

Our reference: **APP- 20252532 FTA**

Enquiries to: **Bruce Halligan**

Email: [REDACTED]

18 May 2026

**The Expert Panel – Hananui Aquaculture Project**

Environmental Protection Authority

Private Bag 63002

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Attention: **Alex Mickleson – Application Lead**

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Tena koe Alex,

***FTAA- 2511-1138 – Hananui Aquaculture Project – Ngāi Tahu Seafood – Minute 5 response - Environment Southland’s feedback on applicant’s response to Minute 4***

The panel has requested via Minute 5 that Environment Southland provides feedback on the applicant’s response to the panel’s Minute 4. *(It is noted that the panel also requests this from the Department of Conservation.)*

It is also noted that subsequent to this request, the applicant has provided its response to the EPA to the matters raised in substantive comments, which the applicant has helpfully copied to ES.

Unfortunately, the panel’s Minute 5 request for comments on Minute 4 has coincided with the period when the ES Water column and benthic reviewer, Dr Nigel Keeley, has been on scheduled leave with very limited connectivity.

Dr Keeley had previously provided his feedback on a range of matters, and the applicant had responded to those via the applicant response to Minute 4. Dr Keeley has provided his feedback on these aspects of the applicant response, which is included as **Appendix 1** to this response, to the extent that he was able in the timeframe provided and with these connectivity constraints. This feedback has been set out in tabulated form for the assistance of the panel.

If further clarification is sought by the panel in relation to Dr Keeley’s views on the Minute 4 response, then ES can seek to engage with him further on his return to work which is after 24 May. Generally, ES endorses Dr Keeley’s feedback, but recognises that some technical elements may require some further discussion. ES is also willing to engage with the applicant on Dr Keeley’s feedback ahead of the upcoming workshop on conditions.

ES provides its comments below with respect to the matters outlined in the applicant’s response to Minute 4:

### **Item 1 – definitions**

ES has reviewed this content and is comfortable with the additional definitions proposed by the applicant.

The ES Harbourmaster has confirmed his comfort with these, as highlighted in the applicant's response Page 2.

ES notes the applicant's position with respect to definitions of "*extreme environmental conditions*" and "*best practicable measures*" – i.e. that definitions for these are not required for the reasons as outlined.

While ultimately a decision for the panel, ES accepts the rationale as outlined by the applicant for not including these definitions.

### **Item 2 – adding list of documents to Condition 2**

ES notes that the applicant proposes an alternative approach of adding an Advice Note to Condition 2 rather than adding the list of documents into the condition itself.

ES is comfortable with the applicant's suggested alternative approach, while also noting this is ultimately the panel's call.

### **Item 3 – Adaptive management and linkage to management plans**

As per ES's substantive comment, while not opposed to the use of adaptive management in the context of this application, ES considers that it is important that the associated conditions are sufficiently certain to be enforceable. ES appreciates the panel's close scrutiny of this aspect.

ES is generally comfortable with the applicant's response to this element, and ES agrees that the applicant's proposed rewording of Clause 2(b)(i) would add some further clarity.

### **Item 4 – what happens if a resubmitted management plan is still not certified by ES**

The applicant has proposed some additions to Condition 2(e) and (f) to add clarity to this condition, should this circumstance occur.

ES is supportive of these additions to Condition 2.

### **Item 5 – Explanation of why the Maritime Construction Safety Management Plan has not been submitted**

ES notes the applicant's response which is, overall, that significant additional engineering design and methodology work and associated review is required to fully develop the MCSMP.

This has been discussed with the ES Regional Harbourmaster.

ES accepts the applicant's position in this regard as to why a draft has not been provided now; while also noting that an appropriate MCSMP will still be required in due course under Condition 12 of the proposed conditions, and that the applicant acknowledges this requirement.

#### **Item 6 – Maximum timeframe for exemptions proposed under Condition 21**

The applicant responds to the panel's concerns by explaining why specifying maximum timeframes for the exemptions is not considered appropriate.

ES appreciates this query from the panel and agrees that risk management on matters such as potential line entanglement hazards is an important matter requiring close scrutiny.

ES accepts the rationale provided by the applicant that these matters can be traversed through operational controls and content in the relevant management plans, which will be subject to independent technical review prior to certification.

It is noted that the Department of Conservation will also have the opportunity via its Minute 5 response to provide its views on this aspect.

#### **Item 7 – Conditions 23 and 24 interpretation of “as far as practicable” and “as near as practicable”**

A member of ES's senior Compliance staff has reviewed this condition and is generally comfortable with the wording change proposed by the applicant in its response to Minute 4 for Condition 23.

In terms of Condition 24, ES proposes that the wording *“as near as practicable to its condition prior to the exercise of this consent”* is replaced with *“to a state that the seabed indicators return to a condition that is functionally equivalent to reference conditions from baseline monitoring”* or alternatively that an advice note be added to Condition 24 that *“as near as practicable”* means *“that the seabed indicators return to a condition that is functionally equivalent to reference conditions but may not exactly replicate pre-development conditions.”*

#### **Item 8 – Condition 24 Closure Plan**

As stated in ES's substantive comments, robust closure arrangements and associated risk mitigation are of strong interest to ES, and ES appreciates the scrutiny that the panel is giving this issue.

While noting the applicant's comments, ES favours a condition requiring a Closure Plan, and considers those matters the applicant has identified should be included in the conditions. ES also suggests that the closure plan should seek to ensure that seabed indicators return to a condition that is functionally equivalent to reference conditions from baseline monitoring.

ES and its Harbourmaster are available to discuss this aspect further if required.

#### **Item 9 – Marine Mammal, Seabirds, Sharks and Biosecurity Management Plan and linkage to the Baseline Monitoring Plan and Report (BLMP)**

ES considers that the panel has highlighted a relevant linkage issue and notes the applicant's suggested additions to Condition 2(b)(iii).

Environment Southland is supportive of these proposed additions to Condition 2(b).

#### **Item 10 – Adaptive Management approach in draft seabird and marine mammals Management Plans**

Environment Southland considers that the panel has highlighted an important element of the condition suite requiring careful scrutiny.

ES would be very willing to participate in further dialogue on this matter either at the conditions workshop in June or prior, in order to seek to ensure that there is sufficient certainty in the relevant adaptive management conditions.

ES also notes that the Department of Conservation will have the opportunity to provide its views on this matter via its response to Minute 5.

#### **Item 11 – Condition 66 and linkage to pre-development baseline condition**

It is noted that the applicant has proposed some changes / additions to Condition 66 for clarity and to provide more certainty.

However, ES notes that these changes do not fully align with the content of Conditions Appendix C – notably C-1 of the March 2026 condition suite which has some tighter limits.

It is also unclear whether there is a depth for total nitrogen monitoring and it would be useful to clarify whether the mean dissolved oxygen concentration is for the entire water column depth.

Dr Keeley has also provided feedback attached on this condition.

#### **Item 12 – extent of adaptive management regime in conditions**

The panel queries why the adaptive management regime has been confined (Conditions 67-83) to seabed and water column effects, and not to effects on other fauna. ES notes the applicant's response explaining its reasoning on this.

As noted in the ES substantive comment, ES does not hold in-house technical expertise on marine mammals, seabird and sharks and does not have the ability to access appropriate external technical input in the timeframe available. ES notes that the Department of Conservation will have the opportunity to provide its feedback via its Minute 5 response.

ES is happy to participate in further dialogue on this aspect.

#### **Item 13 – Condition 68 Adaptive Management triggers**

It is noted that the applicant has clarified that the conditions and appendices should refer to AMTs in all instances.

ES supports this change as consistent terminology is important.

#### **Item 14 – Table C-1 adaptive management plan approach**

The applicant explains its rationale for its position, but indicates that *“a draft Seabed and Water Column EMMP (that would incorporate requirements for baseline or pre-development monitoring) could be provided,”* and that *“Within that draft document, if the Panel wishes, NTS could provide further elaboration of adaptive management measures and provide proposed updated wording to consent conditions to clarify the adaptive management approach”*.

Seeing a draft of this document would be useful to ES, as it would provide more of a framework around the adaptive management regime / approach proposed.

#### **Item 15 – Table C-1 and C-2 – EQSs and AMTs**

ES notes the applicant's response and proposed additional condition wording to seek to clarify this aspect, referencing the Marlborough approach. ES considers this additional wording may add future clarity and would be happy to discuss this aspect further.

#### **Item 16 – No pre-construction baseline monitoring of marine mammals and sharks**

The applicant's position on this matter is noted.

ES does not have a current technical position on the necessity for such pre-construction monitoring and cannot obtain further external technical feedback in the time available. ES did consult with the Department of Conservation during the preparation of its substantive comment.

As outlined above, DOC will have the opportunity to provide its feedback as part of its response to Minute 5.

#### **Item 17 – Additional BLMP and report required as proposed in Conditions 72 & 73**

ES notes the additional content put forward by the applicant to explain the need for an BLMP, which also links to the applicant response to Questions 18 and 19.

ES supports retaining Conditions 72 and 73 to require baseline monitoring and associated reporting to be retained as specified in these conditions.

#### **Item 18 – Baseline Monitoring Plan provision and Item 19 – Draft Water Column and Seabed EMMP provision**

ES notes the applicant's response and that it signals that a draft BLMP and Seabed and Water Column EMMP could be provided to the panel by 22 May.

ES is supportive of a draft BLMP and draft Seabed and Water Column EMMP being circulated prior to commencement of consent. The draft plans would provide more certainty as to the final form of the BLMP and Water Column EMMP as well as a further opportunity to provide feedback.

#### **Item 20 – Triggers**

The panel queries why the science-based triggers in Appendix C are proposed as "drafts".

The applicant has confirmed the reference to the measurable triggers being "draft" can be removed.

ES supports this change.

### **Item 21 – Draft Farm Movement Plan – why is this not provided?**

ES notes the applicant's response and is comfortable with proposed condition 83, which makes a final Farm Movement Plan contingent on a peer-reviewed Engineering Design Report for the proposed location, an additional seabed survey of the new location (to evaluate a new baseline) and site-specific depositional modelling.

### **Item 22 – Conditions 76(c) and 77 – should these consider the moving of farms and progressing between stages?**

The applicant notes Condition 83 requires depositional modelling to support any proposed relocation and therefore does not consider that a change to Condition 76(c) is necessary.

However, the applicant agrees Condition 77 should apply if farm relocation occurs and has proposed additional wording to Condition 77(b).

ES supports the applicant's proposed amendments to Condition 77.

### **Item 23 – Moving from Stage 1 to Stage 2 – Stage Progression Report only includes seabed and water column effects, not effects on other sensitive marine receptors**

ES notes the applicant's response and indication that there is no evidence that warrants linking marine species management to farm staging.

ES has no firm view on this matter, which is ultimately a panel decision.

### **Item 24 – Review conditions – adaptive management**

The applicant's position is that Condition 85 (the review condition) already covers the situation where the adaptive management framework proves insufficient to address effects. In saying that, the applicant is agreeable to adaptive management being a ground for review.

ES supports the inclusion of an additional ground of review for purposes of making the adaptive management framework more effective and robust in relation to effects management. ES considers that such an approach provides greater certainty.

### **Item 25 – Total likely funds from the Hananui Community, Environmental and Health and Education Funds**

The applicant has indicated that total contributions across all funds could grow to circa \$136,000 per annum at Stage 1 and \$272,000 per annum at Stage 2 (under a realistic production scenario and assuming 20% mortality).

ES is supportive of the creation of these funds, and notes that these will provide useful potential sources of funding for relevant, worthy causes.

### **Item 26 – CPI linkage for funds**

The panel queries whether a CPI linkage is required to ensure the funds remain meaningful over the 25-year term. It is noted that the applicant agrees and will amend the relevant conditions.

ES is supportive of the applicant's proposed approach.

### **Items 27 and 28 – discrepancies between management plans, expert recommendations and draft conditions**

ES notes the applicant's response and understands that the applicant will review the draft conditions after comments have been received and will circulate a revised condition suite. It is noted that in terms of the two examples the panel has cited in Minute 4 the applicant has proposed modifications to the Shark Management Plan to link to Condition 49 and to the advice note of Condition 11.

ES has no further comments, but will review the revised condition suite in detail when received.

### **Item 29 – Linkage of Management Plans to the application documents**

The panel notes that other than the EMMP, it doesn't appear that other management plans need to take into account the relevant application documents and seeks a list of documents that should be used to guide final management plan development.

The applicant refers to the response to Condition 9. ES considers that the applicant's proposed approach would address this issue.

### **Process suggestion**

ES notes the content of the applicant's response has been somewhat superseded by Minute 5 so ES offers no further comment on this process suggestion.

### **Additional associated matters**

#### **Management Plan certification process**

ES notes the applicant's position on the Management Plan certification process seeks a single certifier for the relevant resource consents, which ES notes is in contrast with the position of the Department of Conservation.

ES is aware that the issue of potential dual certification of management plans on resource consents has also come under some scrutiny in other fast-track processes, such as the Expert Panel's recent decision on the Waitaha Hydro Scheme (paragraphs 1126-1128 and 1228(k)).

While ultimately a decision for the panel, ES signals that it is prepared to be the sole management plan certifier for regional resource consents if required. While ES does not have specific in-house seabird, marine mammal and shark expertise (as indicated in ES's substantive comment), ES would be willing to engage external expertise to ensure that technical review of management plan content is appropriately robust. ES takes the same approach to processing resource consents where it does not hold suitable in-house technical expertise. ES is also willing to assist the panel by clarifying any of the above as and when required. It will be participating in the upcoming conditions workshop and associated conditions review.

### **Adaptive Management Approach and appropriate certainty**

ES appreciates the panel's strong focus on adaptive management and certainty. As indicated in the ES substantive comment, ES is not opposed in principle to the concept of adaptive management but wishes to ensure that any final condition suite provides appropriate certainty and enforceability.

ES understands that the applicant intends to circulate a further revised suite of conditions prior to the conditions workshop in late June. ES will review those conditions in detail when provided.

Thank you for the opportunity to provide this feedback on behalf of Environment Southland.

A handwritten signature in black ink, appearing to read 'Bruce Halligan', with a small dot at the end.

**Bruce Halligan**  
**Strategic Regulatory Advisor**

**Attachment - Appendix 1- Dr Keeley's tabulated feedback – attached**

**Appendix 1- Dr Keeley's feedback:**

Item	Dr Keeley review and comment	Applicant response 7 May	Dr Keeley comment 18 May
	<p>Condition 66: Is it only the 'functions' that should be listed here? Should this overarching aim include 'diversity'? The later is actually easier to measure than most functions; furthermore, I don't think we have full or complete comprehension of the functions of this habitat, nor do we necessarily have readily available ways to measure and monitor them. That said, I agree that preserving ecological function is a good fundamental goal to include, but maybe in conjunction with diversity? This would however need to be associated with a caveat along the lines of "...attributable to the farm." as they can of course be impacted by unrelated stressors. Doing so would imply some sort of retrospective forensic assessment if the condition was not met, and there are ways of doing this, for example with use of farm waste tracers (and the b-MBI). I see that you refer to 'supporting biodiversity' in the footnote of</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraphs 85 – 87)</p>	<p>Overall, I accept the principal condition and that the footnote gives guidance on approach. I recognise that this is a difficult goal to set conditions around. I still have a minor disagreement in that I think it could be more explicit and testable. The footnote doesn't go as far as to specify what and how it will be indicated / measured. 'Ecosystem functions, as indicated by: (?) e.g. epifaunal diversity, prevalence of key habitat forming organisms, prevalence and type of physical 4D structure'? Perhaps this is details for the MP, but it could be better linked to the condition. Requires some careful thought as they may be novel indicators. "An Integrated assessment framework" does not mean much without these details. But, I repeat, this is <u>not</u> a major issue.</p> <p>I am happy that "...do not cause..." implies establishing the cause if changes are identified.</p>

	C66; if that is what is intended, then perhaps be more explicit?		
	<p>Condition 72: Sets the minimum durations for the different types of baseline monitoring. It is unclear to me how historical surveys, which are useful baseline information, relate to these timelines? Also, a critical factor in this is how many times the surveys are to be conducted within that period. Should this be more explicit? E.g. 'A minimum of 3 (?) repeat surveys within a 24-month period in addition to the already conducted surveys.' ?</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraph 89) and Dr Wilson (paragraphs 16 and 17). With respect to the comment that the condition should be more explicit on the number of times that surveys are conducted, both experts recommend that this level of detail should be included in the draft EMMP which NTS has offered to provide to the Panel.</p>	<p>The clarification and specification are good and appropriate. One caveat would be that my understanding is that the largest perturbation to the benthos is likely to be from a major storm/ wave event, not necessarily linked to seasonal or annual cycles. It is conceivable that 2 years of monitoring does not capture such an event, and it then occurs during production. I don't think that this possible eventuality warrants requiring that pre-development monitoring is continued until this happens, but perhaps it is worth adding something into the monitoring plan, whereby a re-survey of select reference sites may be triggered in response to a suspected major sediment transportation event? (Monitoring wave data).</p>
18	<p>It would seem that collecting further 'pre-development' data is more important to mitigate the risk to the applicant than the environment per se, and is therefore something that can be done post-decision if preferred. Any questions of non-compliance during initial monitoring epi- and macro-faunal abundances and</p>	<p>NTS agrees with Dr Keeley that the baseline monitoring to be completed after the commencement of the consent is more about improving the consent holder's (and Environmental Southland's) understanding of the variability of the environment to better interpret future monitoring results, rather than being related to the need to better understand and protect the environment. Please see the response provided by NTS to Minute 4 from the Panel.</p>	<p>Satisfied. No comment.</p>

	diversity should be confirmed using the supporting indicators mentioned above.		
19	<p>Condition 75a.</p> <p>“Objective to: ...achieve compliance with...” Is achieve the right word? My understanding is that the EMMP does not aim to ensure compliance, rather, it sets the framework against which compliance is evaluated.</p>	<p>Condition 66 is being proposed as the compliance limit for seabed and water column effects. That is, Condition 66 sets an obligation that is to be met from the commencement of the consent and failure to meet the requirements in Condition 66 would constitute a breach of the consent conditions.</p> <p>The EMMP, and the Adaptive Management Triggers, set the methods through which compliance with Condition 66 will be achieved and also sets the framework through which compliance is monitored. It is considered that clause (d) of Condition 75 already addresses the monitoring purpose of the EMMP. NTS considers that no further change is required to condition 75a.</p>	Satisfied. No comment.
20	<p>C’s 72, 72, 76 etc. I am not sure where this is best placed, but more consideration should be given to the monitoring for harmful algal blooms (HAB’s) beyond just the first year’s phytoplankton monitoring. This is obviously in the best interest of the applicant but also given the other natural resources in the area.</p>	<p>This comment is responded to in the evidence of Dr Wilson (paragraphs 19 to 21).</p>	<p>I am satisfied that the identification of HAB’s is covered in the early stages.</p> <p>I recommend giving consideration to targeted HAB monitoring in the longer-term (once the phyto assemblage has been repeatedly characterised). There are tools for effectively looking for toxins or target species that will be cheaper and less labour intensive than full taxonomy. Perhaps this may be considered for the monitoring plan.</p>
21	Appendix C: C-1 Water quality	<p>This comment is responded to in the evidence of Dr Wilson</p>	Satisfied with the specification. Approach seems appropriate.

	<p>For a. 'Total Nitrogen concentrations shall not exceed...' Further clarification needed. Is this based on the average for all boundary stations? Assessed station by station basis? Assessed at individual sample replicate level? Or at any stations' (possibly what is intended) This makes a big difference with regards to compliance. Similarly for b. and c. I note here that lots of ref sites = greater probability of finding a high value which benefits the applicant. Conversely, few sites = greater risk for applicant.</p>	<p>(paragraphs 23 to 25). Dr Wilson has recommended a revision to Appendix C-1(a) and condition 66 (as it is proposed to be amended in response to Minute 4) to provide further clarity on this matter.</p>	
22	<p>C2-1 Sandy Seabed Zone 1 understand where these lines have come from and agree with it in principle, but I wonder if these shapes should be simplified to more uniform ellipses? Reason being is to reduce the ambiguity when sampling near to the zone boundary due to the irregular shape of the boundary. Also, although expecting the model to have resolved this to that resolution is probably unrealistic.</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraph 94).</p>	<p>Happy with the simplification of the boundary.</p>
23	<p>Table C-1 iEQS Table C-1. Re: Zone 1 (and other zones) iEQS. Assuming you don't plan to use the full ES approach initially (because it may require some refinement),</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraphs 96 and 97).</p>	<p>Happy with the proposed approach and acknowledge that it is with precedent.</p>

	<p>which quantitatively integrates the multiple variables to give a single metric for assessing compliance, then you need to be explicit about how compliance is evaluated. Must all indicators be measured? What if 1 indicator exceeds EQS and others do not (plus the many other permutations)? Are any indicators more important / reliable than others? Etc. These are probably important details to flesh out somewhere in CC's?</p>		
25	<p>Table C-2          'Trigger responses' – I note the text 'farm actions should be initiated' – the options may well be listed somewhere, but these should include some sort of investigation to determine whether the change is most likely link to the farm. Large natural perturbations are expected at this site, so attributing and significant changes to the farm probably shouldn't be the default stance.</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraphs 99 and 100).</p>	<p>Thank you for the explanation. Happy with the approach.</p>
26	<p>Precautionary adaptive management conditions:          I have one suggestion here about the possibility of conducting an interim (pre-peak biomass) benthic survey to test responses in indicators and requiring a peer reviewed expert</p>	<p>This comment is responded to in the evidence of Dr Bennett (paragraph 102).</p>	<p>Thank you. I am conscious of the cost that this adds to the applicant but feel it may be justified in this case as it should provide valuable early impact information that serves a few purposes. Happy with what is proposed.</p>

	<p>judgement of the data with respect to the type and initial level of effects, the trajectory with regard to likelihood of exceeding the iEQS at the time for the first peak production survey. This early survey could be done after ca 10 months at the first two pens to be developed, at which point one will approach peak production, and one will be in the first few months of production. This would further mitigate the risk of finding an unacceptable upon the first routine survey and provide an earlier insight into how the seabed is responding, which will be valuable for refining the iEQS.</p>		
27	<p>Pt6 in Table re: possible % increase in TN during maximal conditions. The authors have better clarified potential changes in plots, however, I still do not see acknowledgement of the possibility that they have not yet captured lowest natural background levels of TN, and that naturally lower levels would be associated with a greater % increase (due to the farm). Conversely, the two surveys probably didn't capture the maximum concentrations either, which would be associated with an even</p>	<p>This comment is responded to in the evidence of Dr Wilson (paragraphs 27 to 30).</p>	<p>The uncertainty is adequately acknowledged, and I agree it does not pose significant environmental concern.</p>

	smaller % change. This uncertainty should probably be acknowledged.		
Item	<u>Minute 4 Panel questions</u>	<u>Applicant response Minute 4</u>	<u>Dr Keeley comment 18 May</u>
11	Proposed Condition 66 seems unclear, uncertain and not capable of compliance monitoring as the requirements do not reference a predevelopment Baseline position. Please provide a proposal to make this condition more effective, or reasoning for why the current wording is sufficient.	<p>NTS proposes the following changes to Condition 66:</p> <p>The Consent Holder shall ensure that the marine farming activities authorised by this consent do not cause:</p> <p>a. adverse effects on the <u>existing</u> ecosystem function of biogenic habitat (bryozoan-sponge reefs and bushy bryozoan thickets);</p> <p>b. a reduction in dissolved oxygen concentrations that is harmful to aquatic fauna; and <u>the mean dissolved oxygen concentration 300 m in the predominant current direction from the outside edge of the sea pens to fall below 5 mg/L for two successive months;</u></p> <p>c. a measurable increase in the frequency or magnitude of harmful algal blooms. <u>Chlorophyll- a concentrations 800 m in the predominant current direction</u></p>	<p>Additional criteria for WQ (66b-d) seems to provide what is needed for testing compliance.</p> <p>I note that, arguably, and for the sake of consistency, 66a lacks comparable testable specifics. See my previous comment on that with some example criteria.</p> <p>The footnote gives a general description of ecosystem function, and the detailed methods are cited as given in the EMMP (NB: I don't have the ability review this presently), which is good. Question remains, whether the main condition needs to be more explicit and testable? I agree that there is precedent for dealing with this 'novel habitat' situation and that the actual testable criteria may evolve as the surveys are undertaken. Hence there is some justification to avoid hardwiring very detailed parameters to test into the condition. If this needs to be done for reassurance if testability, then they will require very careful thought.</p>

from the outside edge of the sea pens to be greater than 3.5 µg/L for two successive months; and

d. total nitrogen concentrations 800 m in the predominant current direction from the outside edge of the sea pens to be more than 50 µg/L above the highest concentration measured at reference sites on the same day for two successive months).

Note:

“Ecosystem function” in clause (a) refers to the role of habitat-forming taxa in providing structure, supporting biodiversity, and maintaining overall habitat condition.

Details of sampling methodologies for determining compliance with (b) – (d) above are contained in the EMMP required by Conditions 74 – 79.

Changes to the water quality nutrient limits have introduced comparison with reference sites for total nitrogen, which will provide the ‘without development’ environment sought in the Panel’s query.

Chlorophyll-a and dissolved oxygen are set as absolute limits based on available national and international

		<p>guidelines for avoiding adverse water column effects. Reference to 'existing' ecosystem function has been added to Condition 66(a) to reference the current pre-development position.</p> <p>With reference to Condition 66(a) advice from the seabed technical experts is that the setting of numerical limits for effects in biogenic habitat is not possible at this stage (and is not possible ahead of development for any project like the Hananui Aquaculture Project in a novel environment). In considering the Panel's request, Stantec has reviewed consents issued to New Zealand King Salmon (for Blue Endeavour and for high flow inshore marine farm sites) and to Pare Hauraki Kaimoana (for marine farming in the Coromandel Marine Farming Zone). None of the issued consents for these projects include numerical biogenic habitat limits, including the inshore New Zealand King Salmon sites where marine farming and monitoring of nearby reef habitat has occurred for at least 10 years. This is consistent with the expert advice NTS has received that setting defensible numerical limits for effects on biogenic habitat at this point is not possible. NTS also notes that the management of effects on biogenic habitat and the proposed compliance condition were the subject of comprehensive consultation with Environment Southland (including the council's compliance staff) and the council did not raise concerns about implementing the condition. NTS therefore</p>	
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		respectfully suggests that Condition 66(a) should stand as proposed.	
13	Condition 68 refers to Environmental Quality Standards (EQSs) in the header but then refers to Adaptive Management Triggers (AMTs) in condition text in reference to Appendix C. However, Appendix C-1 refers to AMTs, while Table C-1 and C-2 refer to EQSs. Please provide an explanation for how the EQSs and AMTs are related.	As lodged, the conditions and Appendix C use EQS and AMT interchangeably. It is acknowledged that this has the potential to cause confusion. The conditions and Appendix C to the conditions should use AMTs in all instances.	Yes, this needs to be consistent throughout
14	Table C-1 refers to “farm management response actions as outlined in the adaptive management plan”. There does not appear to be a requirement for the preparation of an adaptive management plan nor is there a description in the conditions of farm management response plans (although it is noted that there are actions within some of the draft Management Plans). If this information exists outside of the draft management plans, please detail where, otherwise please provide an explanation for why it has been omitted.	Please see the applicant’s response to Minute 3 from the Hearing Panel for an explanation of where in the consent conditions included in the substantive application preparation of an adaptive management plan was required. Please see also the answer to Question 20 of Minute 4 below, which would strengthen the adaptive management approach. The approach adopted for the substantive application is consistent with the approach previously adopted in Marlborough, for both the inshore salmon farming sites and the recently consented offshore site (Blue Endeavour) and also aligns with the approach outlined in the Government’s Best practice guidelines for benthic and water quality monitoring of open ocean finfish culture in New Zealand (December 2021). In each of those cases the	No real comment. Other than to recognise that 'management responses' can be quite diverse and need to be tailored to the situation at hand. Perhaps best to state the objective of the responses, e.g. 'such that compliance is achieved within XX (time)', and then what happens if not, ie a more drastic response? (This may exist somewhere, apologies if so as I do not have access to all documents currently)

		<p>preparation of an adaptive management plan was forecast in the consent conditions (or in the case of the guidelines was forecast to be addressed in consent conditions for any given project) but only required to be undertaken once consent had been granted. The applicant acknowledges that Pare Hauraki Kaimoana took a different approach and provided a draft environmental monitoring plan that included an indication of farm management responses to exceedance of adaptive management trigger values. However, the consent conditions for that project still required the preparation of an Environmental Monitoring and Response Plan after the grant of consent and its submission to the regional council for certification.</p> <p>NTS acknowledges that requirements for the adaptive management plan could be clearer in the proposed consent conditions. As part of the response to Questions 18 and 19 of Minute 4 (see below) NTS has identified that a draft Seabed and Water Column EMMP (that would incorporate requirements for baseline or pre-development monitoring) could be provided. Within that draft document, if the Panel wishes, NTS could provide further elaboration of adaptive management measures and provide proposed updated wording to consent conditions to clarify the adaptive management approach.</p>	
15	Table C-1 and C-2 (Appendix C) appear to present AMTs for Stage	The applicant's intention in developing Appendix C was that the AMTs would apply to both	Practical solution, with precedent.

	<p>1 only (as indicated by Figure 1 of that Appendix). Given that modelling was undertaken for Stage 2, please advise why EQZs and AMTs have not been presented for Stage 2 rather than Stage 1, being the full development level and therefore more conservative? If it is proposed to now include EQZs and AMTs for Stage 2, please amend the conditions accordingly.</p>	<p>stages. This can be achieved by including the following figure to outline the Stage 2 zones:</p> <p>(Graphic)</p> <p>Linked to the answer to Question 20 of Minute 4 (below) if the material contained in Appendix C of the consent conditions is confirmed as applying from the commencement of the consent (rather than being 'draft') NTS requests that an additional condition is included to allow for a 'footprint mapping' exercise. This recognises that the Stage 1 and Stage 2 Environmental Quality Zones have been proposed based on modelling and may need to be adjusted once marine farming has commenced and actual enrichment monitoring has been undertaken. This was the approach adopted when the first high flow marine farm sites were introduced to the Marlborough Sounds for New Zealand King Salmon, so is not without precedent in New Zealand marine farming consent conditions. Condition wording such as the following could be adopted:</p> <p><u>Notwithstanding Figure 1 in Appendix C, the size and shape of the Seabed Environmental Quality Zones may be reviewed (to enable comparison with the zone outlines contained in Figure 1) and amended by the consent holder after 3 years of operation or after each marine farm has completed a full harvest and fallow period (whichever is the later). If the consent holder seeks to amend the shape and area of the Seabed Environmental Quality</u></p>	<p>I would note that an adjustment that does not increase total area would naturally be treated differently to a significant increase in footprint area. Also that, should any adjustments implicate biogenic habitat, that would need special consideration. This places addition onus on the consenting authority but is also hard to avoid.</p>
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		<p><u>Zones the following process shall be followed:</u></p> <p>a. <u>The consent holder shall provide the consent authority with a report prepared by a SQEP, that assesses the results of at least three years of seabed monitoring, provides an indication of the solids flux and residual solids footprint from discharges at the marine farms and proposes amendments to the zones;</u></p> <p>b. <u>The consent authority certifies that any alteration to the zones will not result in the seabed effects being inconsistent with the conditions of this consent.</u></p>	
17	<p>Explain why the additional BLMP and Report proposed in Conditions 72 and 73 is required, given that it appears there has been quite comprehensive assessment and monitoring of the seabed, biogenic habitats and the water column in the Applicant's suite of assessment reports, and given the assurance from the Applicant's experts (during the project overview conference) that they are confident that they have provided 'good data sets.'</p>	<p>Please see the attached response from Dr Bennett and Dr McGrath from Cawthron. If the Panel is minded to accept NTS' proposal in answer to Questions 18 and 19 of Minute 4 (below) Conditions 72 and 73 could be deleted.</p> <p><a href="#">Role of baseline (pre-development) monitoring at the Hananui site (PDF, 222KB)</a></p>	<p>No comment. (Nor do I have the report that is referred to)</p>
18-19	<p>Considering the question above and the apparent good data sets described in the Applicant's seabed, biogenic habitats, and water column and fauna Expert Assessment Reports, please provide</p>	<p>The approach adopted for the substantive application is consistent with the approach previously adopted in Marlborough, for both the inshore salmon farming sites and for Blue Endeavour and also aligns with the approach outlined in the Government's</p>	<p>No comment</p>

	<p>commentary on why the BLMP has not already been provided as at least a Draft Plan to the Panel as part of the Application. This response should also address whether a Final Draft BLMP can be provided to the Panel for its consideration of the application, and if so, when.</p> <p>Following on from the questions above regarding the BLMP, and given the Expert Assessment Reports provided with the Application include many Management Plan suggestions, please explain why a Draft Water Column and Seabed EMMP has not already been prepared and provided with the Application. This appears important given that such a Management Plan appears pivotal to the proposed effects and adaptive management approach including the measurable Triggers proposed in proposed Conditions Appendix C.</p>	<p>Best practice guidelines for benthic and water quality monitoring of open ocean finfish culture in New Zealand (December 2021). In each of those cases the preparation of a baseline monitoring plan was forecast in the consent conditions (or in the case of the guidelines was forecast to be addressed in consent conditions for any given project) but only required to be undertaken once consent had been granted. The applicant acknowledges that Pare Hauraki Kaimoana took a different approach and provided a draft environmental monitoring plan as part of the application and was not required to do more than repeat a benthic survey by the eventual consent conditions.</p> <p>In preparing the substantive application NTS was also aware that the eventual decision might result in different locations or operating conditions for the proposed marine farms and chose not to prepare a draft baseline monitoring plan to avoid potential re-work.</p> <p>Please see the answer to Question 19 below in relation to the indication of timing for provision of a final draft BLMP as requested by the Panel.</p> <p>The approach adopted for the substantive application is consistent with the approach previously adopted in Marlborough, for both the inshore salmon farming sites and for Blue Endeavour and also aligns with the anticipated approach outlined in the Government's Best practice guidelines for benthic and water</p>	
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		<p>quality monitoring of open ocean finfish culture in New Zealand (December 2021). In each of those cases the preparation of an environmental monitoring plan was forecast in the consent conditions (or in the case of the guidelines was forecast to be addressed in consent conditions for any given project) but only required to be undertaken once consent had been granted, and with the baseline monitoring used to inform it. The applicant acknowledges that Pare Hauraki Kaimoana took a different approach and provided a draft environmental monitoring plan informed by existing benthic and water column surveys as part of the application. However, the consent conditions for that project still required the preparation of an Environmental Monitoring and Response Plan and its submission to the regional council for certification.</p> <p>In preparing the substantive application the applicant was also aware that the eventual decision might result in different locations or operating conditions for the proposed marine farms and chose not to prepare a draft environmental monitoring plan to avoid potential re-work.</p> <p>As noted in response to Question 18, in discussion with Cawthron and SLR, NTS has determined that it is possible to prepare a draft BLMP. In addition, NTS' technical experts have advised that much of the BLMP information would be relevant for an EMMP. A draft Seabed and Water Column</p>	
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		<p>EMMP could be drafted and provided to the Panel by 22 May 2026. As noted in the answer to Question 14 above, this document could also include a draft adaptive management section. NTS notes that the document would be prepared based on the marine farm locations and operations as proposed in the substantive application, so may need to be updated post the granting of consent and the installation of marine farms at the site (if the minor shifts in marine farm position provided for in the proposed consent conditions are required to ensure the structures are stably anchored). That could be provided for in the consent conditions by requiring the final plan to still be certified by the regional council prior to it being implemented. In conjunction with the provision of the draft document the proposed consent conditions could be adjusted to recognise the existence of a draft. The proposed amendment to condition 2(b) as discussed in answer to question 9 (above) is also relevant here, with the requirement being that the plan submitted for certification would need to be in general accordance with the draft provided to the Panel.</p>	
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