.2, would result in additional reef habitat remaining outside the marine reserve and able to be utilised by recreational fishers.

8.6.5.4 Objections related to the displacement of recreational fishing

Seven individual objectors who identified their main interest as recreational fishing raised concern about the level of recreational fishing pressure that would be displaced to nearby sites. Fishing club templates used by 94 submitters also raised concerns that the displacement of recreational fishing effort would affect adjacent marine habitats. One of the individual objectors raised a specific concern about the effects of fishing displacement on the Moeraki fishery that was "in far worse shape and exploited by commercial fishing".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.

Displacement of recreational fishing from the proposed marine reserve is likely to increase pressure on adjacent areas to some extent. This may have a negative effect on local fish abundance in the short term, however, the size of the effect is uncertain because of limited information about recreational fishing effort. Any effects arising from displaced effort will ultimately be managed through the fisheries management system.

As outlined in 8.5.5.1, a number of sites outside the area of the proposed marine reserve would remain available to fishing. We also note that the area from which fishing would be displaced is small compared with the available reef area that would remain available to fishing. With the potential for long-term benefits of the proposed marine reserve on fish abundance we consider the impact of fishing displacement on adjacent areas is likely to be low.

We also consider our recommendation to amend the boundary of the proposed marine reserve, as set out in 8.6.4.2, would reduce any impacts of fishing displacement as less recreational fishing area would be affected by the proposed marine reserve.

8.6.5.5 Objections related to safety risks

Fishing club templates used by 94 recreational fishing submitters expressed concerns that the proposed marine reserve would affect the safety of those using boats in the area. They said the proposed marine reserve would cause them to go further away from land to fish and increase their vulnerability to more dangerous waters and weather. Four individual objectors also raised this issue, and one of these objectors said they would have to detour around the proposed marine reserve when returning from a fishing trip, presumably with fish on board.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would interfere unduly with recreational use.

Most fishers travelling to the site by boat launch from Otago Harbour (25 km south), Shag Point (4.5 km north) or Moeraki (20 km north). Alternate reef areas are accessible on either side of the proposed site, but there is no deep reef directly offshore from the proposed marine reserve. We consider that recreational fishers would therefore not be forced further offshore, which was the concern raised about safety. While some displacement of

recreational fishing is likely to occur, we do not consider that establishing the proposed marine reserve would threaten the safety of recreational fishers.

It is evident from views raised in some submissions that there is a misconception that travel through the proposed marine reserve would be prohibited for boats with fish on board. The Marine Reserves Act prohibits the taking of marine life from within a marine reserve but does not prohibit the transport of marine life through a marine reserve. This issue can therefore be disregarded as a misunderstanding rather than an objection. If the proposed marine reserve is implemented, Te Papa Atawhai would ensure that information is available for all boat-users to increase awareness of the rules.

8.6.6 Section 5(6)(e) public interest

8.6.6.1 Objections related to impacts on customary interests

Three objections received from Māori who were not identified as affected iwi, hapū or whānau, raised issues relating to impacts on their customary interests. One of these stated, "its our customary right", which we assume to refer to the harvest of kaimoana (seafood). Another described how the proposed marine reserve would take away from their "right as tangata whenua" to be able to provide kaimoana for themselves, which the submitter described as important for maintaining wellbeing, specifically "being able to keep our tapa wha intact", "to keep our pou well", "especially our wairua, hinengaro and tinana" and the integral links with "tangaroa". A third objector highlighted the importance of being able to harvest kaimoana both for teaching younger generations tikanga (protocols) and for tangihanga (funerals).

The combined industry objection from New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand stated that, "Displacement of fishing effort from the proposed marine reserves will result in an influx of fishing pressure into areas of importance for customary fishing, including the mātaitai reserves at Moeraki and Kaka Point". They also mentioned the East Otago Taiāpure, raising concerns that its restrictions would need to be increased if it was affected by displaced fishing effort from the proposed marine reserve.

A number of individuals and three organisations (New Zealand Conservation Authority, Sanford Limited, and the Otago Conservation Board²⁸⁷) who either supported, partially supported or objected, raised the importance of co-management with Kāi Tahu if the proposed marine reserve was established.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

In terms of the objections concerning the submitters' rights to the customary harvest of seafood, as set out in 8.5.6.1, it is acknowledged that the declaration of a marine reserve will prevent extractive fishing activities, including those non-commercial customary fishing activities currently undertaken by these submitters. However, it is not currently the case that there is a general customary right to take fish from the coastal marine area, as suggested by the submitters. Rather, there are already a range of regulatory measures that govern such activities, including the Fisheries (South Island Customary Fishing) Regulations which specifically provide for and regulate non-commercial customary fishing activities. Moreover,

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²⁸⁷ The committee established under the Conservation Act 1987 to represent the community and provide advice to Te Papa Atawhai on conservation matters in the Otago region.

the objections did not provide specific detail to support the submissions, such as information about the proposed site being particularly important to the submitters for mahinga kai (food gathering) or customary use as opposed to the wider area.

More generally in terms of the issues raised by submitters, Te Papa Atawhai notes that customary harvest will still be possible in areas adjacent to the proposed marine reserve, and also that the proposed boundary amendment would reduce the size of the marine reserve and therefore the impacts on customary activities. As noted in 8.5.6.1, two other potential sites (Tow Rock and Long Point) that would also provide continuous protection from shallow coastal to deep reef habitats were not recommended by the Forum due to feedback about their cultural, commercial and recreational significance. As such, the site at Te Umu Koau on which the Application is based was recommended by the Forum on the basis that it would cause the 'least impact' on customary values compared to other locations.

Additionally, as a result of the direct Kāi Tahu engagement (see 6.3), Te Papa Atawhai recommends making provision for activities to continue that would enable mātauraka Māori to be enhanced and allow for certain activities associated with wānaka. These recommendations will alleviate, at least to some extent, impacts on cultural values and interests associated with the site. We do acknowledge, however, that the recommended condition would be limited to members of Ngāi Tahu Whānui, and therefore would not authorise these specific submitters to continue carrying out such activities within the proposed site.

The issue about the importance of establishing co-management with iwi was also discussed during the engagement with Kāi Tahu, as described in 6.3.6.1. For the reasons explained in that section, Te Papa Atawhai recommends that for any of the marine reserves you recommend declaring, you direct that formal co-management arrangements are to be implemented, guided by the work undertaken to date by the Rōpū and the Rōpū co-management sub-committee. We consider that to do so would be consistent with your obligations under section 4 of the Conservation Act and would therefore your fulfil obligations in relation to the Treaty in respect of this issue.

We acknowledge the issue raised in the combined industry submission concerning the impact of displaced fishing effort on nearby taiāpure and mātaitai reserves. It is not possible to make a conclusive assessment of the magnitude or certainty of this potential impact. This is because of limited information on the level of recreational fishing effort that would be displaced, and uncertainty about where the fishing effort would be displaced to. As discussed in 8.6.5.4 however, the area from which fishing would be displaced is small compared with the available reef area that would remain, including a significant amount of fishable reef between the proposed marine reserve and the East Otago Taiāpure to the south and the Moeraki Mātaitai to the north. We note that an amendment to the northern boundary of the proposed marine reserve (as per our recommendation in 8.6.4.2) would also alleviate this potential impact.

8.6.6.2 Objections related to the benefits of kina harvesting

The Kina Industry Council also objected on the basis that in their view "removing kina via fishing is the best solution to help recover" reef areas. They stated that commercial kina harvesting helps control "exploded" kina populations, and thus prevents the heavy kelp grazing pressure that high numbers of kina would have. They suggested that if the proposed marine reserve was established, high kina numbers and the resulting "kina barrens" would not be manageable.

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would interfere unduly with commercial fishing.
- Kina barrens are areas where kina take over and denude a reef. This often happens when their predators namely large predatory fish and kōura are removed. Kina barrens occur extensively in the Hauraki Gulf and further north. Studies in these areas have shown that implementing protection measures allowed predators of kina to recover and naturally resulted in a decrease in kina numbers and a return to a more natural ecosystem. Kina barrens have not been well studied in the South Island.
- Kina barrens do occur in the South Island and post-establishment monitoring would assess kina abundance and how it was changing. Te Papa Atawhai considers it would be unlikely for kina numbers to remain unnaturally high in the medium to long term. Marine reserve status should allow the predators of kina to increase in abundance as observed at other marine reserves in New Zealand.

Submission in support

- In their support for this proposed marine reserve, the New Zealand Marine Sciences Society particularly highlighted the importance of kōura for controlling kina numbers and to "help maintain healthy kelp forests" (Shears and Babcock 2002²⁸⁸ cited).
- This submission highlights the importance of considering the ecological links in the proposed marine reserve area. Establishing a marine reserve at this site would allow an increase in the overall numbers of kōura and other large predatory fish. This in turn would maintain the level of kina at a more natural level and allow a healthy kelp ecosystem to persist. This would ultimately benefit the recruitment of fish and kōura.

8.6.6.3 Objections related to Stony Creek estuary

Two submitters (one giving partial support and one objecting) noted that the Stony Creek estuary was not a marine habitat "95% of the time". These submissions implied that Stony Creek did not fit the statutory requirements to be considered for a marine reserve. The submitters suggested that Stony Creek estuary should be removed from the proposal.

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.
- Te Papa Atawhai considers that Stony Creek estuary is a marine habitat and fits the statutory definitions to remain within the proposed marine reserve.
 - The Marine Reserves Act provides the protection of an 'area' as a marine reserve. Under section 2 of the Marine Reserves Act:

'area means any part of -

- (a) the seabed vertically below an area of the surface of—
- (i) the territorial sea of New Zealand; or
- (ii) the internal waters of New Zealand as defined by section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977; or

²⁸⁸ Shears, N.T., Babcock, R.C., 2002. Marine reserves demonstrate top-down control of community structure on temperate reefs. Oecologia 132: 131-142.

(b) the foreshore of the coast of New Zealand; — and includes any water at any material time upon or vertically above it'

Under section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977:

'The internal waters of New Zealand include any areas of the sea that are on the landward side of the baseline of the territorial sea of New Zealand.'

Regarding whether Stony Creek is 'on the landward side of the baseline of the territorial sea of New Zealand', the baseline as mapped by Land Information New Zealand runs in a straight line across the mouth of the estuary, pursuant to section 6A of the Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act.

In relation to whether it is 'any area of the sea', Stony Creek estuary is documented to have marine features. It is partially open to the sea via sea water leaking through the gravel land bridge between it and the open sea and during weather events when the land bridge is opened and sea water enters the estuary directly.

Research for a 2017 Master of Science thesis²⁸⁹ indicated that the Stony Creek estuary was 'intermittently open'. Its salinity is within the range of other estuaries in the region but is lower than in open estuaries such as the Pleasant River estuary. The algae and animals in Stony Creek estuary appear to be a mix of freshwater and marine species.

A submitter in support reported that they "observed that the sea washes into the Stony Lagoon during storm events at high tide". Forest & Bird's submission noted that the Stony Creek estuary would provide representation of a partially closed estuary and "although a common habitat type within the SEMPF region this is the only one of its kind in the proposed network. Stony Creek provides feeding habitat for gulls, terns and little shags, spoon bills, and large numbers of estuarine waterfowl and waders".

Te Papa Atawhai considers that Stony Creek estuary is an 'area of the sea', with sufficient characteristics to be considered 'internal waters' within section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act. It is therefore an 'area' as defined in section 2 of the Marine Reserves Act, which can be proposed as a marine reserve.

We also note that this is consistent with the approach taken in the Regional Plan: Coast for Otago. Under the Resource Management Act, 'coastal marine area' is defined in section 2 as:

'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 $\mathbf{5}'$

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²⁸⁹ Foote, N. R., 2017. Environmental and biological characteristics of East Otago estuaries along a gradient of marine connectivity (Thesis, Master of Science). University of Otago. Retrieved from http://hdl.handle.net/10523/7463.

Under the Regional Plan, the 'mouth' of Stony Creek is said to be where it enters the estuary and the 'boundary' is five times the width of the mouth upstream²⁹⁰. As such, the whole of the Stony Creek estuary falls within the coastal marine area.

8.6.6.4 Objections related to waterfowl management

Four individual submitters (one objector, two who did not state a preference and one giving qualified support) raised that if the proposed marine reserve was established waterfowl in Stony Creek and the lower part of the Pleasant River estuary would need to be controlled. Two of these submitters were adjoining landowners and three also raised the value of recreational hunting that can currently take place on the estuaries (see 8.6.5.1). The species mentioned for control were Canadian geese, feral geese and mallard ducks, which submitters said could decimate crops and have "environmental and production impact [on] pastures and land".

In their objection, the Otago Fish and Game Council also described the need for control of "wildlife causing nuisance", namely geese and gamebirds. They indicated that "it is important to ensure that control activities are not impeded by establishment of the marine protection network". In their opinion, a suggested "Wildlife Management Reserve" would allow for activities associated with this control.

Forest & Bird supported the proposed marine reserve, including the prohibition on the discharge of a firearm. It added that provision should be made for "culling Canada geese and feral geese as these introduced species can increase in numbers and cause problems in the estuary".

Te Papa Atawhai advice

We consider that prohibiting hunting of certain bird species within the Stony Creek and Pleasant River estuaries would be contrary to the public interest on the basis of the issues raised above. We recommend allowing for some hunting in the estuaries to continue if the proposed marine reserve is established.

The default prohibitions in the Marine Reserves Act on discharging a firearm within or into a marine reserve and removing natural materials or things from the marine reserve²⁹¹ would effectively prevent hunting for recreational or control purposes.

High numbers of these birds, however, are likely to cause harm by competing with other wildlife and increasing bacteria and nutrients in the waterways. We consider it to be contrary to the public interest if harm to biodiversity values and nearby agricultural land occurred as a result of the marine reserve being established. Allowing hunting activity to continue would be beneficial for the public, for the ecological values of the area and for nearby agricultural land-use by ensuring the number of birds was appropriately managed.

Further information sought from Otago Fish and Game Council identified the relevant bird species as Canada goose, mallard and paradise shelduck. Feral geese were mentioned by other submitters. All species except geese are listed in Schedule 1 of the Wildlife Act (Wildlife declared to be game). Canada and feral geese are listed in Schedule 5 of the Wildlife Act (Wildlife not protected).

The Otago Fish and Game Council stated that the current level of hunting by recreational hunters and landholders at these estuaries disperses and keeps the number of birds under control. They also noted that at least five permanent maimais are present in the middle of

²⁹⁰ Schedule 2, Regional Plan: Coast for Otago.

²⁹¹ As discussed above at section 8.6.5.1.

Stony Creek estuary. Temporary maimais are used in Pleasant River estuary²⁹². Under the Regional Plan: Coast for Otago, the erection of maimais is a permitted activity²⁹³.

Allowing for hunting in the area of the proposed marine reserve does, however, have some risk of negative impacts such as:

- disturbance from people accessing the area by foot
- introduction of weeds when maintaining maimai
- litter from discarded firearm cartridges
- general disturbance to other wildlife from discharging firearms and the activity of retriever dogs.

We consider these risks can be appropriately managed under the Marine Reserves Act and the Dog Control Act 1996.

We therefore recommend, if the proposed marine reserve is to be established, a specific condition be included in the Order in Council (see 8.8.1.3) to provide for the discharge of a firearm within and into the marine reserve in these two locations, the removal of hunted birds and associated disturbance to other wildlife, for the purpose of hunting the species of gamebirds and unprotected waterfowl listed in Schedule 1 and Schedule 5 of the Wildlife Act. All other legal requirements relating to the activity of hunting would need to be complied with.

We propose the existing permanent maimais be provided for through a condition in the Order in Council, but no additional permanent structures would be permitted within the boundary of the marine reserve. In terms of temporary maimais, we proposed these structures should be permitted in the marine reserve during the open season for hunting. Temporary maimais would be those brought into the marine reserve on any day and removed from the marine reserve within the following 48 hours.

Other activities associated with hunting would be prohibited, specifically littering (including spent cartridges) and other disturbance of marine life and/or the foreshore, seabed or natural features. There would be no additional allowances for vehicle use associated with hunting activities (see 8.8.1.3).

Forest & Bird noted in their submission that "the prohibition on discharging firearms will benefit the biodiversity by reducing plastic and other litter and vehicle transgressions that are currently obvious at the lagoons". We consider that these risks can be managed appropriately, as set out above.

8.6.6.5 Objections relating to economic impacts

One objector to the proposed marine reserve referenced the flow-on effect of its implementation on the local economy of Karitane. They stated that "visiting recreational fishers will stop coming to Karitane, Waikouaiti, Shag Point and other small local towns" and that local shops, pubs, camping grounds and other businesses would be "seriously" impacted.

²⁹² Emails from Otago Fish and Game Council to DOC Dunedin, February 2021.

²⁹³ Rule 8.5.1.1.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

Te Papa Atawhai recognises that a marine reserve may alter some of the recreational activities carried out in the area. However, other marine reserves throughout New Zealand have brought benefits to local economies by increasing visitors and tourists who are attracted to the marine reserve and recreational activities associated with it. This includes the potential for enhanced recreational fishing in areas adjacent to the marine reserve.

It is not possible to determine if the same effect would be observed at this proposed marine reserve or over what period of time it would occur. We do not agree with the submitter's statement that establishing the proposed marine reserve would cause all recreational fishing activity in the wider area to stop, as adjacent areas would be available for this activity.

8.6.6.6 Objections questioning the management of land-based threats

An individual submitter who objected to the proposed marine reserve questioned whether the water quality had been tested as "there is sewage water being discharged into the ocean from St Kilda to Waikouaiti [...] and the ocean current maps show the current coming up the coast". Te Papa Atawhai has interpreted this objection to imply that if established, the potential pollution from the named sewage sources would render this proposed marine reserve contrary to the public interest.

The combined industry objection from the New Zealand Rock Lobster Industry Council, Paua Industry Council and Fisheries Inshore New Zealand expressed concern that "estuarine habitat threats are typically terrestrial in origin, yet no management measures are proposed". They also noted that "several resource consents have been granted in the area of the Pleasant River estuary". The submitter has therefore questioned what policies would be put in place to manage these threats. We have interpreted this objection to mean that it would be contrary to the public interest to establish the proposed marine reserve if land-based threats to the estuaries were not managed.

Te Papa Atawhai advice

Objections regarding the impacts of land-based threats to the proposed marine reserve were also raised by submitters identified as affected iwi, hapū or whānau (see 8.5.6.2). Our advice here applies to both sets of objections.

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

We agree that multiple stressors affect the proposed marine reserve area, including pollution from land-based activities (through direct discharges and in runoff). The protection afforded by a marine reserve does not immediately mitigate the effects of land-based stressors, however this does not mean that it would be contrary to the public interest to declare a marine reserve. The Marine Reserves Act does not require all threats to be eliminated, rather it requires that an area be preserved 'as far as possible' in its natural state. Moreover, other management measures via the Resource Management Act are either in place or being developed to manage or mitigate the effect of land-based stressors. These include:

 Regional council responsibility for developing and enforcing regional freshwater plans and regional coastal plans. These plans set rules to control discharges to coastal waters and improve land-use practices that release sediment or contaminated runoff in river catchments.

- Policy 5 of the New Zealand Coastal Policy Statement²⁹⁴ directs regional councils to consider the effects on waters in the coastal environment that are held or managed under other acts such as the Marine Reserves Act. It also directs regional councils to avoid the adverse effects of activities that are significant in relation to the purpose of the marine reserve.
- The National Policy Statement for Freshwater Management 2020²⁹⁵ will influence
 activities that may affect the proposed marine reserve by setting freshwater limits
 and land-use regulations.
- Te Papa Atawhai also notes the submission from the Dunedin City Council that expressly described the improvements they had made, and are committed to making, in regard to water quality. They stated, "The DCC's 3 Waters Strategic Direction Statement identifies improving the quality of discharges to the environment as a key priority". They also stated, "The DCC has made substantial investments in wastewater management since 2000. More recently, the DCC has commenced wastewater system planning which looks holistically and strategically at whole of system performance and drivers for change and aligns those needs with financial planning cycles for any future upgrades that may be required. Stormwater system planning is also being considered".
- The combined industry objection from the New Zealand Rock Lobster Industry Council,
 Paua Industry Council and Fisheries Inshore New Zealand mentioned resource consents
 that have been granted in the Pleasant River estuary area. These are associated with a dam
 to the southwest of the estuary. We have assessed the activities operating under these
 resource consents and consider they would not be prohibited under the Marine Reserves Act
 (i.e. the activities would not constitute an offence) and therefore can continue to occur if the
 proposed marine reserve is established. Further detail is provided below in 8.8.1.2.
- Land-based impacts would not be directly managed under the Marine Reserves Act.

 However, a number of other management activities are likely to continue to improve water quality in the medium to long term, including our work with regional councils and others.

8.6.6.7 Objections related to hoiho

The combined industry objection from the New Zealand Rock Lobster Industry Council,
Paua Industry Council and Fisheries Inshore New Zealand raised the issue that establishing
the proposed marine reserve would affect the breeding population of hoiho due to an
increase in visitors.

They stated that "The main threat to hoiho/yellow-eyed penguins is habitat degradation, which a marine reserve will not address. Tourism has been identified as a threat to hoiho, resulting in significantly lower breeding success and fledging weights. As Bobby's Head is one of the few public access point to site D1, tourism-related threats to the breeding birds are likely to increase if a marine reserve is established". The submission argued that establishing the proposed marine reserve would be contrary to the public interest because it would negatively affect a protected species found at the site.

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²⁹⁴ Department of Conservation 2010. New Zealand Coastal Policy Statement 2010. Department of Conservation, 30 p.

²⁹⁵ Ministry for the Environment 2020. National Policy Statement for Freshwater Management 2020. Ministry for the Environment. 70 p.

Te Papa Atawhai advice

- For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in this objection do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.
- We acknowledge the concern raised in the combined industry submission but do not agree that the proposed marine reserve would be detrimental to hoiho through increased visitor access adjacent to the site. We also note that the Yellow-eyed Penguin Trust's²⁹⁶ submission in support highlighted public access at Bobby's Head as a benefit. It did not raise any issue related to disturbing hoiho.
- The Trust owns Tavora Reserve through which Bobby's Head is accessed. Therefore, pedestrian access to Bobby's Head could be managed if interference with the penguin habitat needs to be managed. Access via the track is closed from December to February to prevent disturbance during sensitive times for hoiho.
- Access to the proposed marine reserve would otherwise be through the estuaries or by boat. Habitat degradation and wider ecosystem changes to the marine environment have been identified as pressures on the hoiho population. The cessation of fishing and therefore any disturbance from fishing activities, is likely to benefit this protected species.

8.6.6.8 Objections related to amendment of the marine reserve

- Three individual submitters and Christchurch Penguin Rehabilitation²⁹⁷ would not support the proposed marine reserve unless it was extended (i.e. they gave partial support). Another 14 submitters supported the proposed marine reserve but qualified their support by mentioning that it would be more beneficial if it was larger. The most significant changes stated were increasing the proposed area to cover more deep gravel and deep reef habitat.
- One submitter wrote, "the proposed boundary doesn't include all of the particularly important deep reef habitat and has relatively little deep gravel. These deficiencies could be rectified by moving the boundary of the reserve north-east to include all of the deep reef that it currently intersects, and more of the deep gravel". WWF-New Zealand's submission in support said that if the deep reef, which is partially included in the proposed site, cannot be fully protected, an alternative deep reef habitat must be protected as part of the network. The Forest & Bird template, used by 3,271 submitters to support the proposed marine reserve, included a suggestion for additional protection to "protect sea caves and the entirety of deepwater reefs".
- Extending the proposed site to overlap more with known foraging areas of hoiho and other seabirds was also suggested. One specific suggestion was to extend it offshore to 12 nautical miles "to get a better range of depth", because the proposed site only includes water to a maximum depth of 40 m. The Yellow-eyed Penguin Trust and the Otago Branch of the Ornithological Society of New Zealand Inc. were also supportive of this type of extension.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

Extending the boundary to 12 nautical miles offshore is likely to have significant benefits for protecting biogenic (living) habitats and the species they support. Biogenic habitats are known to occur beyond the 40 m contour but their extent is not mapped. There is some

²⁹⁶ A non-governmental organisation with a focus on the conservation of hoiho via managing birds and their habitat.

²⁹⁷ Provides a rehabilitation service for sick and injured penguins in Canterbury.

evidence that these biogenic habitats are important for juvenile fish. However, it is not considered appropriate to extend the site at this time, as there has been no consultation with our Treaty partner or the public about this. Further mapping of the habitat in the area would also be required.

Similarly, an extension to include a larger area of deep reef would increase the ability of the site to recover in a timely manner. The proposed Te Umu Koau marine reserve includes 7.3 km² or 4.5% of the deep reef habitat of the southeast region. Noting our recommendation in 8.6.4.2 to amend the boundary of the proposed marine reserve, we consider that a viable example of deep reef habitat would remain protected, but that it would be prudent to establish monitoring to investigate whether there are any effects of the protection not covering all of this habitat type.

In terms of the deep gravel habitat type, we note that it would also be represented by the proposed Waitaki and Papanui marine reserves.

The Application for the proposed site must be considered on its merits, and the matters raised in these submissions do not demonstrate that to establish the marine reserve as proposed in the Application would be contrary to the public interest.

8.6.6.9 Objections questioning the integrity of Forum or statutory consultation processes

The New Zealand Sport Fishing Council²⁹⁸ questioned why there was a "187% increase" to the area they supported in 2016 (which we understand to relate to the Forum's consultation). The Otago Rock Lobster Industry Association also raised this issue saying, "It [the 2018 'Network 1' proposal] also included areas which were not part of the original consultation undertaken in 2016. For example, the boundaries of proposed Site D1 were extended without any input at all from commercial industry representatives". The Fiordland Lobster Company raised a similar issue, saying that due to "time and money running out, the [Forum] Chair separated the group so that two options could be presented to Ministers" and therefore that commercial kōura fishing representatives were not present when this proposed marine reserve was discussed. They say this meant that "Forum members, including iwi representatives, did not have the benefit of the expertise and knowledge of the industry representatives to understand the effect on CRA 7 and its economic impact". A commercial fisher who objected to the proposed marine reserve also noted similar flaws in the consultation process for increasing the extent of the proposed marine reserve.

The Otago Rock Lobster Industry Association used the example of the presence of seagrass in the Pleasant River estuary to demonstrate the lack of scientific accuracy in the Forum process and documents, concluding that the process was not adequate. This was interpreted by Te Papa Atawhai as the submitter contending that it would be contrary to the public interest to proceed with these proposals, which are based on the Forum's recommendations. They specifically wrote as an example: "The Forum observed that the presence of seagrass within this reserve necessitated protections over the Pleasant River estuary. However elsewhere in the same document it is also noted that there is no information of the extent or quality of the seagrass present in this estuary" (joint agency advice from October 2018 cited).

PauaMac 5 Incorporated objected to the proposed marine reserve stating that the "application prepared by DOC omits any mention of commercial harvest of pāua in the description and analysis".

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1380.

²⁹⁸ A not-for-profit organisation with 55 affiliated member clubs. It advocates for responsible and sustainable management of the marine environment.

The New Zealand Sport Fishing Council said, "the costs to recreational fishers are not adequately identified". They asserted that further consultation with a more inclusive representation of fishing interests was required.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

The much smaller site referred to by the New Zealand Sport Fishing Council is from the Forum's consultation in 2016. That site extended 2 km offshore (the smaller of the two options the Forum consulted on), rather than 10-12 km offshore as the Forum proposed in their 'Network 1' recommendation and as proposed in the Application. The increased area allowed deep reef habitat to be included, which would otherwise not have been represented in the proposed Network. The Forum also considered two other sites – Tow Rock and Long Point - that would have included deep reef habitat. These sites were removed from consideration due to feedback received during the Forum's consultation regarding the interference their protection would have caused to commercial fishery, recreational, and iwi

Regarding the statement that inadequate resourcing of the Forum led to some issues, and ultimately the recommendation of two networks by the Forum rather than one, Te Papa Atawhai highlights that this is not correct. The Forum sought and was given multiple extensions of time to work towards reaching consensus on one network proposal, but ultimately decided that this was not achievable and that a pragmatic solution was to put forward two network recommendations. While working on the two separate network proposals, the Forum chair facilitated discussion between the groups so that opportunity to input into both proposals was had by all, including on commercial fishing and other matters.

Te Papa Atawhai considers there were reasonable grounds for the Forum to extend the proposal, on the basis of fulfilling the network requirements of the MPA Policy and including some deep reef habitat. The statutory consultation process on the Application provided the opportunity for the public to give their views on the current marine protected area proposals. The statutory consultation process and engagement with Kāi Tahu satisfied legal procedural requirements, as set out in chapter 4.

The Application clarifies the matter of Pleasant River seagrass by stating: '...although seagrass has not been mapped within the Pleasant River estuary, it is known to be present there and is therefore included to some degree in Te Umu Koau Marine Reserve'. The text quoted by the submitter from the 2018 Forum Recommendations is arguably ambiguous. This may have misled the submitter to interpret the seagrass statement as a lack of scientific accuracy, but it should be correctly taken to mean that the presence of seagrass is known but the extent is not. We do not consider there was a lack of scientific accuracy in the Forum's process or documents. The scientific knowledge gaps are identified and expressed in these documents to highlight the limitations of scientific data.

Regarding the PauaMac 5 Incorporated objection, the Application provided a larger amount of information about fisheries that were most likely to be affected by the proposals. The commercial pāua catch estimated to be affected by the proposed Network was less than 0.4% of the average annual catch for the quota management area²⁹⁹. Due to this being a very low figure, it was not discussed in detail in the Application for this proposed site.

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²⁹⁹ Based on historical CatchMapper data averaged over 2007-2019. Table A1.2, the Application (Appendix 1).

- We note that the Application did, however, state the estimated affected pāua commercial catch for this site (0.33%) as for other species (Table A1.2, page 72). How fishers use sites at different times may increase the impact of this proposed site for some individuals. Additional information on catch from the 2019/20 to 2021/22 fishing years, based on electronic reporting data (which has higher spatial accuracy than the type of data used in the Application) indicates that (which has higher spatial accuracy than the area of the proposed marine reserve for one year only. For the 2020/21 and 2021/22 fishing years, no catch was reported from this site. Based on the information available, the proposed marine reserve does not cover an area where pāua fishing occurs at high intensity.
- Extensive consultation with stakeholders, the public and community at place was carried out by the Forum and by Agencies throughout the Forum and subsequent statutory processes. This included a formal non-statutory consultation and ongoing public engagement by the Forum and the recent period of statutory consultation under the Marine Reserves Act process.
- From 2014 to 2017, the Forum carried out face-to-face consultation at place, with a focus on representing communities and stakeholders. During this time, Forum members and agency officials took part in a road show at various locations in the region from Invercargill to Christchurch to Cromwell (see Appendix 3 of the Forum's Recommendations Report). A website and an email contact were also available during the entire Forum process. One meeting was held at the Tautuku Fishing Club in Dunedin, which has representation in the New Zealand Sport Fishing Council. In addition, recreational and commercial fishing representatives on the Forum attended several meetings with recreational fishers, including at least one that was reported in the Otago Daily Times.
- Following from the Forum's foundational work, Te Papa Atawhai completed the statutory consultation process under the Marine Reserves Act in respect of the Application.
- We conclude that there have been many opportunities for recreational fishers to engage in the process either face-to-face or in writing, and to provide information on recreational fishing activity.

8.6.6.10 Objections questioning the need or benefit of the proposed marine reserve

- The submission from Te Ohu Kaimoana (a Māori submitter not identified as affected iwi, hapū or whānau) questioned the scientific study rationale for the proposed marine reserve, stating that the Moeraki Mātaitai contained similar habitats and would offer the opportunity to study "unfished rock lobster populations".
- An individual objector said that due to the migration and pattern of recruitment of koura, the boundaries of the proposed marine reserve would not be efficient, presumably questioning the benefit that would arise from establishment of the proposed marine reserve.
 - Nine individual objectors commented that poor weather conditions (high winds, large swells) were usual along the southeast coast and already limit the amount of recreational fishing that can be undertaken in the area. One of the fishing club templates used by 48 recreational fishing submitters to object to the proposed marine reserve also raised this issue. These submitters concluded that the weather self-regulated recreational fishing so there were no detrimental impacts from this activity, and therefore that the proposed marine reserve was not needed. Te Papa Atawhai considers these statements imply that if the proposed marine reserve was established it would be unjustified and therefore contrary to the public interest.
- Two submitters who partially supported the proposed marine reserve also explained that its establishment was not the solution to protecting the marine environment, and instead there

should be "energy [put] into educating, not only to take the right amount to fish, but to develop a healthy attitude towards looking after our land".

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

The Moeraki Mātaitai is an important customary area and the protection it provides would be complementary to the proposed marine reserve. However, a mātaitai reserve allows some customary and recreational fishing and hence does not provide the level of protection that would allow an unfished population of rock lobster to be studied for example, as suggested by the submitter.

In terms of the submitter's concerns about the effectiveness of the proposed marine reserve due to patterns in kōura recruitment and migration, we consider that monitoring of changes over time would be an important management action for this site. In other locations around New Zealand, increases in adult and juvenile kõura have been observed to occur at the same time under marine reserve protection. While it is unknown how koura would respond at this particular site, this question would be of high scientific value, because of this animal's role as a predator in the reef ecosystem and the long-distance migration behaviour that is a unique feature of their life history.

We acknowledge that weather and sea conditions in the southeast region restrict recreational fishing activity. As described in 5.3.2, there is limited information about the level of recreational fishing in the general area and at this proposed site. According to the 2019 Tini a Tangaroa fisheries assessment³⁰⁰ (Tables 3 and 6), approximately 100 tonnes of rāwaru is harvested annually by recreational fishers in the BCO3 quota management area compared to approximately 170 tonnes harvested by commercial fishers. Note that although these figures represent catch over the entire quota management area rather than this site specifically (more specific information is not available), they indicate the potential for recreational take of rāwaru to be significant in this region.

Regardless of the level of recreational fishing activity, marine reserves are to be 'preserved as far as possible in their natural state' and continued recreational fishing would not be consistent with this purpose. Therefore, we do not consider that the weather-induced limitations on recreational fishing activity are sufficient reason not to establish the proposed marine reserve.

Education is an important component of managing the marine environment but will not allow the biodiversity protection goals of the MPA Policy or the purpose under the Marine Reserves Act to be met. Establishing the proposed marine reserve, however, would provide educational opportunities that would benefit local and regional communities as well as improving awareness of responsible fishing practices in the surrounding areas. New Zealand examples of how marine reserves can be important tools for marine education include the Experiencing Marine Reserves programme³⁰¹ run by the Mountains to Sea

³⁰⁰ Fisheries New Zealand, 2019. Fisheries Assessment Plenary, May 2019: stock assessments and stock status Vol 1. Compiled by the Fisheries Science and Information Group, Fisheries New Zealand, Wellington, New Zealand. 1,641 p. https://fs.fish.govt.nz/Doc/24726/May-Plenary-2019-Vol1.pdf.ashx.

³⁰¹ https://www.emr.org.nz.

Trust³⁰² and the Sir Peter Blake Marine Education & Recreation Centre³⁰³ located next to Long Bay-Okura Marine Reserve.

8.6.6.11 Objections related to impacts of the pandemic

One of the fishing club templates used by 48 submitters stated that the proposed marine reserve should not be declared while the economic impacts of the global COVID-19 pandemic are present. The template stated that further negative effects on people's livelihoods would be felt and their ability to feed themselves compromised.

Te Ohu Kaimoana (a Māori submitter not identified as affected iwi, hapū or whānau) also said the pandemic would compound the economic impacts on kōura fishers if the proposed marine reserve was implemented. These objections were interpreted as to mean that it would be contrary to the public interest to implement the proposed marine reserve while the economic impacts of the global pandemic persist.

Te Papa Atawhai advice

For the reasons set out below, Te Papa Atawhai's assessment is that the matters raised in these objections do not support a conclusion that declaring the proposed marine reserve would be contrary to the public interest.

We acknowledge the disruption and economic impacts of the COVID-19 pandemic on a range of industries, businesses and individuals. We note, however, that the Treasury's Budget Economic and Fiscal Update 2022³⁰⁴ stated that 'the New Zealand economy has overall been resilient to the transmission of the Delta and Omicron variants [of COVID-19] across the motu, although some businesses and households have been more impacted than others'. Te Papa Atawhai also acknowledges that New Zealand's response to the pandemic has changed since the submitters raised these issues in June 2020.

Further, we consider that many other factors are likely to affect the economic returns in the kōura industry more than establishing the proposed marine reserve. The effect of the pandemic on CRA7 catch was relatively minor in terms of overall catch. The total allowable commercial catch was not fully caught in the 2019/20 fishing year, presumably as a result of the pandemic. Following consultation, up to 10% of Annual Catch Entitlement was carried forward to the following fishing year, meaning total allowable commercial catch was slightly overcaught in the subsequent year. Since then, the overall total allowable commercial catch has been increased and fully caught. Therefore, the economic impacts on fishers from the pandemic may not have been as great as the submitter predicted. The proposed boundary amendment (as outlined in 8.6.4.2) would also mitigate any impacts if it is implemented. We also consider that the proposed marine reserve would not prevent people being able to harvest seafood as the submitter suggested.

8.7 Stage 1 assessment – Conclusion in relation to section 5(6) of the Marine Reserves Act

Te Papa Atawhai has considered all objections made in relation to the proposed Te Umu Koau marine reserve against the criteria of section 5(6) of the Marine Reserves Act. This

³⁰² A charitable trust overseeing the Experiencing Marine Reserves marine education and Whitebait Connection freshwater education programmes.

³⁰³ https://merc.org.nz/.

³⁰⁴ New Zealand Government: Budget Economic and Fiscal Update 2022. 19 May 2022, The Treasury. p 162.

includes objections to the proposed Network (these are relevant to your decision-making, as set out in 6.1.3) and objections to the proposed marine reserve.

For the reasons set out in 8.6.4.2, we consider the interference with commercial koura fishing, if the proposed marine reserve is established, would likely be undue. We recommend amending the boundary of the proposed marine reserve to mitigate the interference so that it is not undue.

For the reasons set out in 8.6.6.4, we consider that an outright prohibition on the hunting of particular gamebirds and unprotected waterfowl in the proposed marine reserve would likely be contrary to the public interest. In order to address this, we propose that provision is made in the Order in Council for this activity to continue as set out in 8.8.1.3.

In all other respects, we conclude that while there would be some interference with other existing uses and interests specified in section 5(6) of the Marine Reserves Act if the proposed marine reserve is established, the nature and magnitude of the interference would not be undue, nor contrary to the public interest. In reaching this conclusion we have considered the values of the proposed marine reserve and its value as part of the proposed Network, and the extent to which it is expected to fulfil the purpose of the Marine Reserves Act.

We have also considered whether a decision to not uphold any objections received on the proposed Te Umu Koau marine reserve would fulfil the Crown's obligations in relation to the Treaty of Waitangi, including under section 4 of the Conservation Act. This is considered in light of our assessment (as set out in 6.3.10) that to declare the proposed marine reserves with the recommendations resulting from the direct Kāi Tahu engagement to date would fulfil the Crown's obligation in relation to the Treaty of Waitangi. As recorded above in 8.5.1 and 8.6.1, Te Papa Atawhai considers that no additional matters have been raised in objections from submitters identified as affected iwi, hapū, or whānau or other Māori submitters that would change that assessment.

We therefore consider that no objection should be upheld for the purposes of section 5(6) of the Marine Reserves Act. If you agree, you should proceed to the second stage of decisionmaking under section 5(9) of the Marine Reserves Act.

8.8 Stage 2 assessment – Statutory considerations section 5(9) of the Marine Reserves Act

Section 5(9) provides that your recommendation to the Governor-General on the proposed marine reserve can be made unconditionally or subject to conditions. Our recommended conditions for the proposed Order in Council are set out in 8.8.1. We also recommend other measures to mitigate interference with the criteria listed in section 5(6) of the Marine Reserves Act and as a result of Treaty partner engagement (outlined in 6.3). Our advice on these is set out in 8.8.2 and 8.8.3.

We have provided our assessment of the Application, including any recommended conditions and other measures, against the statutory criteria in section 5(9). As part of this assessment, we have considered the relevant obligations under the Treaty of Waitangi (as set out in 3.3). The information available to formulate this advice includes content in the Application, Consultation Document, Forum's Recommendations Report and new information provided by Kāi Tahu, Tini a Tangaroa and in submissions from the statutory consultation. Where submissions in support were made in relation to the proposed marine

reserve and provide information in relation to the section 5(9) criteria, we also describe this below.

As set out in 6.8, in considering the section 5(9) criteria, you will need to consider the advice provided in the Network chapter in relation to these criteria, in addition to the advice below.

8.8.1 Recommendation for Order in Council conditions for the proposed marine reserve

We recommend the conditions described below if the proposed marine reserve is established. These would be set out in the Order in Council creating the marine reserve and fall into the following categories:

- · conditions arising from Treaty partner engagement
- conditions to provide for other activities that were identified in the Application
- conditions to mitigate interference with the criteria listed in section 5(6), in response to objections
- condition arising from engagement with the Ministry of Transport.

8.8.1.1 Conditions arising from Treaty partner engagement

As described in 6.8.1, as a result of Treaty partner engagement Te Papa Atawhai recommends the following provisions be set out in the Order in Council creating the marine reserve.

- (a) Condition for continued enhancement of mātauraka Māori and wānaka
- (b) Condition for the retrieval of kōiwi tākata and archaeological artefacts
- (c) Condition for retrieval of dead marine mammals and marine mammal parts
- (d) Condition to allow the removal of Undaria pinnatifida
- (e) Condition to require generational reviews

8.8.1.2 Conditions to provide for other activities identified in the Application

The Application proposes that a number of activities are allowed to continue if the proposed marine reserve is established. We recommend allowing for these through Order in Council conditions pursuant to your power under section 5(9). The activities are:

- fossicking of beach materials
- vehicle access over the foreshore in limited circumstances.

The Application also lists retrieval of kōiwi tākata. This was discussed through engagement with Kāi Tahu, and the recommendation in respect of this activity is described in 6.9.1.

We also note the Application (Table A1.6, page 90) listed existing activities being undertaken pursuant to existing resource consents. We do not propose making provision for these in the Order in Council (see Appendix 13 for further detail). This is because these activities are associated with a dam that is outside the boundary of the proposed marine reserve and would not constitute an offence under the Marine Reserves Act. Similarly, the Application stated that driving on the foreshore for access by emergency services would be permitted. This activity does not need specific provision in the Order in Council as the 'reasonable excuse' aspect of section 18I of the Marine Reserves Act would apply and/or Te Papa Atawhai would not exercise its discretion to take enforcement action under either section 18I or section 21.

(f) Condition for fossicking of beach materials

- Te Papa Atawhai recommends a condition to allow for the non-commercial gathering of beach stones, non-living shells and driftwood on the foreshore of the proposed marine reserve using only hand-held (non-mechanical) methods (as described in the Application, Table A1.6, page 90).
- To ensure any fossicking activity would not be carried out in a manner that may interfere with the purpose of the Marine Reserves Act, the condition should also be drafted to include the following aspects (which are similar to those in the Marine Reserve (Kahurangi) Order 2014):
 - A person who removes beach stones, non-living shell or driftwood must not use a method of collection that involves the use of machinery or cutting equipment
 - A person who removes beach stones, non-living shell or driftwood must not, in any
 one day, remove a greater weight than they can carry on their own in one trip.
 - Beach stones are defined as stones that are no more than 256 mm in intermediate diameter including gravel and sand.
- As a result of Treaty partner engagement, we recommend that the condition relating to beach stones excludes concretions (locally known as Moeraki Boulders) and fragments of concretions, so that these cannot be taken from this proposed marine reserve specifically (as set out in 6.3.6.6).
- The condition should stipulate that any activities would be subject to all other legal requirements.
 - (g) Condition for vehicle access over the foreshore for launching or retrieving a vessel
 - Te Papa Atawhai recommends a condition to allow for vehicle access over the foreshore of the proposed marine reserve for the purpose of launching and retrieving vessels.
- For the reasons set out above in 8.6.3.1, the condition should specify that vehicular access for this purpose must be by the most direct route across the foreshore to the nearest feasible vessel launch or retrieval site.

8.8.1.3 Conditions to mitigate interference with the criteria listed in section 5(6) of the Marine Reserves Act

- (h) Condition for gamebird and unprotected waterfowl hunting
- Te Papa Atawhai recommends a condition to allow for gamebird and unprotected waterfowl hunting in Pleasant River and Stony Creek estuaries (as discussed in 8.6.6.4).
- 1429. The condition would provide for:
 - The discharge of a firearm within and into the marine reserve in these two locations for the purpose of hunting those game birds listed in Schedule 1 of the Wildlife Act and unprotected waterfowl listed in Schedule 5 of the Wildlife Act.
 - The removal of hunted game bird and unprotected waterfowl carcasses.
 - Associated disturbance to other wildlife.
 - The existing permanent maimais in Stony Creek estuary to remain.
 - Temporary maimais to be permitted in the marine reserve during the open season for hunting. Temporary maimais would be those that are brought into the marine reserve on any day and removed from the marine reserve within the following 48 hours.
- The condition should be drafted as subject to all other legal requirements.

8.8.1.4 Condition arising from engagement with the Ministry of Transport

(i) Condition for pollution response

Te Papa Atawhai recommends a condition to allow responses to emergency oil spill or pollution incidents. We have engaged with the Ministry of Transport to inform the following advice on this matter.

In certain emergency situations, vessel users or operators may be required to respond to an emergency oil spill or pollution incident. Action may also be required by the local authority or other central government agencies. Our position is that in such a situation, any action would likely to be considered a 'reasonable excuse' under section 18I(3) and/or would not result in Te Papa Atawhai exercising its direction to take enforcement action in respect of either section 18I(3) (offence for certain discharges) or section 21(a) (infringement offence for certain discharges).

In recent marine reserve Orders in Council, however, a provision has been included to confirm 'for avoidance of doubt' that action can be taken in these circumstances, and that the declaration of the marine reserve does not affect or limit the powers of any person under the Maritime Transport Act 1994 in response to these events or the risk of an event. For consistency, we recommend the inclusion of a similar provision in the Order in Council.

8.8.2 Recommendations for other measures to mitigate interference with the criteria listed in section 5(6) of the Marine Reserves Act

(j) Recommendation to amend the boundary of the proposed marine reserve

As set out in 8.6.4.2, Te Papa Atawhai recommends an amendment to the boundary of the proposed marine reserve to mitigate the interference with the commercial kōura fishery. We recommend the boundary be amended as per the D1-A proposal put forward initially by Kāi Tahu.

8.8.3 Recommendations for other measures arising from Treaty partner engagement

As described in 6.8.2, as a result of Treaty partner engagement Te Papa Atawhai recommends the following measures for the proposed marine reserve.

- (k) Recommendation for establishing formal co-management with Kāi Tahu
- (l) Recommendation for the establishment and support of Kāi Tahu rangers
- (m) Recommendation for periodic reviews
- (n) Recommendation to use te reo Māori name confirmed by Kāi Tahu
- (o) Recommendation that pou whenua be established for this marine reserve
- (p) Recommendation to record that marine reserve declaration is unlikely, and not intended, to pre-empt or negatively impact on the Ngãi Tahu Whānui application for customary marine title

8.8.4 Section 5(9) criteria – in the best interests of scientific study, for the benefit of the public and expedient

As set out in 3.2.3, under section 5(9) you must decide whether declaring each of the marine reserves will be in the best interests of scientific study, for the benefit of the public and expedient. Our advice on these criteria as relevant to the proposed marine reserve is described below. As part of this advice, we have included reference to additional information raised in submissions of support that is relevant to each of the section 5(9) criteria. Note that objections are not considered at this stage, as these views have already been considered in our advice on section 5(6) in accordance with the statutory framework.

8.8.4.1 Obligations in relation to the Treaty of Waitangi

In considering whether the declaration of the proposed marine reserve would be in the best interests of scientific study, for the benefit of the public and expedient, you must consider your obligations in relation to the Treaty of Waitangi.

As set out in 3.2.7, in accordance with your obligation under section 4 of the Conservation Act to give effect to the principles of the Treaty of Waitangi, you must consider the views provided by Kāi Tahu in respect of the proposals received through direct engagement in making your assessment under section 5(9). The obligation to have 'particular regard' to these views in accordance with section 49 of te Takutai Moana Act also applies to these views. Our advice and conclusions in respect of the Crown engagement with Kāi Tahu and the corresponding obligations under the Treaty of Waitangi is set out in the Network chapter in 6.3.10. While this advice is provided in the context of the proposed Network, it applies equally to each of the proposed marine reserves, including Te Umu Koau, on the basis that the recommendations arising from the engagement apply to this site. Based on this assessment, Te Papa Atawhai considers that the declaration of the proposed marine reserves (therefore including Te Umu Koau) on the basis of the recommendations made would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

The recommended boundary amendment is specific to this site. Our full analysis is set out above in 8.3.1 and further summarised in the Network chapter in 6.3.6.4. Overall, our assessment is that a decision to progress the D1-A boundary would be consistent with your obligations under section 4 of the Conservation Act and would fulfil your obligations in relation to the Treaty in respect of this proposed measure.

We note that our recommendation does not align with Kāi Tahu's preferred boundary amendments for the site (D1-B or D1-C). We have concluded that a larger boundary amendment than D1-A would go beyond what is required to give effect to Treaty principles, in particular what is required to actively protect the relevant interests. In addition, as noted in 8.3.1.2, procedural reasons mean that further consideration of the proposal made by Kāi Tahu for a larger boundary amendment would likely require you to make a decision to reject the existing Application for the proposed Te Umu Koau marine reserve under section 5(9) and a give a direction to initiate a new application. At the very least you would need to seek further advice about what additional consultation would be required. If you wish to progress these alternative boundaries, therefore, we recommend you seek further advice from the Te Papa Atawhai as to next steps. If you conclude that the proposed marine reserve, either as proposed or with the recommended boundary amendment, will not meet the section 5(9) criteria, you have the option of declining the Application on that basis. In that case the marine reserve would not be declared.

In addition to the engagement with Kāi Tahu, as set out in 5.2, submissions in relation to the proposed marine reserve (including objections and submissions in support) were made through the statutory process by submitters who are 'affected iwi, hapū, and whānau' for the purposes of te Takutai Moana Act and from other Māori submitters (i.e. those not affiliated with Kāi Tahu).

In terms of your decision under section 5(9), the obligation to have 'particular regard' applies to the views received from affected iwi, hapū or whānau through the statutory consultation process. The obligation in section 4 of the Conservation Act also applies to your consideration of these views, and may still be relevant to submissions from other Māori (although the obligation to have particular regard does not apply to the views from other Māori). In order to allow you to have 'particular regard' to the relevant submissions, and in accordance with the principle of informed decision-making, in our advice below we have

therefore identified where submissions have been made from affected iwi, hapū or whānau and/or other Māori submitters that are relevant to the specific section 5(9) criteria. None of the submissions identified raise matters that are inconsistent with our conclusion set out above at paragraph 1438 - that the declaration of the proposed marine reserves (including Te Umu Koau) on the basis of the recommendations made in relation to the engagement with Kāi Tahu would fulfil the Crown's obligations in relation to the Treaty of Waitangi, including the obligation under section 4 to give effect to the principles of the Treaty.

Te Papa Atawhai therefore considers that to declare the proposed marine reserve would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

8.8.4.2 Consistency with statutory planning instruments

As set out in 3.2.8, also relevant to your assessment as to whether the declaration of the proposed marine reserves cumulatively and as part of the proposed Network would be in the best interests of scientific study, for the benefit of the public and expedient, is whether to do so would be consistent with the relevant provisions of any relevant statutory planning instruments. The relevant statutory planning instruments are the Conservation General Policy and the Otago Conservation Management Strategy. Our full assessment of which provisions are relevant to your assessment, and how a decision to declare each of the proposed marine reserves with the recommendations listed in 6.8.1 and 6.8.2 and the subsequent site chapters (for the purposes of the proposed Te Umu Koau marine reserve, therefore, the recommendations listed in 8.8.1–8.8.3) would be consistent with those provisions, is set out in Appendix 12.

In summary, Te Papa Atawhai considers a decision to declare the proposed Te Umu Koau marine reserve with the recommendations listed would be consistent with all relevant provisions of these statutory planning instruments.

8.8.4.3 In the best interests of scientific study

For the reasons set out below and in light of our conclusions in 8.8.4.1 and 8.8.4.2, we consider that establishing the proposed marine reserve with the recommended conditions and measures set out in 8.8.1–8.8.3 would be in the best interests of scientific study.

In considering whether a marine reserve would be 'in the best interest of scientific study', it is appropriate to assess the area that is recommended for marine reserve status against the criteria in section 3(1) of the Marine Reserves Act³⁰⁵. This is described in 8.2.1.

The diverse and iconic natural features, marine life and species associated with the coastline make this area unarguably of distinctive quality, typical and beautiful. We consider that protecting the underwater scenery and natural features at this site is consistent with section 3(1) in that they are so typical, or beautiful, or unique that their continued preservation is in the national interest.

Further information supporting a conclusion that the proposed marine reserve would be in the best interests of scientific study is evident from points raised in submissions of support. For example:

An individual identified as affected iwi, hapū or whānau raised that this is the only
proposed marine reserve in the proposed Network to contain the deep reef habitat

³⁰⁵ See chapter 3. Section 3(1): It is hereby declared that the provisions of this Act shall have effect for the purpose of preserving, as marine reserves for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life of such distinctive quality, or so typical or beautiful or unique that their continued preservation is in the natural interest.

- type and importantly two types of estuaries, noting that "any further concessions [to this site] will undermine its biodiversity values".
- Another wrote, "It is pleasing that the two estuaries of Pleasant River and Stony Lagoon are included as they are foraging grounds for avian predators and nursery grounds for a range of fish species. Stony Lagoon is a feeding place for gulls, terns and little shags. It will be an interesting site to study the processes and contribution of partially closed estuaries to the marine fish lifecycle. It will be representative of a common habitat on the Otago Coast". This submitter also stated, "This reserve proposal will be an important base line site to examine issues such as the impact of dredge spoil, bottom trawling and other sources of sediment upon the health of Macrocystis in particular."
- The New Zealand Marine Sciences Society noted that the area of the proposed marine reserve was "an important area for scientific research, particularly by staff and students from Otago University. Protection would facilitate valuable comparisons with similar but unprotected areas".
- Forest & Bird stated that "Te Umu Koau will provide an excellent opportunity to study the behavioural response of the Otago Crayfish [kōura] to a reserve which given the poorly understood life history and migration patterns of Crayfish between Otago, Southland, Rakiura and Fiordland could be an additional benefit to the fishery. Considering this is the most valuable fishery in the region it is extraordinary there is so little research and data gathering."
- Our recommendation for the proposed boundary amendment (as set out in 8.3.1) does not change our assessment above that establishment of the proposed marine reserve would be in the best interests of scientific study. While the amended area would not protect the deep reef habitat type as adequately as the original proposal, a viable example of this habitat would remain. The amended area would also still represent a number of other habitat types that are typical of the region. The inclusion of this variety of habitats is of scientific value, particularly when considered in the overall context of the proposed Network.

8.8.4.4 For the benefit of the public

- For the reasons set out below and in light of our conclusions in 8.8.4.1 and 8.8.4.2, we consider that establishing the proposed marine reserve with the recommended conditions and measures set out in 8.8.1–8.8.3 would be for the benefit of the public.
- These benefits are described above in 8.2.2 and include enhancement of ecosystem services and strengthening the health of coastal ecosystems, which ultimately provide benefits for the public.
 - Further information supporting a conclusion that the proposed marine reserve would be for the benefit of the public is evident from points raised in submissions of support. For example:
 - A submitter noted the benefit of this site as "the only reserve that protects a deep reef".
 - Another said, "A new East Otago Catchment Group has been established which will help restore the upper reaches of the waterway" and that a marine reserve would complete an "ecological landscape restoration vision".
 - The Yellow-Eyed Penguin Trust, which owns and manage the adjoining Tavora Reserve, noted that "the reserve has a coastal walking track, which would support public access and appreciation of a marine reserve".

Our recommendation for the proposed boundary amendment (as set out in 8.3.1) does not change our assessment above that establishment of the proposed marine reserve would be for the benefit of the public. The public benefits described would largely still be expected to arise.

8.8.4.5 It is expedient

- For the reasons set out below and in light of our conclusions in 8.8.4.1 and 8.8.4.2, we consider that establishing the proposed marine reserve with the recommended conditions and measures set out in 8.8.1–8.8.3 would be expedient.
- The presence of important biogenic habitat and support species, *Macrocystis* and seagrass, within this area means that establishing marine reserve protection is expedient. These types of habitats provide a very important structuring and support role in the wider marine ecosystem and are regarded as a vital part of effective marine protected area network design.
- The secondary benefits that are likely to arise for protected seabird species by enhancing habitat protection at this site are also important. For example, hoiho are classified as Threatened and tītī/sooty shearwater are classified as At Risk³⁰⁶ and any actions taken now to improve their rates of survival would be advantageous.
- Further information supporting a conclusion that establishment of the proposed marine reserve is expedient is evident from points raised in submissions of support. For example:
 - An individual identified as affected iwi, hapū or whānau noted that the proposed marine reserve would give marine biodiversity greater resilience against the effects of climate change.
 - The submission from WWF-New Zealand said, "this site represents the best balance between reducing the impact on existing users and protecting important representative habitats that provide critical ecosystem services. Without this site (which partially includes a deep-water reef system) the network would not meet the MPA Policy (planning principle 5)".
 - An individual submitter who identified as an adjacent landowner wrote, "I am pleased to see driving on the inter-tidal area would be prohibited. The scars of vehicles driving over an arm of the Pleasant River estuary before it was restored to tidal flooding in 2008, are still evident over 10 years later. Vehicles can do such damage and now that the road through the Tumai subdivision gives access to the estuary legal protection from vehicles would be good."
 - Te Papa Atawhai agrees with the points made in these submissions. We note that while we do not recommend vehicle access is prohibited entirely, the restrictions proposed on this activity would ensure any damage as mentioned by the submitter would be minimised.
 - Our recommendation for the proposed boundary amendment (as set out in 8.3.1) does not change our assessment that establishment of the proposed marine reserve would be expedient. The proposed area would still include a representative example of deep reef habitat and provide adequate protection to a number of other representative habitat types, allowing the area to recover to a more natural state.

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³⁰⁶ New Zealand Threat Classification System 2020, https://nztcs.org.nz/.

Naming of the proposed marine reserve 8.9

The proposed marine reserve would be named in accordance with the requirements of the New Zealand Geographic Board. Te Papa Atawhai has discussed the naming of this proposed site with Kāi Tahu. Kāi Tahu have endorsed the name to be taken forward for review by the New Zealand Geographic Board as 'Te Umu Koau Marine Reserve'.

Conclusion – proposed Te Umu Koau marine reserve 8.10

Our overall assessment in relation to the proposed Te Umu Koau marine reserve is that:

- the procedural requirements of section 4 and section 5 of the Marine Reserves Act have been met
- we do not recommend upholding any objections received under section 5(6) of the Marine Reserves Act on the proviso that the recommended conditions and other measures listed below are implemented
- to declare the area a marine reserve will be in the best interests of scientific study, will be for the benefit of the public and will be expedient (in accordance with section 5(9) of the Marine Reserves Act), including with our recommended conditions to be included in the Order in Council [(a)-(i) as set out in 8.8.1] and our recommendations for other measures [(j)-(p) as set out in 8.8.2 and 8.8.3]
- to declare the proposed marine reserve on the basis of the recommendations listed above would fulfil the Crown's obligations in relation to the Treaty of Waitangi.

Recommendation - proposed Te Umu Koau marine reserve 8.11

We recommend that you proceed to seek the concurrence of the Minster for Oceans and Fisheries and the Minister of Transport³⁰⁷ to recommend to the Governor-General the making of an Order in Council (subject to conditions) to declare the proposed area, with an amended northern boundary, a marine reserve.

³⁰⁷ As under section 5(9) of the Marine Reserves Act