Proposal to close the Kaipara Harbour to the taking of scallops

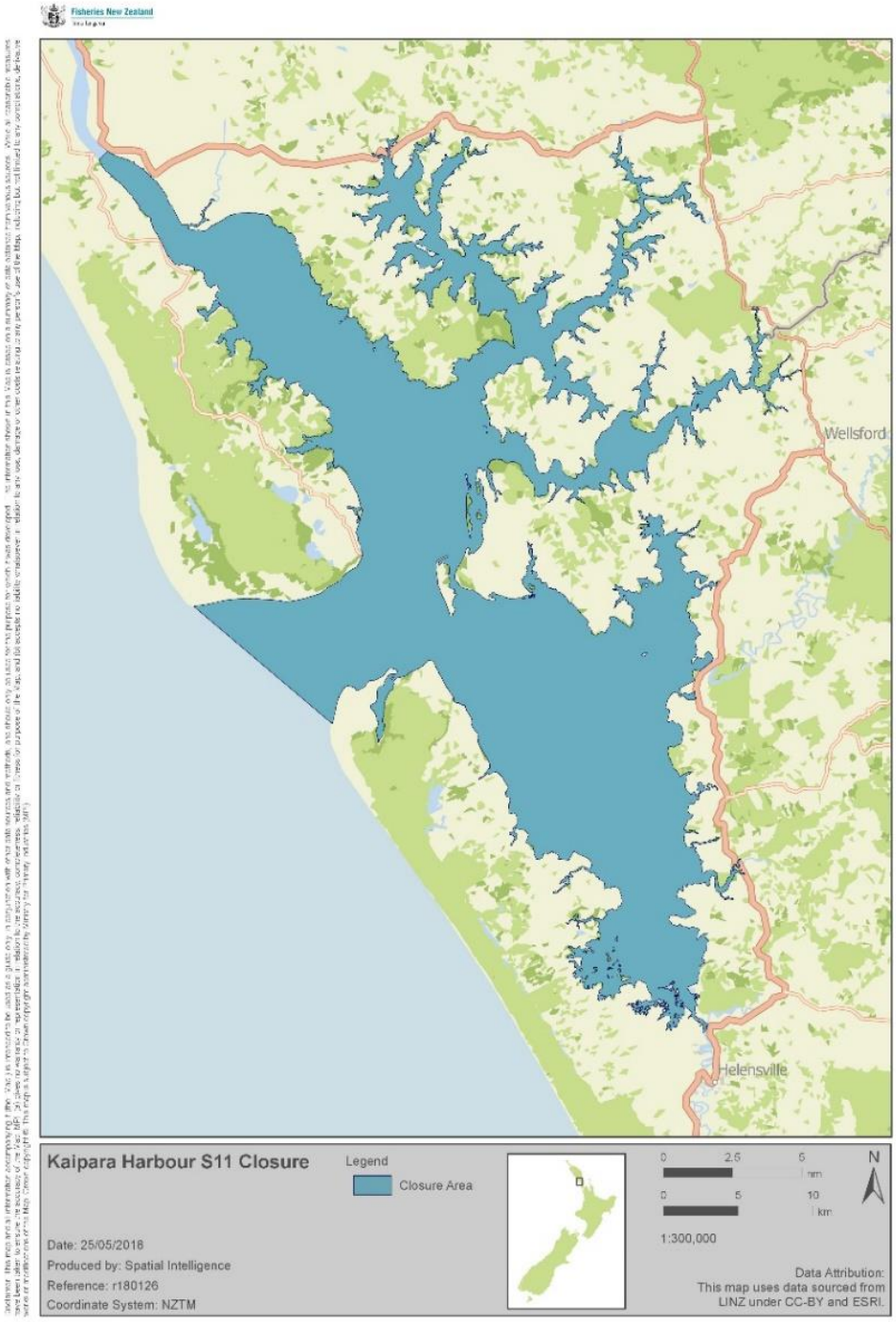

Figure 1: The proposed area for the closure of the Kaipara Harbour to the taking of scallops, as a sustainability measure under section 11 of the Fisheries Act 1996.

1. What is proposed?

368. Fisheries New Zealand proposes that the Kaipara Harbour be closed to the taking of scallops (*Pecten novaezelandiae*; kuakua, tipa, tupa), as a sustainability measure under section 11 of the Fisheries Act 1996 (the Act). The Kaipara Harbour is already closed to commercial scallop fishing. Therefore, the proposed closure under section 11 would affect only recreational fishers.

369. Fisheries New Zealand proposes the following initial options and seeks information and views from tangata whenua and stakeholders (Table 1):

Table 1: Proposed options for the taking of scallops in the Kaipara Harbour

	Management action
Option 1 ***(Status quo)***	No changes made to current management.
Option 2	Close the Kaipara Harbour to the taking of scallops as a sustainability measure under section 11 of the Fisheries Act 1996.

2. Why the need for change?

370. The best available information suggests that there is a sustainability risk to the scallop population within the Kaipara Harbour. The most recent 2017 scientific survey indicates that scallop abundance in the harbour is very low and the distribution of scallops in the harbour is increasingly limited, with very few scallop beds having scallops of harvestable size. Survey results have also shown very low juvenile scallop abundance, and sampled scallops in the harbour were identified to be in poor condition, with several diseases detected.

3. Background

3.1 FISHERY CHARACTERISATION

371. The Kaipara Harbour is the largest inland coastal harbour in the southern hemisphere and an important area for fish stocks and fishing. Scallops are traditionally important in this area for recreational and customary fishers. While scallop abundance is known to vary greatly from year to year due to the species' relatively short lifespan and sensitivity to environmental conditions, there appears to have been an overall decline in scallop abundance and distribution in the Kaipara Harbour over the last sixty years.

372. Since the early 2000s, in particular, there has been increasing concern about environmental and fishing pressure on the scallop beds. Requests from tangata whenua and key stakeholders initiated previous closures to the taking of scallops in the Kaipara Harbour for three fixed periods (15 July 2005 to 14 July 2007, 14 September 2007 to 13 September 2008, and 28 November 2008 to 27 November 2009) under section 186A of the Act.

373. While consultation on the first two temporary closures received widespread support from all sectors, consultation on the third temporary closure received a significant number of submissions in opposition. Reasons for opposition included concern over the reliability of scientific information, observations that the scallop population abundance and size will vary regardless of recreational harvesting, and anecdotal evidence that there remained an abundance of scallops in the Kaipara Harbour.

374. The distribution and abundance of scallops in the Kaipara Harbour was previously surveyed in August 2007 and November 2009. More recently, concerns have again been raised leading to another survey of the harbour in 2017.

Management arrangements

375. The controls on fishing for scallops in the Kaipara Harbour include a seasonal closure between 1 April and 31 August each year[1], a minimum legal size of 100 mm[2], and a recreational daily bag limit of 20 scallops per person[3].

376. In the past, temporary closures have been implemented when survey information showed that there was a sustainability risk to the scallop population. Closing all or significant parts of a scallop fishery has proven to be a successful approach in rebuilding scallop numbers both in New Zealand (for example, the Southern Scallop fishery) and overseas.

Status of the Kaipara scallop population

377. The 2017 survey indicated a decrease in legal-sized (100 mm minimum size[4]) scallops from 680 000 scallops surveyed in 2009, to 400 000 scallops in the same areas surveyed in 2017. The 2017 survey results also indicated that the spatial distribution of scallops has become more limited, and scallops are now primarily found only in the southern areas of the harbour (Figure 2). Legal-sized scallops were also only shown to occur in the south of the harbour (Figure 3), with numbers of juveniles being less frequent in the 2017 population, indicating additional concerns about reduced recruitment (Figure 4).

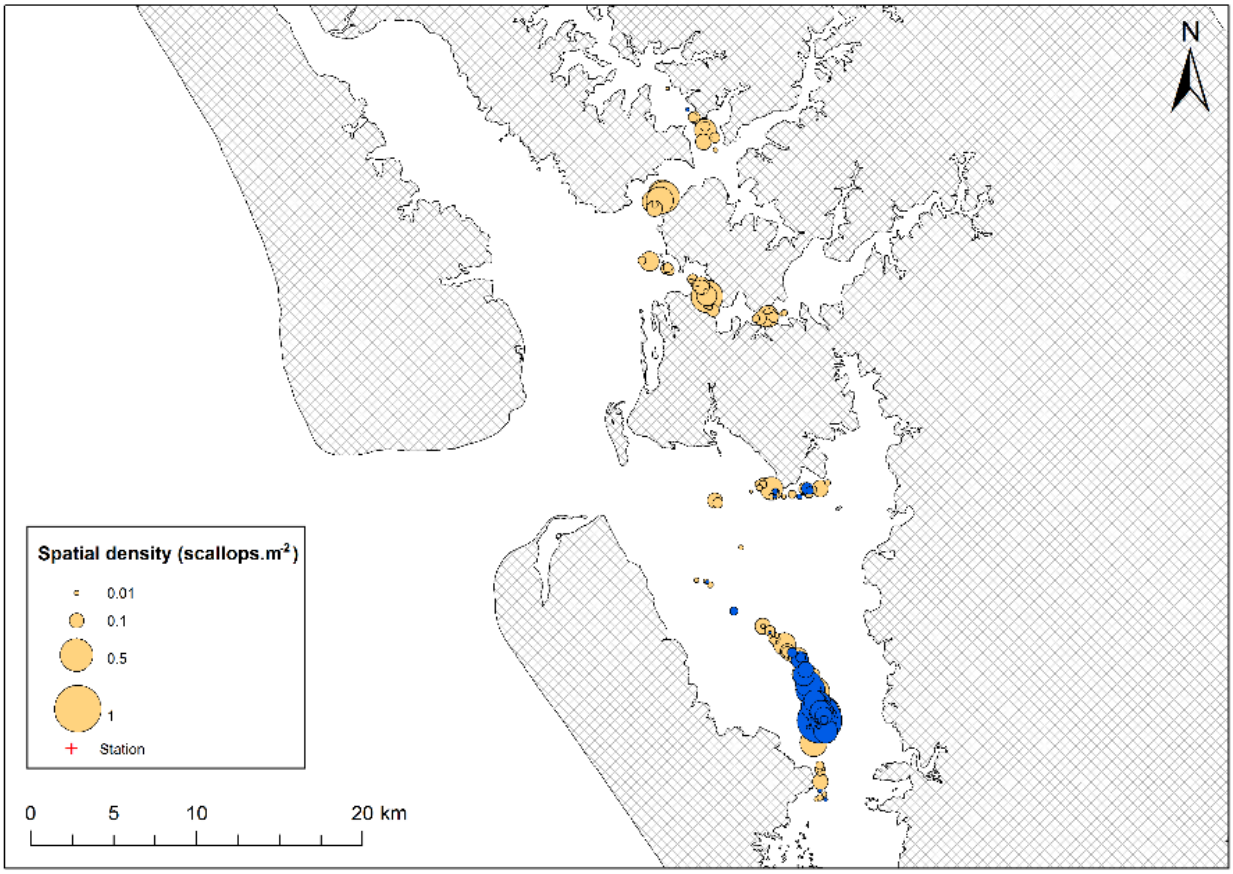

Figure 2: Spatial Density of scallops in the Kaipara Harbour. Beige indicating 2007 and 2009 distributions, and blue indicating 2017 distribution.

[1] Fisheries (Amateur Fishing) Regulations 2013. Season dates were changed in 2008 (Regulation 8: substituted, on 1 April 2008, by regulation 4 of the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Amendment Regulations 2008).
[2] Fisheries (Amateur Fishing) Regulations 2013 (Schedule 2, Part 2)
[3] Fisheries (Amateur Fishing) Regulations 2013. http://www.legislation.govt.nz/regulation/public/2013/0482/latest/DLM3629901.html
[4] Fisheries (Amateur Fishing) Regulations 2013 (Schedule 2, Part 2)

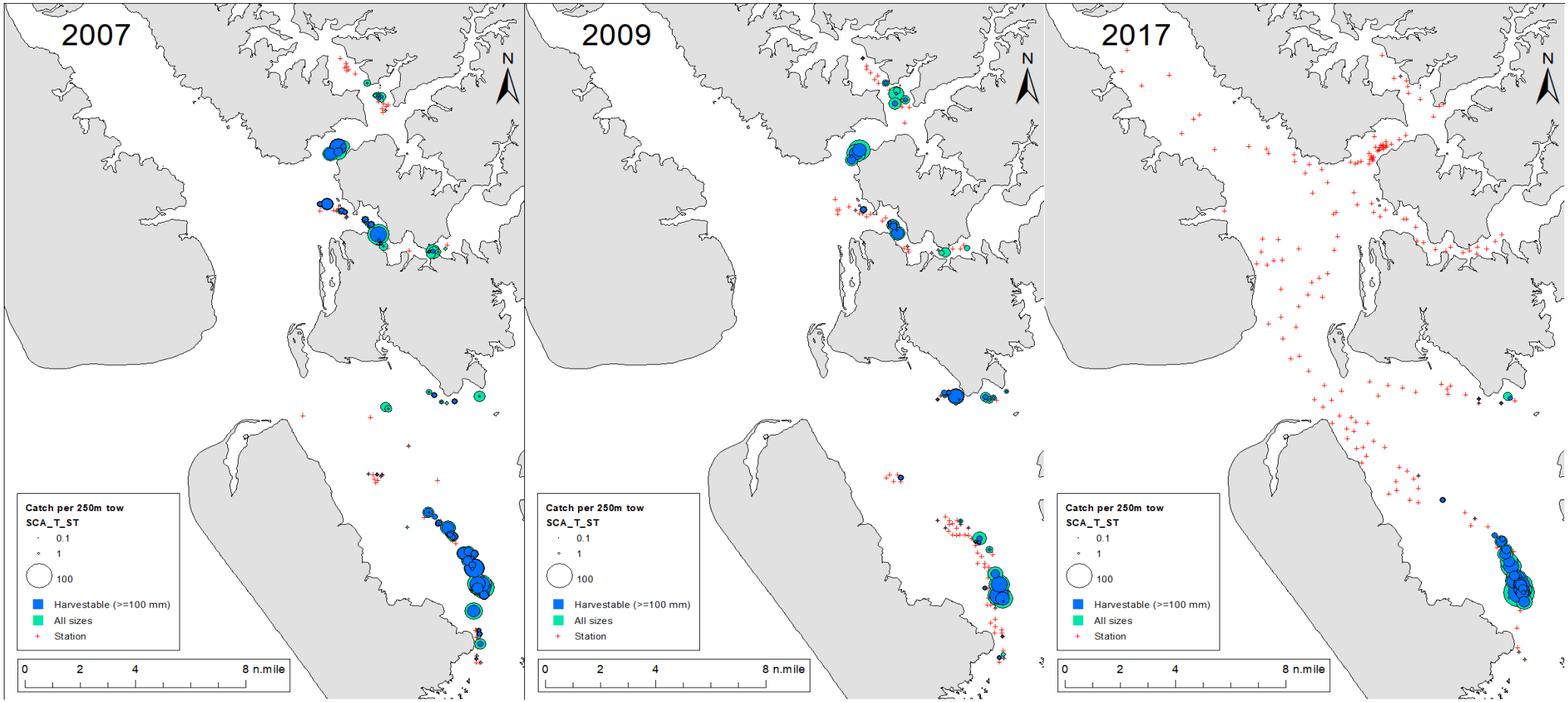

Figure 3: 2007, 2009, 2017 surveyed areas showing stations in red, all-size populations in green, and harvestable-sized populations in blue.

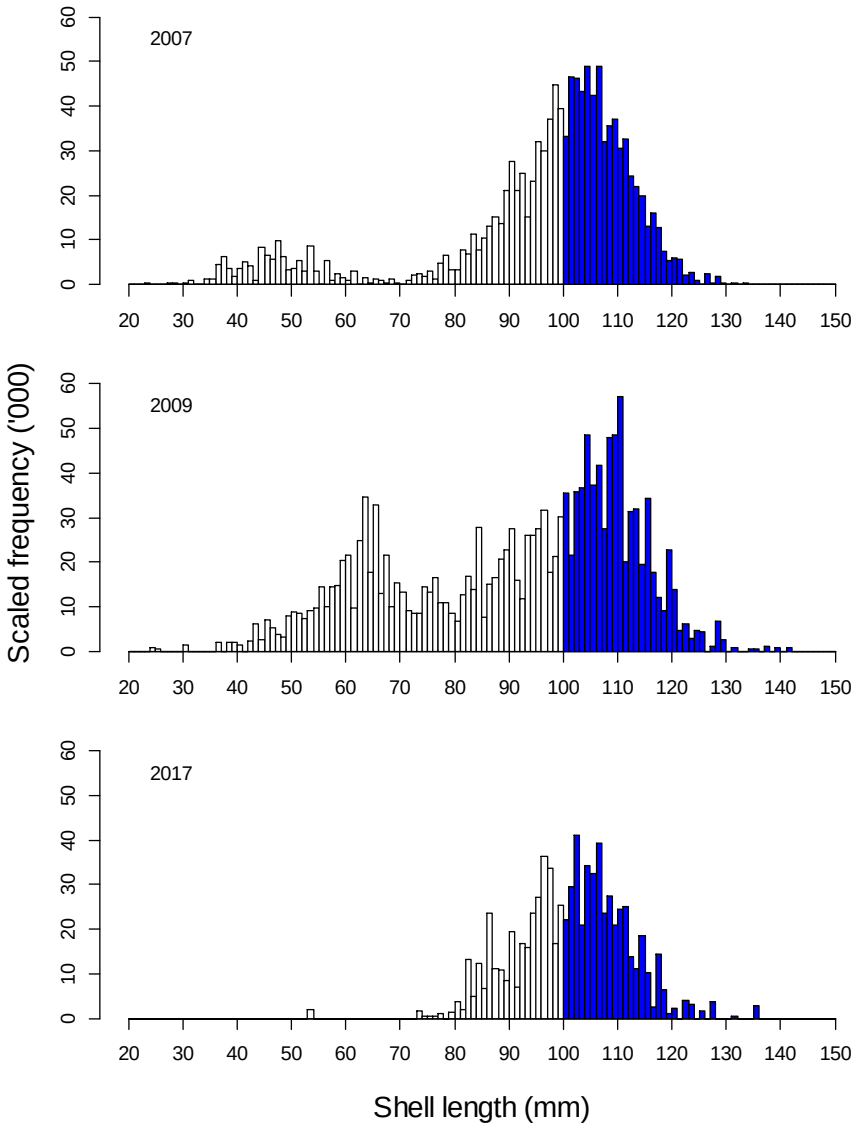

Figure 4: Length-frequency graph for sampled scallops in the Kaipara Harbour in 2007, 2009, and 2017. The length frequencies of scallops of legal size are shaded blue, while the length frequencies of sub-legal size scallops are shaded white.

378. In addition, specimens collected from the areas of Shelly Beach (south-western Kaipara Harbour) and Tauhoa (eastern central Kaipara Harbour) during the 2017 survey were identified to be in poor condition. Histopathology and bacteriology studies[5] detected several diseases. Evidence included extreme damage to digestive glands, which is consistent with virus-like particles common to scallops.

379. Survey results over a 10-year period also indicate increased amounts of sedimentation in the harbour.[6] As young scallops are unable to settle on mud or silt, this contributes to reduced recruitment to the scallop population. The absence of scallops in areas which previously supported dense scallop beds suggests that previously suitable habitats for scallops have been degraded.

[5] Williams, J.R.; Bian, R.; Roberts, C.L. (2018). Survey of scallops in Kaipara Harbour, 2017. New Zealand Fisheries Assessment Report 2018/20.

[6] Morrison, M.A.; Lowe, M.L.; Jones, E.G.; Makey, L.; Shankar, U.; Usmar, N.; Miller, A.; Smith, M.; Middleton, C. (2014). Habitats of particular significance for fisheries management: the Kaipara Harbour. New Zealand Aquatic Environment and Biodiversity Report No. 129. 169 p. https://www.mpi.govt.nz/dmsdocument/4367/send

3. Why are these options proposed?

3.1 OPTION 1 *(Status quo)*

380. Under Option 1, no management changes will occur. Recovery and sustainability of the scallop population will rely on the current rules for managing the scallop fishery. Commercial fishing for scallops will continue to be prohibited in the harbour[7].

381. This option has the least impact on harvesting, but provides the least protection to the remaining scallop population. Fisheries New Zealand considers that this option might not address the risk that long-term sustainability and utilisation would be compromised. We also consider that this option may not give adequate weight to the scientific information suggesting that the scallop population in the harbour has low abundance, limited spatial distribution, a risk to recruitment, and scallops of poor conditions.

3.2 OPTION 2

382. Under Option 2, Fisheries New Zealand proposes a closure of the Kaipara Harbour to the taking of scallops, under section 11 of the Act.

383. Best available information suggests the abundance of scallops in the harbour is currently very low, the scallops are limited in distribution compared to historical evidence, and have been identified to be in poor condition. In addition, information suggests there is increasing sedimentation in the Harbour which poses a further risk to recruitment. Continued harvesting of the population, while providing utilisation benefits in the short term, will result in further reduction of biomass and also associated harvesting mortality and stress to the scallop population.

384. In New Zealand, and internationally, closure of scallop beds has been used as a management tool when population abundance reaches levels that pose a risk to long term sustainability. Fisheries New Zealand consider that the latest fishery survey information, and wider concerns about the marine environment and its ability to support scallops, suggest that there are risks to ongoing harvesting of scallops. Fisheries New Zealand considers that closure of the beds is most likely to provide the necessary time and opportunity required for the population to recover, as disturbance and stress from harvest pressure, and related mortality, will be significantly lessened.

385. Unlike the previous "fixed-term" closures, the proposed closure would be in place indefinitely until new scientific information suggests that scallop numbers have rebuilt to a level that can support harvest. Another survey is planned for 2020 that would help to inform future decision making.

386. Fisheries New Zealand notes that a closure using a *Gazette* Notice under section 11 of the Act provides flexibility, as it allows for more timely changes in management actions compared to regulatory changes, should evidence arise indicating that the population is recovering during the closure.

[7] Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986. Accessible at: http://legislation.govt.nz/regulation/public/1986/0216/34.0/DLM104498.html

387. The taking of scallops from the Kaipara Harbour is an important customary fishing practice and a closure under section 11 would not apply to customary fisheries (see Statutory Considerations), however, subject to confirmation, a non-regulatory rahui may be put in place by Kaipara Harbour iwi.

4. Other Relevant Matters

388. Fisheries New Zealand notes that environmental factors such as siltation and eutrophication (excess nutrients) in enclosed bays and sheltered harbours may be affecting scallop recruitment. Fisheries New Zealand does not have a direct role in managing such environmental impacts. Nonetheless, Fisheries New Zealand will monitor existing work being done in this field, and continue to engage with relevant local authorities in this regard.

4.1 INPUT AND PARTICIPATION OF TANGATA WHENUA

389. The results of the scallop survey and the option to consider a closure of the Kaipara Harbour were communicated to Ngā Maunga Whakahii o Kaipara, Te Uri o Hau, and Te Rūnanga o Ngāti Whātua. Ngā Maunga Whakahii o Kaipara Trust Board has communicated its support of this closure in preliminary discussions, with meetings to follow with Te Uri o Hau and Te Rūnanga o Ngāti Whātua. Communication will be maintained throughout the consultation process.

390. The request to close the Kaipara Harbour scallop fishery seeks to give effect to provisions of the 1996 Act and the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (the Settlement Act). These Acts address ongoing Treaty obligations on the Crown to make better provision for Māori non-commercial, customary fishing rights and interests, and Māori participation in the management and conservation of New Zealand's fisheries. In particular, the request assists in ensuring that the scallop stock in the harbour can provide, now and in the future, for the use and management practices of Māori as required by section 10 of the Settlement Act.

Kaitiakitanga

391. Under Section 12(1)(b) of the Act, the Minister must also have particular regard to kaitiakitanga before setting or varying any sustainability measure. Under the Act, kaitiakitanga is the exercise of guardianship, and in relation to any fisheries resources, includes the ethic of stewardship based on the nature of the resources, as exercised by the appropriate tangata whenua in accordance with tikanga Māori.

392. Relevant Iwi or Forum Fishery Plans provide a view of the objectives and outcomes iwi seek from the management of the fishery, and can provide an indication of how iwi exercise kaitiakitanga over fisheries resources. Iwi views from Forum meetings and submissions received from iwi can also provide an indication.

393. Scallops (kuakua, tipa, tupa) are identified as a taonga species for Te Uri o Hau. Fisheries New Zealand considers that the management options presented in this discussion document will contribute towards maintaining kaitiakitanga for Ngā Maunga Whakahii o Kaipara, Te Uri o Hau, and Te Rūnanga o Ngāti Whātua.

4.2 ENGAGEMENT WITH STAKEHOLDER GROUPS

394. The results of the 2017 survey have also been communicated to the Integrated Kaipara Harbour Management Group (IKHMG). The IKHMG was established in 2005, and has been involved in environmental management initiatives in the Kaipara Harbour, including supporting tangata whenua in previous closures.

5. Further Information

Should you require further information, please see:

Fisheries Act (1996)
http://www.legislation.govt.nz/act/public/1996/0088/latest/DLM394192.html

Williams, J.R.; Bian, R.; Roberts, C.L. (2018). Survey of scallops in Kaipara Harbour, 2017. New Zealand Fisheries Assessment Report 2018/20.