

South East Marine Protection Forum Proposals

Summary for the NZSFC, Prepared by Josh Barclay

December 2016

The South East Marine Protection Forum have worked to develop a proposed network of marine reserves, these sites were chosen due to their ecological significance by a multi stakeholder group. A representative area of each of the 34 habitat types identified to exist in the region was included in proposals. a summary of these proposals is below.

Notable points

- While this information is important context, biodiversity protection is the purpose of this process. The fact that there is an adverse economic or social impact is not a reason to exclude a habitat in the MPA network. But, differences in economic and social impacts may help us decide between options that would protect similar habitats or ecosystems. Economic benefits are also relevant under the MPA Guidelines, as they may help in deciding between options that have similar impacts on existing users.
- At present, there is no reliable means of calculating recreational fishers catch in any given area. Marine reserves (Type 1 MPA) are mostly considered unpopular with recreational fishers, and comments made to the Forum indicate two major concerns are spatial displacement and safety.
- Multiple reserves, or replication, reduce the risk that entire populations or all examples of a protected habitat are destroyed by a catastrophe. Connectivity is important as it allows populations in different parts of a species range
- An ecologically representative network of protected areas should, by definition: capture the full range of ecological variability; ensure functioning ecosystems by encompassing the temporal and spatial scales at which ecological systems operate and provide for effective management of large-scale processes and patterns.
- A marine protected areas network is more than just several MPAs that operate independently. Within a network the benefits of the individual MPA parts combine to create greater benefits overall.

Proposed area summary

1. Tuhawaiki to Pareroa



Figure 1 - Proposed reserve A - Tuhawaiki to Pareroa

- a. Size: 4.4km²
- b. Type 2 MPA, Restrictions include –
 - i. No bottom trawling
 - ii. No dredging (Rec and Com)
 - iii. Wanting feedback on restricting longlining (commercial and recreational), All net fishing and mid water trawling.
- c. Would not restrict potting or recreational fishing other than stated above.
- d. Currently a voluntary ban of commercial trawling in place.
- e. Identified as a pupping ground for school sharks and elephant fish use this area for laying egg sacs.
- f. Would be situated against a mataitai reserve.
- g. The forum notes say that establishing this MPA would give the power to enforce the voluntary ban that is currently in place, protecting the area used by elephant fish and school sharks.

2. Waitaki Coastal

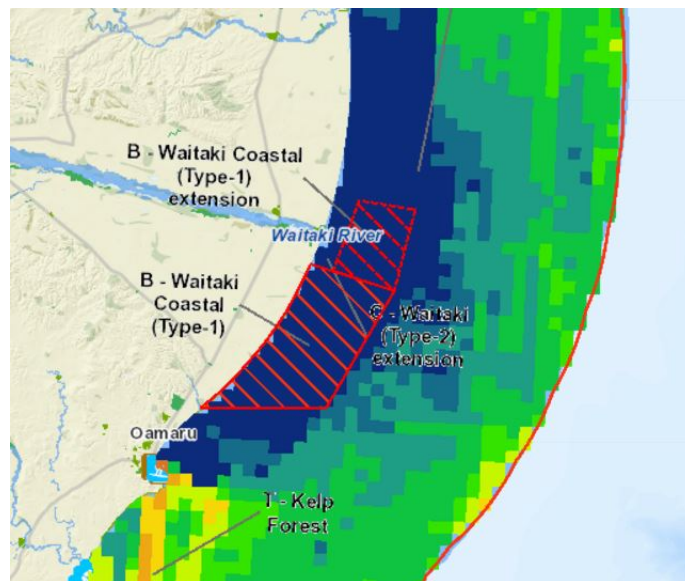


Figure 2 - Proposed reserve B - Waitaki Coastal (With fishing intensity)

- a. Size: 88.4km² (with a proposed extension of 31.4 km²).
- b. Type 1 'No Take' MPA
- c. This MPA has been set up to exclude the river mouth, the extension would cover the area starting approx. 2km offshore of the mouth.
- d. Area has been identified as important for:
 - i. Juvenile fish species, possible nursing ground
 - ii. Hector's dolphins
 - iii. Little Blue Penguins
 - iv. Foraging seabirds
- e. River mouth said to deliver high level of nutrients which attracts many foraging species.
- f. The forum notes this is the only habitat of its kind encompassed in the MPA proposals
- g. River mouth generates a unique environment found nowhere else in the area.
- h. Small amounts of Danish seining, mixed trawling and set netting currently occurring in the area (Looks to be low amounts compared to surrounding areas, shown in figure 2).
- i. The forum notes that most recreational fishing occurring in the area takes place at the river mouth for Kahawai and Salmon

3. Waitaki Offshore

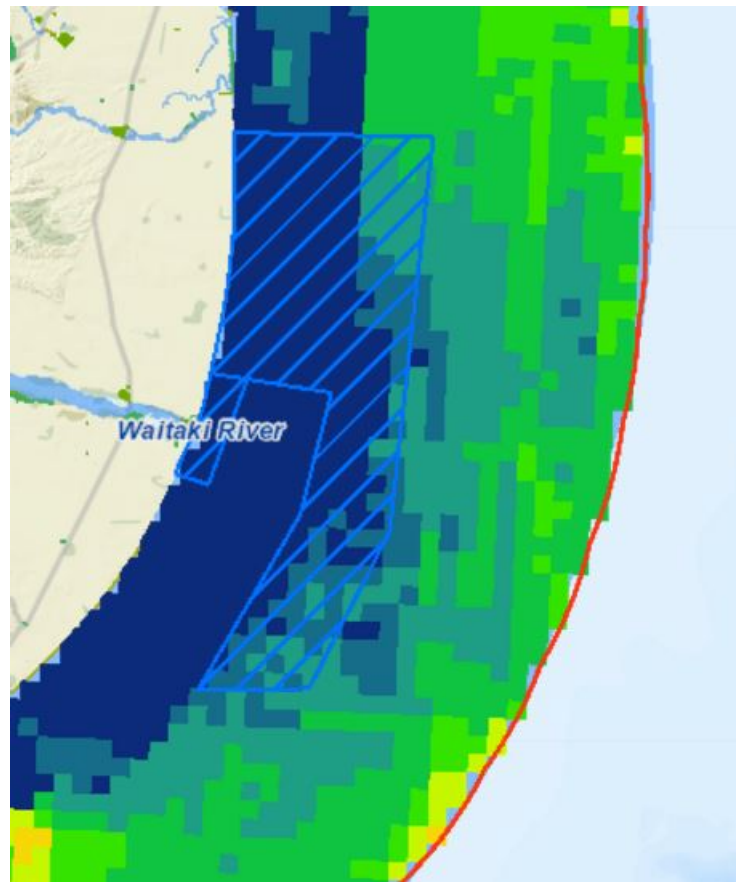


Figure 3 - Proposed MPA C - Waitaki Offshore (With fishing intensity)

- a. Size: 224km² (Proposed extension 10.5km²)
- b. Type 2 MPA, Restrictions include –
 - i. No trawling
 - ii. No dredging
 - iii. No Danish seining
 - iv. No set netting
- c. This is an extension of the Waitaiki Coastal MPA in order to protect the unique area around the river mouth.
- d. Important for foraging of seabirds, Blue Penguins and Hector's dolphins.
- e. Some members of the forum requested the MPA was continued out to the 12nm limit to properly protect the above species, but was drawn to the point that it currently is to avoid displacing trawl effort.
- f. The forum state there is no commercial dredging taking place in the proposed area currently and the majority of fishing effort is by Danish seine.
- g. The forum state there is little/no recreational dredging or set netting in the area, therefore this MPA will not affect recreational fishing.

4. Pleasant River to Stony Creek

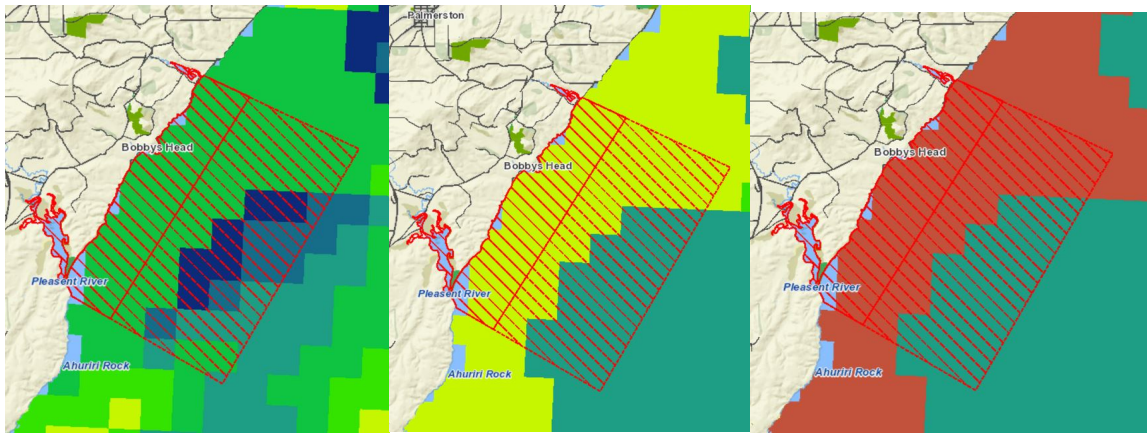


Figure 4 - Proposed MPA D - Left: all commercial fishing intensity, Centre: Commercial Line fishing intensity Left: Commercial Pot fishing intensity

- a. Size: 16.5 km² (Option 1), 51.3 km² (Option 2)
- b. Type 1 'No take' MPA
- c. The forum state that option 1 has less of an effect on commercial and recreational fishing, but option 2 properly protects the desired habitats.
- d. This MPA covers kelp forests, exposed reef shelves, subtidal concretions (Moeraki boulders) and estuarine areas with option 1, option 2 expands this to cover "rare examples of areas of volcanic rock reefs, sea caves"
- e. The forum acknowledges that this will have an effect on recreational and commercial paua and rock lobster fishing mainly. They state this effect of displacement will be lessened for rock lobsters as they are migratory and can still be caught when they leave the MPA.
- f. It appears this will displace mainly longlining and potting, little trawling occurs in the proposed reserve (approximately <1% of the regions trawl).
- g. This zone is close to the local university marine lab, would be used for research purposes

5. Otago Shelf and Canyons (4 proposals)

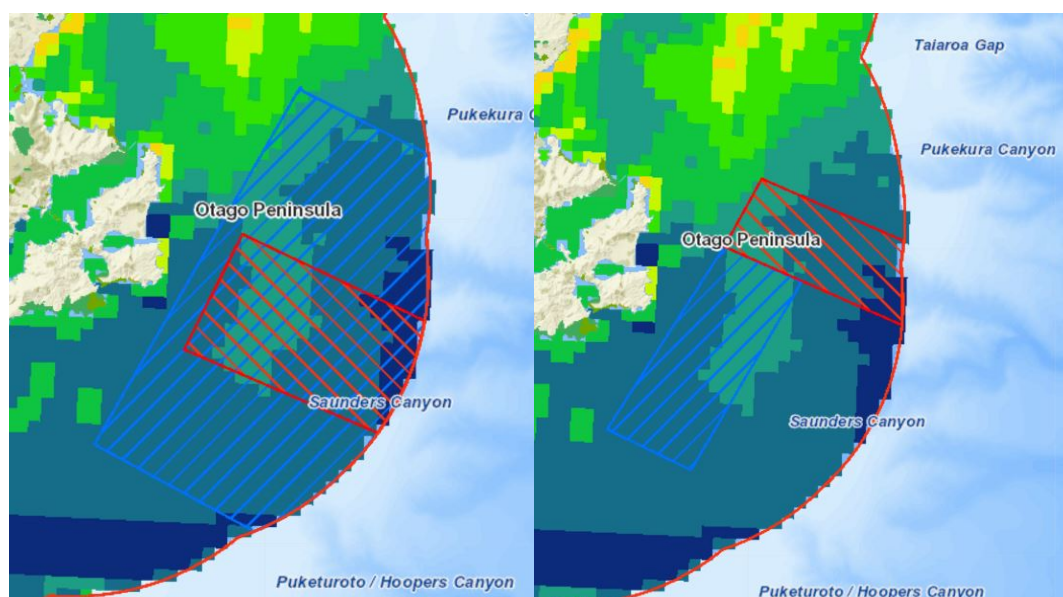


Figure 5 - Proposed MPA E,F,G,H - left, option 1. Right, Option 2 (relative fishing intensity displayed)

- a. Size:
 - i. Option 1 – Type 1(Red) = 186km², Type 2(Blue) = 618km²
 - ii. Option 2 – Type 1(Red) = 106km², Type 2(Blue) = 138km²
- b. The type 2 MPA's would restrict
 - i. Option 1 – Dredging, all trawling, Danish seining, set netting and purse seining.
 - ii. Option 2 – Bottom trawling, dredging and Danish seining
- c. The two type 1 reserves are over Saunders and Papanui Canyons, these are considered by the forum to be ecologically significant and hold unique ecosystems important to the region.
 - i. Both hold similar ecosystems, with the Saunders proposal covering greater area.
- d. The type two's were proposed to protect fragile Bryzoan beds which are common in this zone.
 - i. Both hold similar ecosystems, with the Saunders proposal covering greater area.
- e. The majority of the commercial fishing in the proposals is longline, set netting and potting.
- f. Some dredging for Queen Scallops is carried out on the ridge between the two canyons, option 1 would stop this.
- g. There is currently a voluntary trawl ban to protect the Bryozoan fields.
- h. There is a large fishery for school sharks taken by set net, option 2 would allow for this.
- i. The forum state Saunders canyon is more valued by recreational fishers.
- j. The forum are open to a mix up of the options.

6. Harakeke Point to White Island



Figure 6 - Proposed MPA I (relative fishing intensity displayed)

- a. Size –
 - i. Option 1 – 28.8km²
 - ii. Option 2 – 35.5km²
- b. Type 1 ‘No Take’ MPA
- c. This site has been proposed due to its high levels of biodiversity and a diverse range of habitats.
- d. Tow rock, which is covered by option 2 is identified as a high biodiversity area with possibly the best water clarity in the area. The forum state, not including tow rock would limit the ability to protect deeper rocky reefs.
 - i. There is an important commercial rock lobster fishery around Tow rock.
 - ii. Tow rock is a popular recreational fishing area and the forum state there is likely to be large opposition to including this area.
- e. White Island is a popular recreational fishing location, the forum state that the majority of this fishing takes place on the west of the island which is not covered by the MPA.
- f. Seal Point, within the MPA is popular for paua harvest and spear fishing.
- g. There has been a prohibition on commercial paua harvest on parts of the coast within this area for the last 30 years.

- h. Large populations of many seabird species in the area, including yellow-eyed penguins, little blue penguins, red billed gulls, fairy prions and terns, as well as being a known area for seals and sea lions.

7. White Island to Waldronville

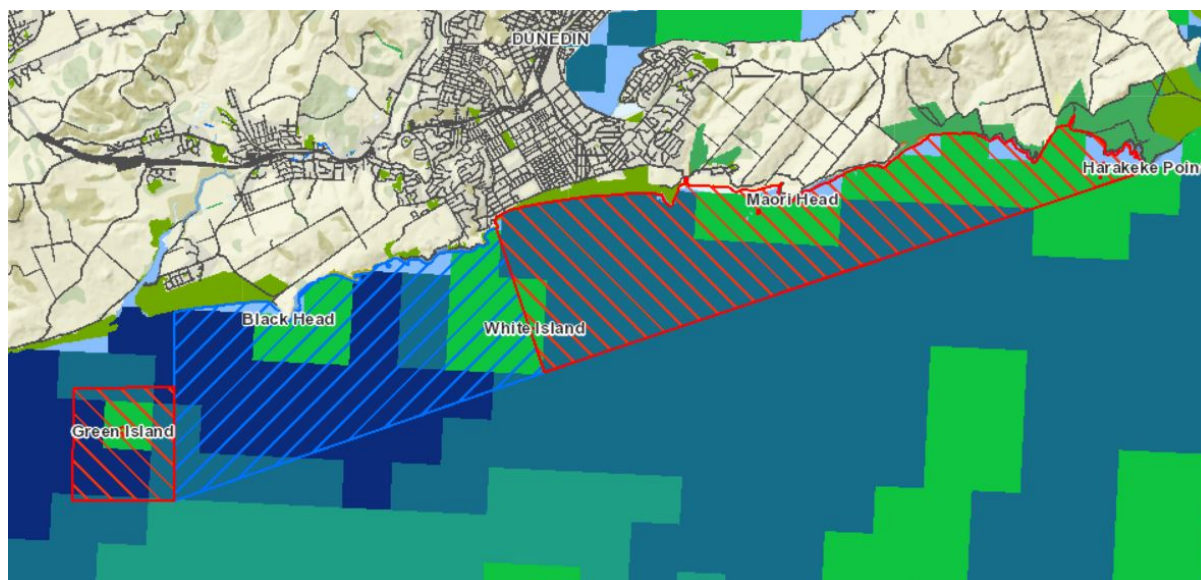


Figure 7 - Proposed MPA J – In blue (relative fishing intensity displayed)

- a. Size: 24.7km²
- b. Type 2 MPA, Restrictions include –
 - i. All commercial fishing
 - ii. Decreased Recreational bag limits (5 Blue cod, 2 Paua and 2 Rock lobster)
- c. This area is adjacent to the MPA's I & K (Harakeke to White Island and Green Island), it is believed this will help relieve the pressure displaced from the introduction of these reserves
- d. The largest commercial impact would be on rock lobster potting. The effort in this area is less than the surrounding areas (e.g. Tow rock and Cape Saunders)
- e. It was noted by the forum this is a popular recreational fishing area.
- f. The proposal does not elaborate how these reduced bag limits will be enforced or how they would work.

8. Green Island

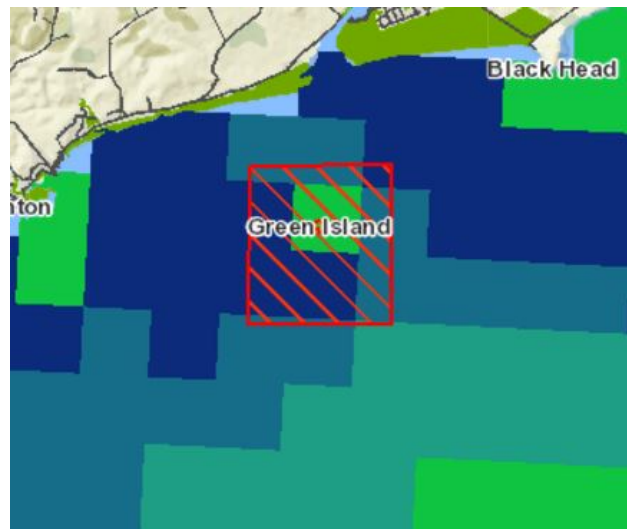


Figure 8 - Proposed MPA K (relative fishing intensity displayed)

- a. Size: 5km²
- b. Type 1 'No Take' MPA
- c. Known for large number of seabirds, including sooty shearwater, little blue penguin, red-billed gull, fairy prion, yellow-eyed penguin, little cormorant and Otago shag
- d. Frequently visited by seals and sea lions
- e. The Island is a nature reserve and a permit is required to land.
- f. The forum identifies the area as ecologically significant and historically had a diverse array of marine life.
- g. It was chosen as a prospective site as it was decided it would be a great area to continue the reserve on land into the marine area and create a complete representative area. They want to develop it into an 'iconic site'
- h. The forum note most recreational fishing happens to the west of the island so have set the boundaries to minimise the effect. However, the area extends the same distance east as it does west so it is unclear how they have done this.
- i. This MPA would not displace much commercial fishing. <0.1% of any method of commercial fishing is carried out in this area. (with the exception of Rock lobster potting, with 0.2% of the total potting for the region being carried out inside this area)
- j. Spear fishing is common around green island

9. Akatore Estuary



Figure 9 - Proposed MPA L (relative fishing intensity displayed)

- a. Size: 0.3km²
- b. Type 2 MPA, Restrictions include –
 - i. No dredging
 - ii. No set net fishing
 - iii. No commercial line fishing
 - iv. No mechanical harvesting (including spades for shellfish)
 - v. No fyke net fishing
 - vi. No whitebaiting
- c. The Akatore Estuary was chosen as it is bordered by protected land to the north, this gives a greater chance of recovery as opposed to the estuaries surrounded by farmland.
- d. The only commercial fishing is for eels and is very limited
- e. Set netting for flounder and collection of cockles are the two main recreation harvests in the area. Set netting would no longer be allowed, cockles can be collected by hand.

10. Akatore Coastal

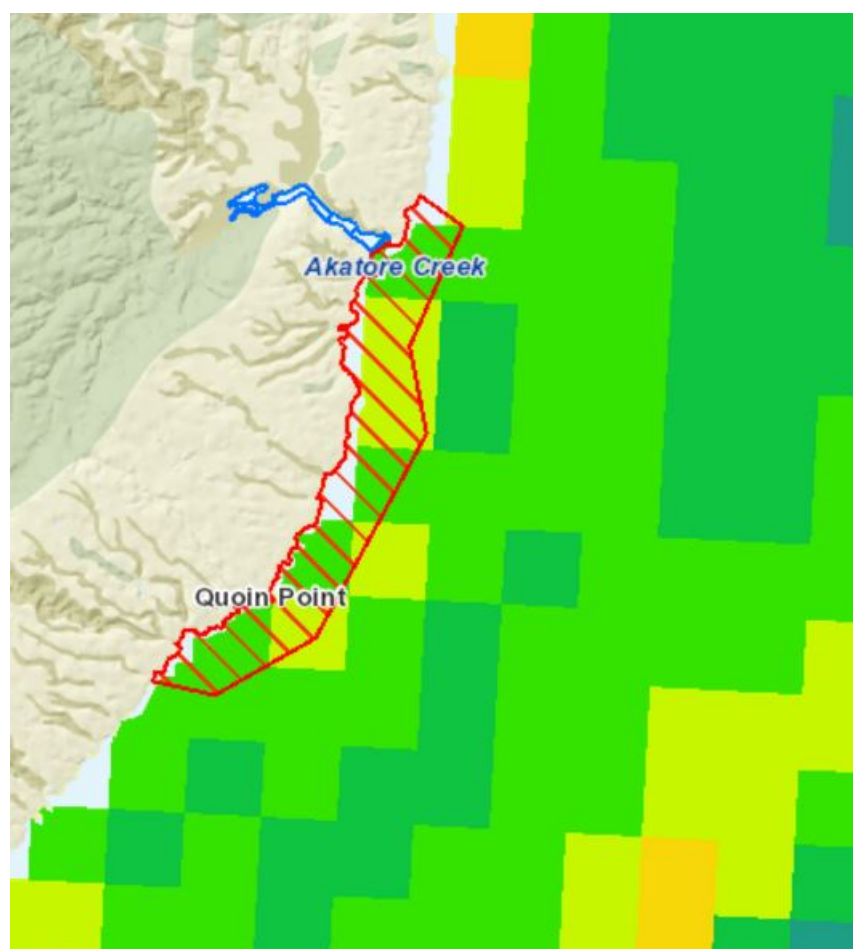


Figure 10 - Proposed MPA M (relative fishing intensity displayed)

- Size: 6.3km²
- Type 1 'No Take' MPA
- This proposal has been done in conjunction with the Akatore Estuary and Akatore Offshore type 2 MPA's
- The forum note that this area contains a rare rock (schist) that creates different habitat than other kinds of rocks. This is supposed to be good habitat for intertidal and subtidal species.
- A small historical fishing town is found nearby at Taieri, the area further out from this reserve has been left unprotected as to not disrupt these fishermen. They are only able to use small boats to get in and out of the Taieri river so cannot travel long distances.
- There is a considerable amount of Rock lobster potting that would be displaced by this reserve.
- The forum note recreational fishing is likely to be impacted from this reserve as it is used by the local holiday homes and Taieri frequently.

11. Akatore Offshore

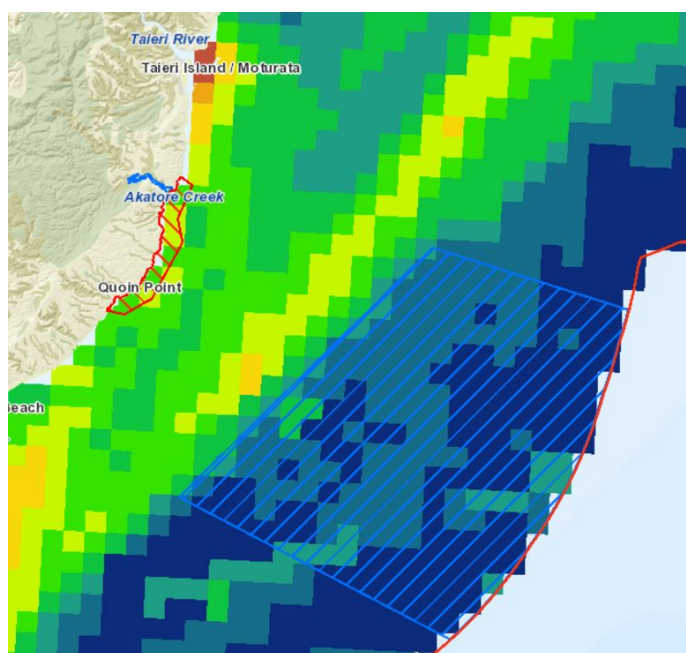


Figure 11 - Proposed MPA N (relative fishing intensity displayed)

- a. Size: 223km²
- b. Type 2 MPA, Restrictions include –
 - i. Dredging
 - ii. All trawling
 - iii. Danish seining
 - iv. All set netting
 - v. Purse seining
- c. This zone has been proposed in order to avoid the trawl areas further inshore (see fig 11)
- d. The area has high biodiversity values due to the type of gravel found on the seafloor
- e. The main commercial fishing here is Lobster and blue cod potting which will not be interrupted.
- f. Some set netting would be displaced.

12. Long Point

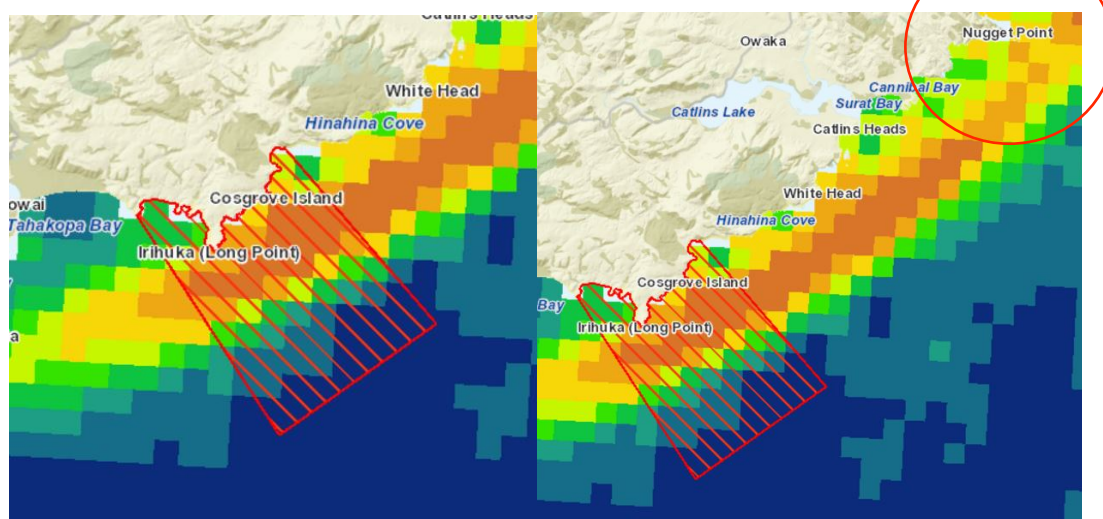


Figure 12 - Proposed MPA O (relative fishing intensity displayed) The Nuggets circled

- a. Size: 65.6km²
- b. Type 1 'No Take' MPA
- c. This proposal is said to contain a full range of very diverse habitats that are important to the area.
- d. The area has been identified as an "Important Seabird Area (IBA)"
- e. There is a large colony of yellow-eyed penguins present
- f. It is a breeding area for NZ fur seals
- g. The habitats contained inside the proposed area are not included in any other area in the proposed network
- h. The alternative to this proposed site would be the Nuggets, a highly valued site (highlighted above)
- i. A large amount of trawling is carried out within the area
- j. Commercial paua and rock lobster fishing is also prevalent
- k. 6% of the regions flatfish trawl is taken in this area.
- l. 5.6% of the regions commercial paua is collected in the area
- m. The forum have noted the high recreational use of this zone by land based and boat fishers

13. Long Point Offshore

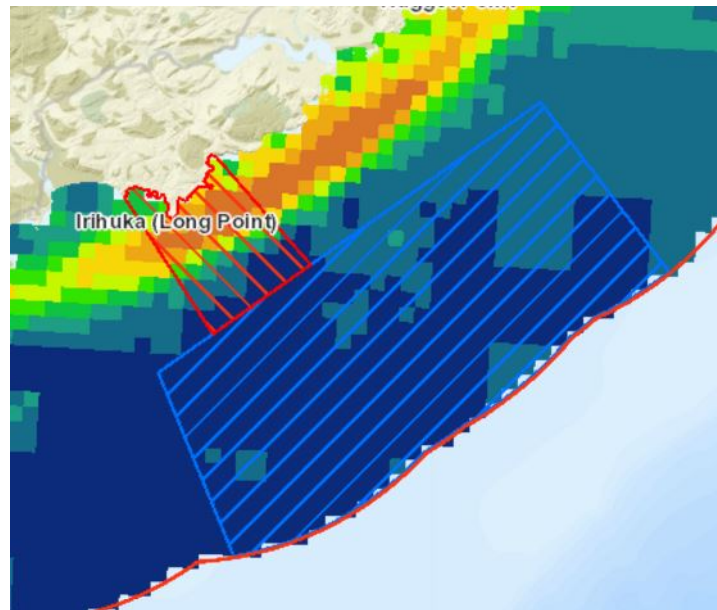


Figure 13 - Proposed MPA P (relative fishing intensity displayed)

- a. Size: 460km²
- b. Type 2 MPA, Restrictions include –
 - i. All trawling
 - ii. All dredging
 - iii. Danish and purse seining
 - iv. All set netting
- c. Little is known about this area, though it has been identified as important for seabirds and marine mammals
- d. Feedback is sought on whether just benthic protection would suffice
- e. Some set netting of School shark and rig would be displaced
- f. This proposal would only restrict recreational dredging and set netting, unlikely to be carried out in the area.

14. Tahakopa Estuary



Figure 14 - Proposed MPA Q (relative fishing intensity displayed)

- a. Size: 0.3km²
- b. Type 1 'No Take' MPA
- c. This area was proposed as it is reasonably undeveloped in its surroundings, therefore less effected by runoff.
- d. Significant area for wading birds
- e. Whitebait breeding area
- f. This proposal covers half of the estuary
- g. There is a small amount of commercial eeling effort here
- h. There is some recreational set netting of founder and collection of shellfish, this can still be carried out in the other half of the estuary

15. Tautuku Estuary

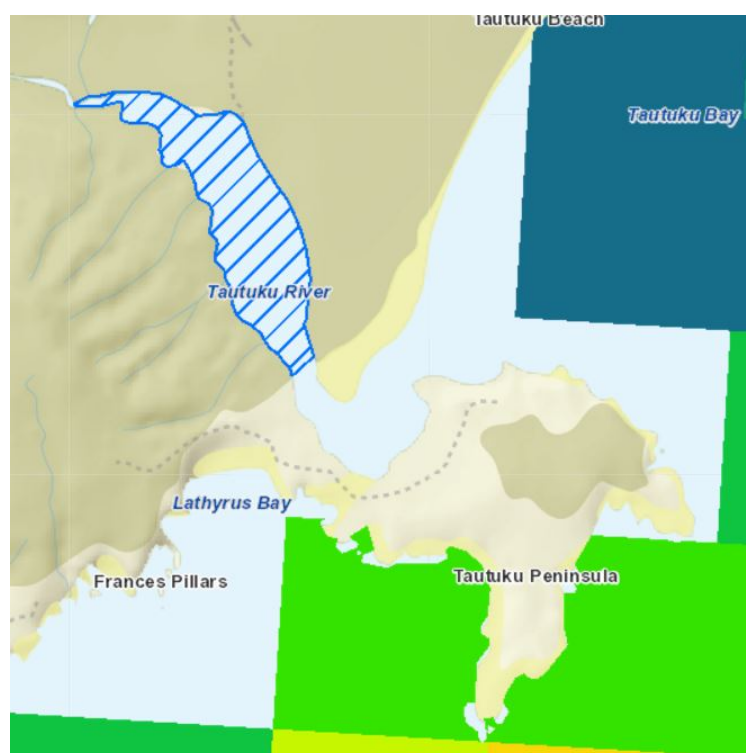


Figure 15 - Proposed MPA R (relative fishing intensity displayed)

- a. Size: 0.5km²
- b. Type 2 MPA, Restrictions include –
 - i. No dredging
 - ii. No set net fishing
 - iii. No commercial line fishing
 - iv. No mechanical harvesting
 - v. No fyke fishing
 - vi. No whitebaiting
- c. This was proposed to reduce bottom impacting methods to allow the recovery of the estuary
- d. The catchment of the estuary has the least human impact of any estuary on the east coast.
- e. Identified as a nursery for flatfish
- f. Large wading bird populations
- g. Small scale commercial eeling occurs in the estuary
- h. Recreational fishing of flatfish and cockles would be allowed by hand gathering only

16. Haldane



Figure 16 - Proposed MPA S (relative fishing intensity displayed)

- a. Size: 1.8km²
- b. Type 2 MPA, Restrictions include –
 - i. No dredging
 - ii. No set net fishing
 - iii. No mechanical harvesting
 - iv. No commercial line fishing
 - v. No fyke net fishing
 - vi. No whitebaiting
- c. This area is noted as a “very significant area for birds”
- d. Significant area for flatfish
- e. Small scale commercial eeling occurs in the estuary
- f. The area is used by locals for shellfish gathering and floundering

17. Kelp Forest

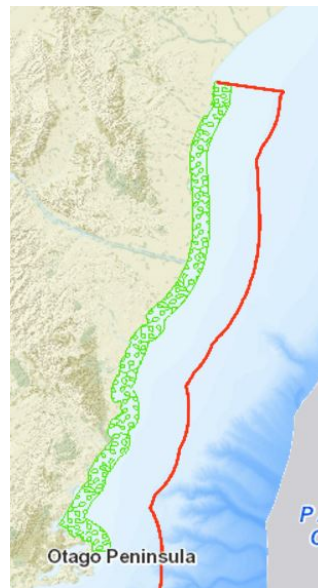


Figure 17 - Proposed MPA T

- a. There is currently no legislation on how to protect kelp but special legislation could be implemented, the forum is seeking feedback on how to best protect these kelp beds.
- b. Important in carbon fixation, reducing atmospheric carbon
- c. There are 6 quota holders for kelp, none of which actively harvest in the area.
- d.