

# Review of Sustainability Measures for Deepwater (King) Clam (PZL 7) for 2020/21

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# 1 Stocks being reviewed

#### Deepwater (King) Clam (PZL 7)

Panopea zelandica; deepwater (king) clam, geoduck

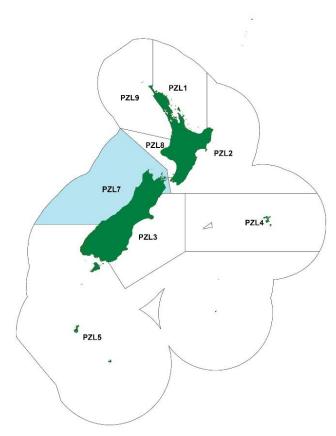


Figure 1. Quota Management Area (QMA) for PZL 7.

# 2 Summary

- 1. Fisheries New Zealand is proposing to review the sustainability measures for king clams or geoduck in Quota Management Area 7 (PZL 7) for the 1 October 2020 fishing year.
- 2. Fisheries New Zealand is seeking feedback and submissions on whether an increase to the Total Allowable Catch (TAC) for PZL 7 could be considered in light of the results of a biomass assessment (Slater et al., 2017) under a special permit issued to support this developing fishery. This information suggests there is an opportunity for increased utilisation in this fishery.
- 3. A cautious approach is proposed in determining sustainability measures as geoduck are long lived and sedentary, and there is uncertainty regarding how the stock and its habitat will respond to fishing. The fishing method (a hand held water jet) results in the resuspension of sediment (although these effects are likely to be short-lived).
- 4. The TAC of PZL 7 is currently 30 tonnes, with a Total Allowable Commercial Catch (TACC) of 23.1 tonnes. Three options are proposed for this stock:

**Option 1** is to maintain the *status quo* – no increases, and carries the least sustainability risk. It is a cautious approach that would, however, constrain development of the fishery.

**Option 2** is an increase to the TAC to 65 tonnes, increasing the TACC to 48 tonnes and setting a 1 tonne allowance each, for both recreational and customary fishing. It sets an

allowance for other sources of fishing-related mortality of 15 tonnes. This option provides for an increase in catch that is less than the estimated harvest rate based on biomass (see Option 3) to place more weight on uncertainties in how the stock and its environment may respond to increased fishing.

**Option 3** is an increase to the TAC to 130 tonnes, increasing the TACC to 99 tonnes and setting a 1 tonne allowance each for both recreational and customary fishing. It sets an allowance for other sources of fishing-related mortality of 29 tonnes. This option applies an annual harvest rate of 3% to the estimated biomass (4,331 tonnes) in the area where commercial fishing will occur. It provides for the most utilisation, but potentially carries a higher sustainability risk.

- 5. There is little non-commercial catch of geoduck. Fisheries New Zealand is seeking input and feedback on how the options might impact across all sectors.
- 6. It is proposed that any additional commercial catch of geoduck would be limited to the areas in Golden Bay that were assessed by the survey (and are subject to growing water certification for shellfish). This will allow further monitoring and assessment within the survey site to better determine any impacts on the stock and environment.
- 7. Fisheries New Zealand seeks your input and views on the options proposed.

#### 3 Quota Management System

- 8. Geoduck entered the Quota Management System (QMS) in 2006 and is managed according to a 1 October to 30 September fishing year. The PZL 7 QMA extends along the West Coast of the South Island north of Awarua Point, and around to Clarence Point on the east coast. Quota Management Areas are considered an appropriate spatial scale at which to manage this species<sup>1</sup>.
- 9. For more information about the QMS go to <a href="https://www.mpi.govt.nz/law-and-policy/legal-overviews/fisheries/quota-management-system/">https://www.mpi.govt.nz/law-and-policy/legal-overviews/fisheries/quota-management-system/</a>.

# 4 Legal basis for managing fisheries in New Zealand

10. The Fisheries Act 1996 provides the legal basis for managing fisheries in New Zealand, including the Minister's responsibilities for setting and varying sustainability measures. See the separate document Overview of legislative requirements and other considerations on the Fisheries New Zealand sustainability consultation webpage <a href="https://www.fisheries.govt.nz/dmsdocument/40502">https://www.fisheries.govt.nz/dmsdocument/40502</a> for more information.

# 5 Treaty of Waitangi obligations

#### 5.1 Input and participation of tangata whenua

- 11. Input and participation into the sustainability decision-making process is provided through Iwi Fisheries Forums. Each Iwi Fisheries Forum has developed an Iwi Fisheries Forum Plan that describes how the Iwi in the Forum exercise kaitiakitanga over the fisheries of importance to them, and their objectives for the management of their interests in fisheries. Particular regard must be given to kaitiakitanga when making sustainability decisions. Iwi Fisheries Forums may also be used as entities to consult Iwi with an interest in fisheries.
- 12. The proposal to review PZL 7 was discussed in 2019 with Te Waka a Māui me Ōna Toka lwi Forum (TWAM): the South Island iwi fisheries forum. The forum includes all nine tangata

<sup>&</sup>lt;sup>1</sup> This is because they are discrete enough to cater for regional-scale management (on the basis that the number of populations that may be utilised, either commercially or non-commercially, within these areas is likely to be limited), and the biological characteristics of geoduck are more likely to give rise to a preference for management on a scale not larger than a QMA.

whenua lwi of Te Wai Pounamu: Ngāti Apa ki Ratō, Ngāti Kōata, Ngāti Kuia, Ngāti Rarua, Ngāti Tama, Ngāti Tōarangatira, Rangitāne ō Wairau, Te Ati Awa and Ngai Tahu. The results of the biomass survey (Slater et al., 2017) were circulated to forum members. Iwi noted that market certainty is an issue with deepwater clams, and raised concerns with proposals to increase catch, given the TACC has never been fully caught.

- 13. Geoduck is a taonga species. Prior to a proposed TWAM hui on 18 March 2020, Fisheries New Zealand provided forum members with fisheries management material for discussion including the proposal in this paper to review the catch settings for PZL 7. Due to COVID-19 travel restrictions the intended hui on 18 March 2020 was cancelled.
- 14. Given the disruption to travel, the opportunity for further input from the forum has been impacted and any further input from the nine lwi of Te Wai Pounamu will be via electronic means. This will be included in the final advice and recommendations provided to the Minister. Input provided may result in an alternative option being presented to the Minister for his decision on the management settings for PZL 7.

#### 5.2 Kaitiakitanga

- 15. Geoduck (Pupu) is identified in the Te Waipounamu lwi Forum Fisheries Plan as a taonga species. Furthermore, the Te Waka a Māui me Ōna Toka lwi Forum considers all fish species taonga. The Forum Fisheries Plan contains objectives to support and provide for the interests of South Island lwi, including the following which are relevant to the options proposed in this paper:
  - Management objective 1: To create thriving customary non-commercial fisheries that support the cultural wellbeing of South Island Iwi and whanau;
  - Management objective 3: To develop environmentally responsible, productive, sustainable
    and culturally appropriate commercial fisheries that create long-term commercial benefits
    and economic development opportunities for South Island wi; and
  - Management objective 5: to restore, maintain and enhance the mauri and wairua of fisheries throughout the South Island.
- 16. Fisheries New Zealand considers that this proposal meets Management Objective 1 and seeks further clarification and input into its contribution toward Objectives 3 and 5.
- 17. The following customary management areas are located within QMA 7:
  - the taiāpure of Whakapuaka (Delaware Bay)
  - the mātaitai reserves of Okuru/Mussel Point, Tauperikaka, Mahitahi/Bruce Bay, Manakaiaua/Hunts Beach, Okarito Lagoon, Te Tai Tapu (Anatori), Te Tai Tapu (Kaihoka).
- 18. Commercial fishing is not permitted within mātaitai reserves, but recreational and customary fishing is allowed. No regulations are in place for the Whakapuaka taiāpure relating to geoduck (the area has potentially suitable habitat for geoduck).

# 6 Relevant plans, strategies, statements and context

- 19. There are a number of regional plans in place within QMA 7, including:
  - Regional coastal plans to address the cumulative effects of activities in the coastal marine area, and the adverse impacts from land-based activities on the marine environment.
  - The Marlborough Environment Plan (MEP) that has identified several Ecologically Significant Marine Sites (ESMS) in the Marlborough Sounds Area<sup>2</sup>. The MEP states

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<sup>&</sup>lt;sup>2</sup> The MDC ecologically significant marine sites in the Marlborough Sounds can be found here: https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP\_Decisions/Vol\_2\_Tracked\_Changes/Rules\_Chapter\_16\_Coastal\_Marine\_Zone.pdf

'Disturbance of the seabed must not occur within a Category A Ecologically Significant Marine Site'. It prohibits dredging and bottom trawling within any Category A or B Ecologically Significant Marine Site but allows for these fishing methods to be discretionary activities within the buffer zone of these sites.

20. Fishers are subject to the rules in the plans (for example, small scale restrictions on fishing methods), however, the large area of PZL 7 means these rules do not, in general, stop fishers taking their annual catch entitlement (ACE) from other areas within PZL 7.

#### 7 Current state of the stocks

- 21. Geoduck is predominantly a commercial fishery with historically low levels of customary and recreational catch. There is potential for greater customary and recreational catch, if caught by commercial fishers as recreational or customary catch. Catch allowances for PZL 7 have not been reviewed since geoduck was introduced into the Quota Management System in 2006. Commercial catch of geoduck within PZL 7 has remained low under these settings, and fishers have requested an increase to allow certainty of supply and support market development.
- 22. Due to the low levels of exploitation of geoduck within PZL 7 to-date, the stock is effectively in an 'unfished' state. Biological reference points for the fishery have been set at 20%  $B_0$  (soft limit) and at 10%  $B_0$  (hard limit) in accordance with the Harvest Strategy Standard.
- 23. The best available information on the current state of the PZL 7 stock is a biomass assessment of geoduck, carried out in Golden Bay between September 2014 and August 2015 as part of a special permit issued under the Fisheries Act 1996. The study estimated biomass to be 1,334 tonnes in the 'Collingwood area' (Slater et al., 2017). After correcting for survey efficiency, Slater et al. (2017) estimated there to be 4,331 tonnes geoduck biomass in the Collingwood area.
- 24. Given the relatively low intensity of fishing in recent years, it is unlikely that biomass has changed significantly since the survey as a result of fishing. We note that biomass may have changed as a result of other factors.

#### 8 Recent catch levels and trends

25. Information on commercial fishing of geoduck in PZL 7 includes catch estimates, effort data and landing information. Figure 2 below shows annual commercial catch in PZL 7 has been relatively consistent through time, and has not approached the TACC (23.1 tonnes). Fishers state that the relatively low TACC is constraining the development of the fishery by not providing large enough quantities of geoduck to supply and support market demand.

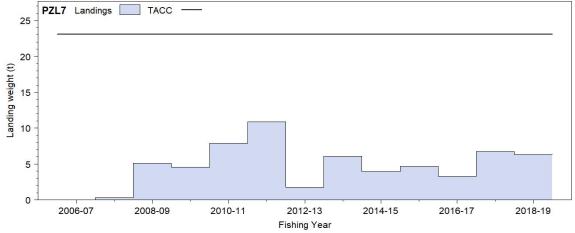


Figure 2. Reported commercial landings and TACCs for the PZL 7.

26. There is believed to be little customary or recreational geoduck catch. When PZL 7 was introduced to the QMS, no recreational or customary allowance was made. However, since then some non-commercial catch has been landed under section 111 of the Fisheries Act 1996 by commercial operators (Table 1).

Table 1. Fishing events and greenweight of landings made under section 111.

Fishing Year	No. of fishing events	Sum Greenweight (kg)
2014/15	7	67
2015/16	13	131
2016/17	9	65
2017/18	18	157.3
2018/19	7	50
Grand Total	54	470.3

27. All commercial vessels using Underwater Breathing Apparatus (UBA) to target geoduck are required to carry Automatic Location Communicators (ALCs). This requirement has been in place since 2006. In addition, as of December 2019, all commercial operators are required to report and submit electronic fishing reports on a daily basis and carry Geospatial Position Reporting (GPR) devices on their vessels. This provides improved information about the location and extent of fishing. Finer scale information provides an opportunity to improve monitoring of commercial catch per unit effort for geoduck.

# 9 Current TAC, TACC and allowances

Table 2. Current TAC, TACC and allowances (in tonnes) for other mortality due to fishing for PZL 7.

Fishstock	TAC (t)	TACC (t)	Other mortality to the stock due to fishing
PZL 7	30.0	23.1	6.9

#### 10 Current other controls

- 28. Commercial fishers typically target geoduck using UBA and are, therefore, required to carry ALCs. The fishing method allowed for this species is a hand held water jet.
- 29. No method restrictions are in place for the customary or recreational take of geoduck within PZL 7. General spatial restrictions exist within the FMA where all forms of fishing are prohibited. The daily limit for recreational fishers for geoduck is 50 per person per day, and forms part of the combined species limit.
- 30. Commercial shellfish harvest may only occur in certified growing waters under the Animal Products (Regulated Control Scheme Bivalve Molluscan Shellfish) Regulations 2006. It is proposed that additional commercial catch (i.e. under Options 2 or 3) would only be taken from the areas in Golden Bay that were assessed by the survey and are subject to growing water certification for shellfish.

# 11 Options – varying the TAC, TACCs and allowances

31. Three options are proposed for the TAC, TACC, recreational and customary allowances, and the other sources of fishing related mortality (OSFRM) for PZL 7. Feedback is sought on these options, or alternatives within this range.

Table 3: Options for varying TAC, TACC and other sources of mortality (all in tonnes) for PZL 7.

Dashed lines (-) represent an allowance that has not been set.

			Allowances		
Option	Total Allowable Catch (tonnes)	Total Allowable Commercial Catch (tonnes)	Customary Māori (tonnes)	Recreational (tonnes)	All other mortality to the stock caused by fishing (tonnes)
Option 1 (Status quo)	30	23.1	-	-	6.9
Option 2	65 🛧 (117%)	48 1 (108%)	1	1	15 🛧
Option 3	130 🛧 (433%)	99 🛧 (329%)	1	1	29 🛧

#### 11.1 Total allowable catch

- 32. Option 1 is the *status quo* TAC of 30 tonnes for PZL 7 and carries the least sustainability risk. The option takes into account that the TAC has not been approached since introduction to the QMS (Figure 2). It also recognises sustainability risks with this fishery, including:
  - Localised depletion as geoduck are a sedentary, long-lived species;
  - The commercial harvesting method (water jets liquefying the substrate) potentially causing damage to the benthos, and associated organisms; and
  - There are underlying concerns regarding the health of the benthic ecosystem in the PZL 7 area in Golden Bay and Tasman Bay.
- 33. Option 2 proposes to increase the TAC from 30 tonnes to 65 tonnes, an increase of 117%. This is an intermediate option. It takes into account uncertainties in the best available information, including:
  - A lack of information on the sustainable yield in a New Zealand/Golden Bay context;
  - How the fishery may respond to a sustained increase in exploitation; and
  - The potential impacts of the fishing method on the environment and associated species.
- 34. Option 3 proposes to increase the TAC from 30 tonnes to 130 tonnes, an increase of 433%. This increase is based on the biomass survey estimates given by Slater et al (2017). The assessment applied a 3% fishing rate to a conservative biomass estimate within a relatively small area of PZL 7 (where commercial fishing will largely be concentrated, Figure 3).
- 35. Given the conservative estimates outlined in Slater et al. (2017) this yield is likely to be precautionary noting, however, that there are risks with using biomass estimates from a single-year study, given annual variation in recruitment (based on research on geoduck populations in Golden Bay)<sup>3</sup>. The sustainability risk associated with this option is higher. This would be managed by continuing to monitor the commercial fishery at a fine scale (using digital monitoring), and reviewing TACs again if appropriate.

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<sup>&</sup>lt;sup>3</sup> Geoduck are relatively long-lived (up to 85 years) and recruitment is variable between years. The biomass assessment for this area (that forms the basis for the option 3 increase) is based on a biomass survey carried out over one year (2014/15). Therefore, there is a risk the assessment may not be representative of the biomass present over longer timeframes, and may overestimate the amount of biomass available for exploitation, given variable recruitment.

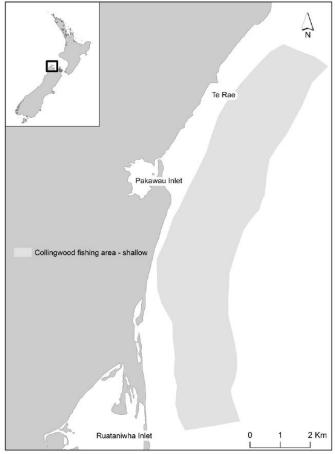


Figure 3. Map displaying the Collingwood area surveyed by Slater et al. (2017) in light grey, where any additional catch would be taken.

#### 11.2 Allowances

Other Sources of Fishing-Related Mortality

36. Options 2 and 3 both propose to set OSFRM at approximately 30% of the TACC, which is consistent with how the OSFRM was set when geoduck was brought into the QMS. There is no new information to suggest an alternative approach is appropriate.

#### Customary and recreational catch

- 37. No customary catch of geoducks in PZL 7 has been reported to Fisheries New Zealand. Information on Maori customary harvest is limited due to areas of PZL 7 not being gazetted under the Fisheries (South Island Customary Fishing) Regulations 1999. In these circumstances customary fishing authorisations would be issued under Fisheries (Amateur Fishing) Regulations 2013, where there is no requirement to report.
- 38. Fisheries New Zealand's best estimates of recreational harvest come from the National Panel Survey of Marine Recreational Fishers (2011/12 and 2017/18). However, geoduck catch is not reported in the panel survey. We are aware that commercial fishers have landed low numbers of catch as recreational catch (under section 111 of the Act) over the last 5 years (Table 1). The specialised harvest method (hydraulic water jet) is likely to restrict the number of recreational fishers targeting, and accessing geoduck.

#### 11.3 Total Allowable Commercial Catch

39. Under Option 1 there would be no change to the TACC. Fishing has, on average, not approached that of the TACC (Table 2), however, commercial fishers advise this is due to minimum volume requirements to market export product.

- 40. Under Option 2 the TACC would increase from 23.1 tonnes to 48 tonnes. Based on the reported port price of \$19.12 per kilogram for the 2019/20 fishing year, this may support an approximate increase in revenue of \$480,000 per year if fully utilised.
- 41. Under Option 3 the TACC would increase from 23.1 to 99 tonnes. Based on the reported port price of \$19.12 per kilogram for the 2019/20 fishing year, this may support an approximate increase in revenue of \$1.5 million per year if fully utilised.

Table 4: Predicted changes to commercial revenue for the proposed options, based on recommended port prices of \$19.12/kg for PZL 7 in the 2019/20 fishing year.

Option	Change from current setting (t)	Predicted revenue changes (\$p.a.)
Option 1 (status quo)	NA	NA
Option 2	24.9↑	\$480,000↑
Option 3	75.9↑	\$1,500,000↑

#### 12 Uncertainties and risks

- 42. There are a number of uncertainties in the information surrounding this fishery, specifically:
  - The best available biomass information is a one-year study conducted in 2014 (Slater et al., 2017), therefore, there is a risk the results do not account for annual variability in stock and may not represent the current state of the population;
  - The biomass assessment focused on the area in which commercial fishing is expected to be most intense. While geoduck occurs in other areas in PZL 7 its biomass in these areas is uncertain;
  - It is unclear how the fishery responds to fishing given the low levels of exploitation to-date;
  - There is uncertainty in the extent and nature of environmental impacts of the fishing method used to extract geoducks (liquefying the substrate using a hydraulic jet); and
  - Larger (older) geoducks are mostly females<sup>4</sup>. Therefore, it is possible that fishers may inadvertently target more females than males, which may potentially reduce fecundity of localised populations. However, further research would be required to ascertain the extent to which this may be occurring.

#### 13 Environmental interactions

- 43. Geoduck is targeted using UBA and hand gathering with water-jets. This method involves liquefying the substrate using high-pressure water to locate and extract individuals within the top 30-50 cm of the substrate. This method disturbs the substratum within a 0.5-1 m radius of the targeted individual, and results in the disturbance of all associated infauna species within the disturbed area.
- 44. In advance of this review of sustainability measures, commercial fishers in PZL 7 commissioned a literature review of the environmental impacts of this fishing method. This concludes the effects of geoduck harvesting using this method appear to be localised and relatively short-lived. In the short-term, the sediment and benthic infauna is generally disturbed and liquefaction can result in sediment resuspension, which can in turn, impact nearby habitats and ecosystems (Gribben and Heasman, 2015). Fisheries New Zealand considers ongoing monitoring of environmental impacts to be a vital component of any increase in TACC.
- 45. There are no known interactions with marine mammals, seabirds or fish bycatch in this fishery. Key environmental interactions with the geoduck fishery, which must be taken into account

<sup>&</sup>lt;sup>4</sup> Geoduck are protandric, developing first as males with a proportion of the population becoming female as they grow (age). This causes sex ratios within discrete populations to change with the majority of the larger (older) individuals being females.

when considering sustainability measures include:

#### Biological diversity

- 46. There is little literature available describing the ecological role of geoducks. However, they are likely to affect water and sediment properties through their filtering and burrowing behaviour and the excretion of waste products (Feldman et al., 2004). Geoducks may also influence the physical structure of their environment. Some evidence suggests they are a prey item for other bottom-dwelling organisms such as crabs and flatfish (Feldman et al., 2004).
- 47. The main area of focus for the development of the commercial fishery is in Golden Bay. This area has historically been the focus of commercial dredging for scallops, which has not been commercially fished for several years, and is currently closed, due to low scallop abundance. Key factors inhibiting the recovery of the scallop fishery are likely to be a lack of suitable habitat and sediment resuspension. Improved understanding of the impacts of harvesting geoduck on the marine environment will need to occur as part of any potential increase to the TACC. This is consistent with ongoing efforts to improve the benthic environment in the area.

#### Habitats of particular significance for fisheries management

- 48. As discussed in the 'plans, strategies' section of this paper, several Ecologically Significant Marine Sites have been identified in the Marlborough Environment Plan in the Marlborough Sounds area. In the remainder of PZL 7, research has characterised both New Zealand's benthic environment and the level of benthic impact from fisheries activity (Aquatic Environment and Biodiversity Annual Review 2019. The environmental impacts of fishing are summarised annually by Fisheries New Zealand. Fisheries New Zealand will continue to monitor the impacts of fishing on the marine environment.
- 49. Digital monitoring of fishing activity will allow ongoing monitoring of where fishing is occurring to ensure habitats of significance for fisheries management (including several Ecologically Significant Marine Sites) are protected. The fishing industry is aware of the habitats identified in PZL 7.

#### Associated or dependent species

50. The extraction of geoduck is known to have an impact on surrounding benthic infauna (and habitat). The available research suggests that fishing-related mortality when harvesting geoduck could in certain circumstances be as high as 50% of the exploited fishery (Breen 1994). We have taken this into consideration by proposing relatively high OSFRM allowances (30% of the proposed TACCs under options 2 and 3 above). The intensity of fishing for geoduck will also be closely monitored using a combination of electronic catch and position reporting and digital monitoring.

#### 14 Deemed values

51. Fisheries New Zealand does not propose any changes to the deemed values for PZL 7.

# 15 Questions for submitters on options for varying TACs, TACCs and allowances

- Which option(s) do you support for revising the TACs and allowances? Why?
- If you do not support any of the options listed, what alternative(s) should be considered?
   Why?
- Are the allowances for customary fishing appropriate? Why?
- We ask tangata whenua to provide any additional information you may have on customary catch
- Are the allowances for recreational fishing appropriate? Why?

- Are the allowances for other sources of mortality appropriate? Why?
- What other management controls should be considered for both recreational and commercial fishers? Why?
- 52. Please provide detailed, verifiable information and rationale to support your views.

# 16 Referenced reports

Breen, P. A. (1994). Sustainable fishing patterns for geoduc clam (*Panopea zelandica*) populations in New Zealand. *New Zealand Fisheries Assessment Research Document 94/4.* MAF Fisheries, N.Z. Ministry of Agriculture & Fisheries.

Feldman, K., Vadopalas, B., Armstrong, D., Friedman, C., Hilborn, R., Naish, K., Orensanz, J., Valero, J., Ruesink, J., Suhrbier, A., Christy, A., Cheney, D., & Davis, J. P. (2004). Comprehensive literature review and synopsis of issues relating to geoduck (*Panopea abrupta*) ecology and aquaculture production. *Prepared for Washington State Department of Natural Resources*.

Gribben, P. E. & Heasman, K. G. (2015). Developing fisheries and aquaculture industries for *Panopea zelandica* in New Zealand. *Journal of Shellfish Research*, 31(1):5-10.

Biomass assessment of Geoduc (Panopea zelandica) from northern Golden Bay in Fishing Management Area 7. Slater A, Millar R and White W, AUT Institute for Applied Ecology New Zealand, 2017. <a href="http://hdl.handle.net/10292/12757">http://hdl.handle.net/10292/12757</a>

Fisheries Assessment Plenary May 2020: <a href="https://www.fisheries.govt.nz/news-and-resources/science-and-research/fisheries-research/">https://www.fisheries.govt.nz/news-and-resources/science-and-research/</a>

Harvest Strategy Standard: https://fs.fish.govt.nz/Doc/16543/harveststrategyfinal.pdf.ashx

## 17 How to get more information and have your say

- 53. Fisheries New Zealand invites you to make a submission on the proposals set out in this discussion document. Consultation closes at 5pm on 1 July 2020.
- 54. Please see the Fisheries New Zealand sustainability consultation webpage (<a href="https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-october-2020/">https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-october-2020/</a>) for related information, a helpful submissions template, and information on how to submit your feedback. If you cannot access to the webpage or require hard copies of documents or any other information, please email <a href="mailto:FMSubmissions@mpi.govt.nz">FMSubmissions@mpi.govt.nz</a>.