

Details of Permit

Purpose for which permit is granted:		Marine farming of King Salmon (<i>Oncorhynchus tshawytscha</i>) at a site located off the northern coast of Rakiura/Stewart Island, including: (a) All associated structures, activities in the coastal marine area, occupation of the common marine and coastal area, disturbance of damage to and deposition on the seabed, and any other ancillary activities (b) All associated discharges to water (c) The associated use of coastal water for marine farming (d) The maintenance and removal of structures
Location:	- site locality	Coastal marine area from between 2 and 6 kilometres offshore from mean high water springs along the northern coastline of Rakiura/Stewart Island, as shown on Plan A in Appendix B.
	- receiving environment	Coastal marine area
Expiry date:		25 years from the commencement of the consent

Commented [GU1]: Note to Parties: The Panel considers that application has also been made for the removal of the structures at the conclusion of marine farming, and for their maintenance during the farming operation, and the Panel would prefer to be clear about that in the purpose.

Commented [BH2R1]: Environment Southland - Agree

SCHEDULE OF CONDITIONS

Interpretation

Wherever used in the conditions:

Commencement Date Notice means a notice in writing given by the Consent Holder to the Consent Authority specifying the date on which this resource consent is to commence.

Commented [GU3]: Note to Parties: Amendment made to clarify the commencement date in condition 6

Consent Authority means Southland Regional Council.

Commented [BH4R3]: Environment Southland- Agree

Entanglement refers to an incident where a seabird, shark or marine mammal becomes trapped or constrained by ropes, nets, lines or structures associated with the marine farm to the extent that direct human intervention is required to free the individual or individuals.

Manager means the Manager Resource Management, Southland Regional Council.

Commented [BH5]: Environment Southland- agrees with this condition . Southland Regional Council MAY be superceded by a new local government entity in the future, however broader local government succession legislation covers such occurrence

SQEP means a suitably qualified and experienced professional. The qualifications and experience of the relevant SQEP shall be set out in the related document or otherwise provided to the Consent Authority upon request.

Threatened means, in relation to conditions 35(a), 42(a) and 49(a), species assessed as Threatened under the New Zealand Threat Classification System (Nationally Critical, Nationally Endangered, or Nationally Vulnerable), and species listed as Vulnerable, Endangered, or Critically Endangered on the IUCN Red List.

Note: In addition to the definitions outlined above, where a word or phrase used in a specific condition requires definition, that definition is provided as a note after the relevant condition.

General conditions

Note: In addition to the conditions of this consent, activities undertaken under this consent must also be undertaken in compliance with any applicable national regulations or legislation.

1. The activities authorised by this consent must be undertaken in general accordance with the application lodged with the Environmental Protection Authority on 26 November 2025 (FTAA-2511-1138) and the documents identified in Appendix A of this consent, except where modified by the conditions of this consent.

Commented [GU6]: Note to Applicant: Please provide a copy of this document

2. Where these resource consent conditions require a document (such as a report, Management Plan or amendment or review of a Management Plan) to be 'certified' the following process shall be followed:

- (a) The Consent Holder shall give the Consent Authority at least 20 working days' notice that certification is going to be requested, to allow the consent authority to organise any technical experts it may require;
- (b) The document shall be provided to the Manager for certification that it:
 - i. contains suitable methods and procedures that will achieve the document's objectives as established in consent conditions, including that the document will ensure that any specified limits or restrictions identified in the consent conditions will be complied with;
 - ii. contains the information required to be included in the document by consent conditions; and
 - iii. where applicable, is in general accordance with the most recent version of each draft management plan as provided to the Environmental Protection Authority on 1 July 2026, except as amended to:
 - A. respond to new information not available at the time the resource consent was granted, including but not limited to, information arising from monitoring; or
 - B. align the management plans with consent conditions; or
 - C. align with new or updated national instruments or updated best practice guidance; or
 - D. incorporate comments made by Environment Southland, the Department of Conservation, Ministry for Primary Industries or representatives of Ngā Rūnanga ki Murihiku.
- (c) The Consent Authority may take such advice from suitably qualified persons as it considers necessary to satisfy itself that the document submitted for certification achieves the requirement of the relevant condition(s);
- (d) Should the document, in the opinion of the Consent Authority, achieve the criteria identified in the applicable consent conditions, the Consent Authority shall notify the consent holder accordingly and the consent holder may commence activities consistent with the document on receipt of written confirmation (certification) from the Manager;
- (e) Certification of documents under this condition may occur prior to the Consent Holder issuing the Commencement Date Notice provided that, at the time certification occurs, the consent would otherwise have commenced in accordance with sections 116 and 116A, Resource Management Act 1991\;
- (f) If the Consent Holder receives written notice from the Consent Authority that certification of a document will not be provided, the Consent Holder may re-submit the document following review of the Consent Authority's reasons, and with any necessary amendments, and request certification again. Conditions 2 (b) to 2 (d) would apply to a re-submitted document and the process shall be repeated until the Manager is able to certify that the document achieves the criteria in the applicable consent conditions;
- (g) Minor and technical amendments to each certified document (such as updating relevant contact details, hyperlinks or references to external content) may be made without certification by the Manager. A version of the document with minor and technical amendments must be provided to the Manager within one month of the amendment. Where this management plan relates to an approval under the Wildlife Act 1953, a copy must also be provided to the Department of Conservation.

Advice Note: The documents subject to the certification process that is set out in condition 2 are the Engineering Design Report (EDR), the Marine Mammal Management Plan (MMMP), the Seabird Management Plan (SBMP), the Shark Management Plan (SMP), the Biosecurity

Commented [GU7]: Note to Parties: The Panel does not consider it appropriate for any management plans to be certified if the consent would not otherwise have commenced (ie if it still subject to appeal and therefore the conditions potentially subject to change).

Management Plan (BMP), any Stage Progression Report (SRP), the Environmental Monitoring and Management Plan (EMMP) and any Farm Movement Plan (FMP).

Advice Note: Certification must not be unreasonably withheld or delayed and certification or a response is expected to take no longer than 30 working days.

3. The Consent Holder must implement the certified documents required by the conditions of this consent and all works and activities authorised by this consent must be carried out in accordance with the certified documents required by the conditions of this consent.
4. If there are inconsistencies between the conditions of this consent and the documents identified in **Appendix A** of this consent, the conditions of this consent shall prevail.
5. The Consent Holder must pay any monitoring charge or charges to recover the actual and reasonable costs incurred by the Consent Authority, including charges incurred through the use of technical experts/specialists engaged by the Consent Authority for the purposes of monitoring conditions of this consent (such as reviews of the required Management Plans) to ensure compliance with the conditions of this consent.

Lapse date and commencement date

6. This consent shall lapse ten years from the date of commencement. The consent shall commence on the date that the consent commences in accordance with sections 116 and 116A, RMA, or the date specified in the Commencement Date Notice, whichever is the later.

Occupation

7. Exclusive occupation of the common marine and coastal area (to the exclusion of the public and other users of the coastal marine area) shall be limited to the area of the marine farm structures, including mooring lines and anchors, not exceeding more than 200 metres around the structures (measured outwards from the compensation buoys on the mooring grid and from the sides of the feed barges) or extending beyond the area shown on Plan A attached to and forming part of these conditions (**Appendix B**).
8. Exclusive occupation must not exceed an area of 460 hectares across all the marine farms authorised by this consent and exclusive occupation areas around farms blocks relocated in accordance with conditions 10 and 85 may be substituted for those shown on Plan A.
9. This consent provides for preferential occupation of the consented area shown on Plan A, with the exception of the area identified in condition 7. Except to the extent that it is necessary for public safety or to achieve the purpose of this consent, members of the public must not be excluded from the area of preferential occupation.

Interpretation

For the purpose of Conditions 7 – 9:

Exclusive occupation means a restriction of access to an area of the coastal marine area to the person(s) or company that holds consent to occupy the space unless that occupier grants permission for others to have access.

Preferential occupation means the general public is allowed to use an area of the coastal marine area that is subject to a consent to occupy space, except in circumstances where the occupier wants to use the area.

Structures

10. Marine farm structures first installed at the consented site must be located generally as shown on Plan A or within 250 metres of the positions shown on that plan. If any farms are relocated in accordance with condition 85 they must be located generally in the alternative farm locations shown on Plan A or within 500 metres of any initial farm positions shown on Plan A.
11. The sea pens and feed barge fixings and moorings shall be designed to function securely in the site's estimated environmental conditions with a minimum 1-in-50 year return period (peak current speed, significant wave height, and wind speed), and reasonably predictable natural hazards. Unless superseded by a site-specific assessment as part of the Engineering Design Report prepared by a SQEP, supported by additional environmental data and analysis, and

Commented [GU8]: Note to Parties: This condition remains subject to the Panel making a final determination on which entity or entities should be required to certify any particular management plan.

Commented [BH9R8]: Environment Southland has engaged further with both the applicant and the Department of Conservation on this since the issue of these draft conditions.
ES also notes and endorses the panel's dialogue at the 23 June session that the certification process needs to be clear and efficient. Environment Southland would seek to ensure that the certification process:
-avoids creating "a consent within a consent"
-provides for appropriately robust technical inputs prior to being forwarded to the certifier (it is noted 2(iii)D above provides for such inputs)
-is clear, efficient and effective, and avoids the potential pitfalls and difficulties of a dual certification process where one certifier is happy and the other is not. ES does not wish its Manager of Resource Management to be placed in a position of having to "referee"/navigate any such situations.

As per previous dialogue, ES is prepared to be the sole certifier for the management plans if that is where the panel lands on this.

agreed in writing by the Consent Authority prior to the works commencing, the design basis shall not be less than the following baseline parameters identified in the application:

- (a) Peak current speed at 5-7 m depth: 1.57 m/s;
- (b) Significant wave height (Hs): 3.48 m;
- (c) 10-minute mean wind speed at 10 m elevation: 29.5 m/s.

12. At least 30 working days prior to the first installation of marine farming structures at the site, the Consent Holder must provide to the Consent Authority for certification an Engineering Design Report prepared by a SQEP, with an accompanying peer review by a second SQEP, that includes the following information:

- (a) The consented site's estimated extreme environmental conditions associated with a minimum 1-in-50-year return period (peak current speed, significant wave height, and wind speed) and reasonably predictable natural hazards within which the sea pens and feed barges, fixings and moorings have been designed to function securely;
- (b) Design drawings for the mooring systems, anchors and anchor blocks required for securing the sea pens and feed barges at the site;
- (c) An analysis demonstrating that the specified anchors, anchor blocks, moorings (i.e. ropes and chains), connecting hardware (e.g. plates and shackles) and containment systems are designed to function within the design limits specified for the site's estimated extreme environmental conditions; and
- (d) Specifications and design of the sea pens (floating collars and fish enclosures) to be utilised and an analysis demonstrating that they are designed to function within the site's estimated extreme environmental conditions.

Condition 12 notes:

- *For the purposes of condition 12, a SQEP shall be a Chartered Professional Engineer or hold a similar professional title from an appropriate engineering registration authority that is a signatory of the Washington Accord (1989), e.g. European Engineer (EUR ING) or P.Eng (registered professional engineer).*

13. At least 20 working days prior to the first installation of marine farming structures at the site, the Consent Holder must provide to the Consent Authority a Maritime Construction Safety Management Plan (MCSMP) that has been prepared by a SQEP in consultation with the Harbourmaster.

14. The objective of the MCSMP is to mitigate the risks associated with marine farm construction activities and/or farm breakaway events that occur within the marine environment to staff and contractors at the marine farm and to mariners. For the purposes of the MCSMP a breakaway event is where a structure or part thereof becomes free floating (i.e. is no longer attached to the mooring system).

15. The MCSMP must at a minimum include the following information:

- (a) List of parties involved in the construction and their roles and responsibilities
- (b) List of parties who may be impacted by the work and so who need to be communicated with
- (c) The safety priorities
- (d) The construction / installation methodology
- (e) A hazard register
- (f) Controls that will be employed to minimise the identified potential risks
- (g) An Emergency Operating Procedure (EOP) for any farm breakaway events, including requirements for reporting,
- (h) Communication channels, requirements and triggers
- (i) A requirement to provide a written report to the Consent Authority and to the Harbour Master within 20 working days after any breakaway event that describes:

Commented [GU10]: Note to Parties: the 30 day period is to match Advice Note after 2(g)

Commented [GU11]: Note to Parties: The requirement for such a report should be self-evident. The Panel would be comfortable for this obligation to be relocated elsewhere in the conditions if that was the Applicant or Consent Authority's preference.

Commented [BH12R11]: Environment Southland - comfortable with 15(i) . Suggest adding additional text to 15(g) after " reporting " of " as outlined in Condition 15(i) " as suggested by applicant in further discussions , to add some further clarity.

- i. The nature of the breakaway event and the steps taken to recover any lost materials or equipment
 - ii. A description of any material or equipment that was not able to be recovered
 - iii. The cause of the breakaway event, and what steps are proposed to be taken to avoid a repeat occurrence.
- 16. (a) Initial construction and installation of the marine farm and any future construction or installations at the marine farm, including progression to stage 2, shall be undertaken in accordance with the MCSMP;
- (b) In addition, the Emergency Operating Procedure (EOP) shall be implemented for ongoing operation of marine farms at the site.
- 17. The Consent Holder may review the MCSMP at any time prior to and during construction, and may review the EOP at any time during operation of the marine farms. Any reviews of the MCSMP, including the EOP, shall be undertaken by a SQEP in consultation with the Harbourmaster. Any amendment to the MCSMP or the EOP arising from a review shall be provided to the Consent Authority.
- 18. Requirements prior to and on commissioning of marine farming structures and associated infrastructure:
 - (a) Within 10 working days of completing installation of a set of sea pens and any associated barge, the Consent Holder shall provide 'as built' plans of each block of marine farm structures and barge(s) established, including coordinates for all four corners of each block, and identifying any difference between the 'as built' plans and the Engineering Design Report required by condition 12 to the Consent Authority;
 - (b) If marine farms are re-located within the consented site under condition 85, updated 'as built' plans shall be provided, consistent with the requirements of condition 18(a).;
 - (c) 30 days prior to laying of the cardinal marks, the Consent Holder shall confirm with the Harbourmaster the type / model of cardinal buoys, the design of the shapes and the light characteristics and any radio aids intended to be fitted and the coordinates of the intended placement. The Consent holder is to request the Harbourmaster issue Notices to Mariners (NTMs) notifying of the cardinal marks and their characteristics and the position of the new recommended large vessel anchorages;
 - (d) Within 5 working days of laying of the cardinal marks, the Consent Holder shall provide the Harbourmaster and Land Information NZ (LINZ) Hydrographic Office written details of the light characteristics and any radio aids, if fitted, and coordinates of the position of the marks and request for the 'List of Lights' to be updated and for the farm area to be shown on the associated nautical charts. Unless advised otherwise by the Harbourmaster, the communication with LINZ is to include the updated position of the recommended anchorages currently shown on the charts.
 - (e) Within 10 working days of the construction of each farm block, the Consent Holder shall provide the Harbourmaster with confirmation that maritime "special marks" have been fitted in accordance with Figure 1 and that their light characteristics are consistent with the extant Maritime NZ Marine farm guidelines.

Commented [GU13]: Note to Applicant: As the Engineering Design Report requires certification (Condition 12), how would any differences between the 'as built plans' and the EDR be addressed?

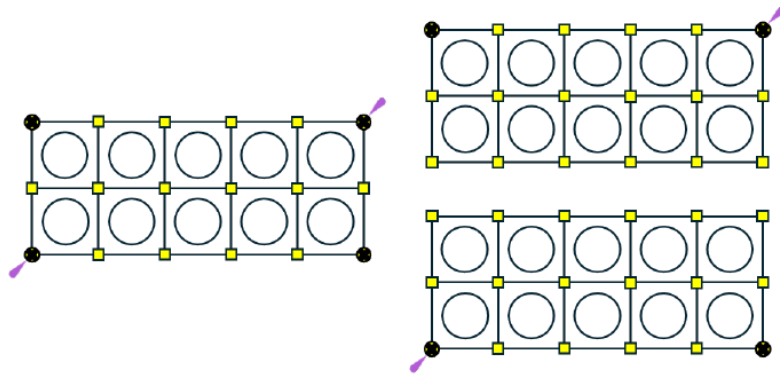


Figure 1: Proposed marine farm lighting (left: stage one, right: stage two) where a yellow square denotes a yellow compensation buoy, a yellow circle with an 'X' denotes a yellow special mark with a yellow cross shape on a short post, and a purple drop denotes a flashing yellow light.

Interpretation

For the purposes of condition 18:

Cardinal mark means an aid to navigation with four quadrant marks (north, east, south and west) that indicates the mariner should pass to the named side of the mark (e.g. pass north of a north mark).

Special mark means an aid to navigation indicating a special area or feature. It is yellow and its topmark is an 'X'.

19. Structures and feed barges installed at any marine farm within the consented site must comply with the following limits and standards:

Table 1: Structures and feed barges limits and standards

Structures/feed barges	Limit
Number of marine farms	Maximum of four
Number of fixed barges	One per marine farm Maximum length of 40 metres and width of 12 metres Maximum air draught (overall height above the waterline) shall not exceed 14 metres (excluding appurtenances including aerials, satellite dishes, cranes and other non-superstructure equipment) under any design load conditions
Blocks of sea pens	Maximum of two blocks per marine farm and eight blocks in total
Sea pens	Maximum of 10 (maximum circumference of 168 metres) circular pens per block, set out in a 5 x 2 pattern, including above water predator nets up to 6 metres high above water and below water nets up to 22 metres depth, with a minimum clearance of 5m to the seabed Maximum of 80 sea pens in total Above water bird nets shall be installed and maintained on all sea pen structures. All above and below water structures, including nets, must be made of, painted or otherwise finished in dark material and recessive colours

Commented [GU14]: Note to Applicant: This might be better described as a large black circle, or else make the circle larger so the cross can be seen on the image

Structures/feed barges	Limit
	All above water predator nets must have a mesh size equal to or less than 60 millimetres half mesh (knot to knot) There must only be a single below water net for each pen, excluding installed false bottoms All below water nets used for sea pens must have a mesh size no larger than 40 millimetres half mesh (knot to knot) All nets shall be constructed from predator resistant materials designed, installed and maintained to resist tearing of the nets by seabirds, marine mammals and sharks
Under water lighting	Maximum of eight 680 watt LED lights per sea pen

20. Except buoys, navigational marks, feed pipes and electrical cables / conduit or otherwise as specifically required by the Harbourmaster or as provided for in the MCSMP, MMMP or SBMP (whose requirements shall prevail over this condition):
- The upper works of each barge above the gunwales shall be painted in a nautical colour scheme (such as white and blue);
 - The hull of each barge shall be a dark colour(s) (such as black);
 - All other surface structures at each Salmon Farm shall:
 - Be painted or finished in dark or recessive colour(s); or
 - Be the natural colour of the materials if these are recessive (such as galvanised carbon steel); and
 - Where reasonably practicable, structures of the same type shall be painted or finished in such a way to allow the whole of each floating part to be discernible and contiguous (such as by using consistent and coherent colours).
21. The Consent Holder must, at all times during the exercise of this consent:
- maintain the marine farm structures, including but not restricted to the associated anchors, lines, buoys, sea pens, nets and feed barges, in good repair, appearance and condition; and
 - ensure the marine farm structures are secured and marked by appropriate navigational aids, so as not to create a navigation safety hazard.
22. Except during maintenance activities (including biosecurity operations) and supervised operational activities that require the lifting of nets or movement of pens:
- All nets (above and below water), ropes and mooring lines shall be kept under tension to minimise the potential for entanglement while in use for fish farming; and
 - If nets are not in use for fish farming they shall either be kept taut and weighted, or be removed from the water and stored so that they will not entangle seabirds, sharks or mammals.
23. If nets, ropes and mooring lines need to be loosened during maintenance activities and supervised operational activities that require the lifting of nets, measures as specified in the MMMP, SMP and SBMP must be implemented to avoid and/or minimise the risk of entanglement.
24. Sea pens shall be designed and operated to minimise the ability of marine mammals, sharks and diving birds to access dead fish from the bottom of the sea pens.
25. Should the Consent Holder decide to discontinue activities and surrender the consent, written notice shall be provided to the Manager no less than three months prior to the date on which the Consent Holder proposes to cease operations at the site.
26. Upon expiry (unless operating under section 165ZH of the RMA or an equivalent provision), surrender or cancellation of the consent:

Commented [GU15]: Note to Applicant: The Panel would prefer that these feed pipes be a recessive colour because a brighter colour would be more visible. Applicant to advise if there is any material operational constraint against these feed pipes being a recessive colour.

- (a) the Consent Holder must, at its own cost, completely remove all ropes, net pens, feed/accommodation barges, special marks associated with the marine farms, and all ancillary structures not embedded in the seabed, along with all equipment and vessels;
 - (b) unless it is not practicable or safe, the Consent Holder must, at its own cost, completely remove any type of anchor, anchor block, chain or rope that is embedded in the seabed;
 - (c) any structures remaining in the seabed shall, if practicable and safe, be cut flush with the seabed.
27. For any structures remaining in the seabed under condition 26(c), the consent holder shall prepare a report by a SQEP providing:
- (a) visual evidence of any structures remaining in the seabed at the site;
 - (b) the NZTM coordinates of the structure(s) which remain in the seabed;
 - (c) the reasons for leaving the anchor, anchor block, chain and/or rope in the seabed.
- The report shall be provided to the Manager within 20 working days of the completion of the report.
28. Upon reviewing the report required by condition 27, in the event that the Consent Authority is not satisfied with the way that all the structures have been decommissioned, the Consent Holder shall undertake any further reasonably practicable and safe actions the Consent Holder requests to fully decommission the site. Once the Consent Holder has indicated that it is satisfied with the decommissioning, the Consent Holder shall remove the cardinal marks that indicate the presence of the site.

Advice note 1: Removal of marine farm and associated structures from the site will be dependent on vessel and contractor availability and weather conditions, but shall occur as soon as practicable. On provision of notice to the Consent Authority under condition 25, the Consent Holder and the Consent Authority will agree an indicative timetable for the work to be completed. The Consent Holder will work to comply with that timetable, subject to the availability of the necessary specialists to complete the work and the effects of factors outside the Consent Holder's control.

Advice note 2: If the Consent Holder fails to undertake or complete the work required by conditions 25, 26, 27 and 28, the Consent Authority may recover all actual and reasonable costs incurred to undertake or complete the work itself from the Consent Holder, in accordance with the Consent Authority's approved Schedule of Fees and Charges at the time of this action being required.

Advice note 3: It shall be the Consent Holder's responsibility to notify all relevant maritime authorities at the conclusion of the decommissioning activities to ensure that any Notice to Mariners are removed and that LINZ is notified so that chart corrections are applied to accurately reflect hazards in the area.

Navigational safety

29. The type, design, functionality, and placement of marine farm lighting and marking shall be in accordance with International Association of Marine Aids to Navigation and Lighthouse Authority Guidelines and shall be installed in accordance with the approval provided by the Harbourmaster under his or her Maritime Delegation from the Director of Maritime New Zealand pursuant to sections 200, 444(2) and 444(4) of the Maritime Transport Act 1994.
30. At least 20 working days prior to the first installation of marine farming structures at the consented site or changes to the location and layout in accordance with condition 85, the Consent Holder must advise the Harbourmaster and must comply with any directions from the Harbourmaster concerning notification of the presence of the marine farming structures to coastal users.

Farm operations

31. The consent holder shall ensure that the marine farms are operated so that
- (a) feed loss from the pens is minimised;
 - (b) Fish feeding behaviour and feed loss are monitored during feeding; and

Commented [GU16]: Note to Parties: The Panel's preference is that this be a condition of consent, rather than an Advice Note.

Commented [BH17R16]: Environment Southland-comfortable with that

(c) Total annual feed discharge across all four farms does not exceed:

- i. During stage 1 (ie all of Farms 1A, 2A, 3A, and 4A), 15,000 tonnes;
- ii. During stage 2 (ie all of Farms 1A and 1B, 2A and 2B, 3A and 3B, and 4A and 4B), 25,000 tonnes; or
- iii. During an alternative stage that is undertaken in accordance with recommendations in a certified Stage Progression Report (SPR), an alternative total annual feed discharge, less than 25,000 tonnes, as provided for in the SPR.

32. Marine farms must be operated as single year class farms and the four marine farms shall be managed on a rotational stocking basis, which means that the farms will be stocked at staggered intervals and that farms will be at different stages across the production cycle.

Interpretation

Single year class means the introduction of a single generation (year-class) of fish.

- 33. Following harvest each marine farm must be fallowed (hold no fish) for a period of no less than three months before introduction of the next year class of smolt. The Consent Holder must keep a record of the date of harvest, the date of restocking, the period of time each marine farm is operating at peak discharge, the dates each farm is fallow and provide a copy to the Consent Authority annually as part of the Annual Report required under condition 76.
- 34. Dead fish shall be removed from the sea pens at least twice a week, and daily where possible, provided that weather conditions, farm maintenance, and health and safety requirements permit, and otherwise at the first available period where weather conditions, farm maintenance and health and safety requirements permit. Dead fish removed from sea pens shall be treated and/or stored in such a manner that is bio-secure and does not attract predators and must be disposed of on mainland New Zealand in a biosecure manner.

Marine mammals

- 35. The Consent Holder must undertake the activity authorised by this resource consent so as to:
 - (a) Avoid adverse effects on indigenous marine mammal taxa that are listed as threatened or at risk in the New Zealand Threat Classification System (NZTCS) lists and marine mammals that are listed by the International Union for Conservation of Nature and Natural Resources as threatened.
 - (b) Avoid and/or minimise the risk of entrapment, injury or entanglement of marine mammals and record and report any incidence of injury or mortality of any marine mammals in accordance with measures in a Marine Mammal Management Plan (MMMP).
 - (c) Ensure that its staff and contractors do not:
 - i. feed any marine mammals or discharge/discard anything within the coastal marine area that would attract marine mammals (unless the discharge is authorised and in accordance with the conditions of this consent) in the vicinity of the marine farms or the consented site nor intentionally interact with marine mammals except where such an interaction is authorised by the conditions of this consent.
 - ii. undertake recreational fishing activities at any of the marine farms or while transiting between the marine farms.
- 36. Prior to the introduction of marine farm structures, including pens, mooring lines and anchors, the Consent Holder must submit a MMMP prepared by a SQEP to the Manager, for certification in accordance with condition 2.
- 37. The objectives of the MMMP are to:
 - (a) define the methodology to be used for monitoring, recording and reporting the level of marine mammal presence around the marine farms at the consented site;
 - (b) achieve compliance with the conditions of this consent;

Commented [GU18]: Note to Applicant: Does this mean that, in Stage 2, Farm 1A and 1B for example will be operated together as one farm for the purpose of this condition?

- (c) minimise and/or mitigate the attraction or avoidance of marine mammals to the marine farms at the consented site;
 - (d) minimise and/or mitigate interactions between marine mammals and marine farm activities and structures; and
 - (e) meet the requirements of the Marine Mammals Protection Regulations 1992 (as may be amended or replaced from time to time) and any permit granted under the Marine Mammals Protection Act 1978.
38. The MMMP must at a minimum include the following information:
- (a) a monitoring programme with procedures for recording and reporting marine mammal presence in the vicinity of farm structures;
 - (b) a framework for mitigation and management actions and techniques to avoid and otherwise minimise harmful marine mammal interactions and incidents with farm structures;
 - (c) measures to record and respond to marine mammal interactions/incidents with farm structures;
 - (d) procedures for the implementation of the MMMP, including the training of staff;
 - (e) timeframes for reporting of incidents (entrapment, live entanglement, injury and mortality) to the Consent Authority, the Department of Conservation and **papatipu rūnanga**;
 - (f) actions to be taken in the event of any injury or mortality;
 - (g) a process for reviewing the effectiveness of the MMMP at achieving the objectives set out in condition 37 and updating the MMMP if required to improve its effectiveness;
 - (h) a management review process that has the flexibility to accommodate future advances in infrastructure and other developments in line with the evolution of the science behind best management practices for management of marine mammal interactions and incidents with marine farms; and
 - (i) contact details for the person who is responsible for the monitoring, reporting and implementation of the MMMP.
39. The MMMP shall be reviewed by a SQEP as follows:
- (a) two years after the installation of the first net pens at the site, and every five years thereafter; and
 - (b) within 30 calendar days of the discovery of any marine mammal mortality or serious injury, or an orca or whale entanglement, associated with or resulting from the Consent Holder's activities.
40. Any amendment to the MMMP arising from the reviews set out in condition 39 shall be submitted to the Manager for certification in accordance with condition 2.
41. In preparing the MMMP under condition 36, and undertaking any reviews under condition 39, the Consent Holder shall seek feedback from:
- (a) the Department of Conservation; and
 - (b) a representative or representatives of **Ngā Rūnanga ki Murihiku**.
- The MMMP is to be provided to the parties listed in condition 41(a) and (b) at least 20 working days prior to being submitted to the Manager, Resource Management, Environment Southland for certification.
- As part of the material submitted for certification, the Consent Holder must provide a document containing:
- feedback from these parties, and
 - an explanation of the Consent Holder's response to the feedback, including what (if any) amendments have been made in response to the feedback and feedback that has not resulted in amendments.

Commented [GU19]: Note to Parties: Should this be "Ngā Rūnanga ki Murihiku" as per condition 41 below?

Commented [BH20R19]: Environment Southland - will leave to applicant to respond.

Commented [GU21]: Note to Parties: Amendments made to be consistent with other management plan certification processes.

Commented [BH22R21]: Environment Southland - comfortable with that

Seabirds

42. The Consent Holder must undertake the activities authorised by this resource consent so as to:
 - (a) avoid adverse effects on:
 - i. NZTCS Threatened and At Risk seabird species (including juveniles from nearby nesting or roosting sites); and
 - ii. Taxa that are listed by the International Union for Conservation of Nature and Natural Resources (IUCN) as threatened;
 - (b) otherwise minimise risks to seabirds from debris and foreign objects (including physical structures), artificial lighting, entanglement or collisions, and disturbance of nesting or roosting sites;
 - (c) minimise and/or mitigate the effects of the attraction of seabirds to the marine farms at the consented site;
 - (d) minimise and/or mitigate interactions between seabirds and marine farm activities and structures;
 - (e) avoid and/or mitigate the risk of entrapment, injury or entanglement of seabirds and record and report any incidence of injury or mortality of any seabirds in accordance with a Seabird Management Plan (SBMP);
 - (f) ensure that its staff and contractors do not intentionally feed seabirds or discharge/discard anything within the coastal marine area that would attract seabirds (unless the discharge is authorised and in accordance with the conditions of this consent) in the vicinity of the marine farms or while transiting between marine farms.
43. Prior to the commencement of any physical construction works on site, including installation of pens, mooring lines and anchors, the Consent Holder must submit a SBMP prepared by a SQEP to the Manager Resource Management, Environment Southland, for certification in accordance with condition 2.
44. The objectives of the SBMP are to:
 - (a) achieve compliance with conditions of this consent;
 - (b) define the methodology to be used for monitoring, recording and reporting seabird interactions around the marine farms;
 - (c) for the first two years of operation of the marine farms at the site, monitor, record and report on seabird behaviours around the marine farms.
45. The SBMP must at a minimum include the following information:
 - (a) A monitoring programme with procedures for recording and reporting seabird interactions and behaviours in the vicinity of marine farms.
 - (b) Mitigation and management actions and techniques to minimise seabird interactions and incidents with farm structures in order to achieve condition 44.
 - (c) Procedures to record, respond to and report seabird interactions/incidents with farm structures, and timeframes for reporting.
 - (d) Procedures for the implementation of the SBMP, including training of staff.
 - (e) A process for reviewing the effectiveness of the SBMP at achieving the objectives set out in condition 44 and updating the SBMP if required to improve its effectiveness
 - (f) A management review process that has the flexibility to accommodate future advances in infrastructure and other developments in line with the evolution of the science behind best management practices for management of seabird interactions and incidents with marine farms.

Commented [GU23]: Note to Applicant: To confirm what "marine farm" means for the purposes of this condition; is it each of Marine Farm 1, 2, 3 and 4? or Should 1A and 1B be separately identified and does each require a 2 year period of monitoring?

- (g) Any updates (where necessary) to be consistent with any approval required under the Wildlife Act 1953.

46. The SBMP shall be subject to review, by a SQEP:

- (a) two years after the completion of installation of the first sea pen at the consented site; and
- (b) every five years thereafter.

47. Any amendment to the SBMP arising from the reviews set out in condition 46 shall be submitted to the Manager for certification in accordance with condition 2.

48. In preparing the SBMP under condition 43, and undertaking any reviews under condition 46, the Consent Holder shall provide the SBMP to and seek feedback from:

- (a) The Department of Conservation; and
- (b) a representative or representatives of Ngā Rūnanga ki Murihiku.

The SBMP is to be provided to the parties listed in condition 48(a) and (b) at least 20 working days prior to being submitted to the Manager, Resource Management, Environment Southland for certification.

As part of the material submitted for certification, the Consent Holder must provide a document containing:

- feedback from these parties, and
- an explanation of the Consent Holder's response to the feedback, including what (if any) amendments have been made in response to the feedback and feedback that has not resulted in amendments.

Sharks

49. The Consent Holder must:

- (a) Avoid adverse effects of activities on indigenous shark taxa listed as threatened or at risk in the NZTCS or threatened in the IUCN red list, excluding shark species managed under the Fisheries Act.
- (b) ensure that its staff and contractors do not feed sharks or undertake recreational fishing activities in the vicinity of the marine farms or while transiting between marine farms; and
- (c) minimise shark interactions with the marine farms.

50. Prior to the introduction of marine farm structures, including pens, mooring lines and anchors, the Consent Holder must submit a Shark Management Plan (SMP) prepared by a SQEP to the Manager for certification in accordance with condition 2.

51. The objectives of the SMP are to:

- (a) achieve compliance with conditions of this consent;
- (b) operate the marine farms so as to avoid, remedy, and mitigate adverse effects on sharks;
- (c) avoid entanglement or entrapment of sharks, having regard to best international practice, ongoing research and allowing for technological improvement in net design, construction and maintenance;
- (d) establish reporting and response procedures in the event of protected, threatened, or at-risk shark entrapment, entanglement or death; and
- (e) establish a monitoring programme to assess the effectiveness of the SMP.

52. The SMP must at a minimum include the following information:

- (a) a monitoring programme with procedures for recording and reporting interactions and incidents (entanglement, entrapment, injury and mortalities) with sharks at the marine farms;
- (b) mitigation and management actions and techniques to minimise shark interactions and incidents with farm structures in order to achieve condition 51;

- (c) measures to respond to shark interactions/incidents with farm structures;
- (d) procedures for the implementation of the SMP, including training of staff;
- (e) timeframes for reporting of incidents (entrapment, live entanglement, injury and mortality) to the Consent Authority, the Department of Conservation (when a protected species is involved) and papatipu rūnanga; and
- (f) a management review process that has the flexibility to accommodate future advances in infrastructure and other developments in line with the evolution of the science behind best management practices for management of shark interactions and incidents with marine farms.
- (g) Any updates (where necessary) to be consistent with any approval required under the Wildlife Act 1953.

53. The SMP shall be subject to review, by a SQEP:

- (a) two years after the completion of the installation of the first sea pen at the site, and no more than every five years thereafter; and
- (b) within 30 calendar days of the discovery of any protected shark species mortality, entanglement serious injury associated with or resulting from the consent holder's activities.

54. Any amendment to the SMP arising from the reviews set out in condition 53 shall be submitted to the Manager, for certification.

55. In preparing the SMP under condition 50, and undertaking any reviews under condition 53, the Consent Holder shall provide the SMP to and seek feedback from:

- (a) The Department of Conservation; and
- (b) a representative or representatives of Ngā Rūnanga ki Murihiku.

The SMP is to be provided to the parties listed in condition 5587(a) and (b) at least 20 working days prior to being submitted to the Manager, Resource Management, Environment Southland for certification.

As part of the material submitted for certification, the Consent Holder must provide a document containing:

- feedback from these parties, and
- an explanation of the Consent Holder's response to the feedback, including what (if any) amendments have been made in response to the feedback and feedback that has not resulted in amendments.

Biosecurity

56. The consent holder shall operate the farms so as to ensure that it avoids to the greatest extent practicable the risk of introducing or spreading:

- (a) Marine pests; and
- (b) Pathogens.

57. Prior to the installation of farm structures at the marine farms, the Consent Holder must submit a Biosecurity Management Plan (BMP) prepared by a SQEP to the Manager for certification in accordance with condition 2.

58. The objective of the BMP is to ensure that the risks of introduction or spread of any marine pest(s) and/or pathogens from the marine farming activities are managed, and reduced to as low a level as practicable.

59. The BMP must at a minimum include the following information:

- (a) Identification of generic pathway and on-farm pathogen biosecurity measures to be implemented, including those associated with vessel movements to and from the marine farm;

Commented [GU24]: Note to Applicant: Should this be "Ngā Rūnanga ki Murihiku" as per comment above and condition 55 below?

- (b) Identification of additional measures for marine pest and biofouling management specific to the risks posed by salmon farming at the consented site;
 - (c) Identification of additional measures for specific pathogen risks posed by salmon farming at the consented site; and
 - (d) An outline of staff training to be implemented at the site for mitigating biosecurity risks.
60. The BMP shall be subject to review by a SQEP:
- (a) Annually;
 - (b) When there is a significant change in operating parameters at the consented site that potentially present an altered biosecurity risk to the marine farms or their environment;
 - (c) If new technologies or methods arise that could significantly improve the biosecurity outcomes for the site; and
 - (d) Where BMP requirements need to be amended to be consistent with any broader regulatory developments (e.g., new regional or national pathway plan rules that are stricter than those currently in the BMP).
61. Any amendment to the BMP arising from the reviews set out in condition 60 shall be submitted to the Manager, Resource Management, Environment Southland for certification.
62. In preparing the BMP under condition 57, and undertaking any reviews under condition 60, the Consent Holder shall seek feedback from:
- (a) Biosecurity New Zealand; and
 - (b) a representative or representatives of Ngā Rūnanga ki Murihiku.

The BMP is to be provided to the parties listed in condition 62(a) and (b) at least 20 working days prior to being submitted to the Manager, Resource Management, Environment Southland for certification.

As part of the material submitted for certification, the Consent Holder must provide a document containing:

- feedback from these parties, and
- an explanation of the Consent Holder's response to the feedback, including what (if any) amendments have been made in response to the feedback and feedback that has not resulted in amendments.

Waste management

- 63.
- (a) Any floating inorganic waste material or debris that is accidentally lost from the marine farms or from the Consent Holder's or contractors' vessels shall be promptly retrieved, stored and then disposed of at an approved waste facility onshore.
 - (b) From the commencement of the installation of marine farm structures and throughout the construction and operation of the marine farm, the Consent Holder must prepare and implement a Waste Management Plan to avoid and minimise the risk of waste materials such as plastics and marine farm debris being discharged into the coastal marine area, including during any transit to and from the site. The Waste Management Plan shall address the risk of waste from construction and operational activities and shall be periodically reviewed to ensure that the waste management measures set out in the plan are effective. A copy of the Waste Management Plan shall be provided to the Consent Authority upon request.
 - (c) The Consent Holder must undertake an annual inspection of the adjacent coastline (from Saddle Point to Bob's Point) for any marine farm related waste and debris, and remove any inorganic waste material or debris for disposal at an authorised facility. The Consent Holder

must keep a record of these inspections and the amount of waste removed, which must be provided to the Consent Authority as part of the Annual Report required under condition 76.

Heritage

64. The Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol, or an accidental discovery protocol modified to reflect the specific project detail, marine environment and marine conditions that the project is occurring within, shall be operated under for any accidental archaeological discoveries that occur during construction works.
65. The Accidental Discovery Protocol required under condition 64 shall be accessible on site at all times during work under this consent.

Advice note:

Under the Heritage New Zealand Pouhere Taonga Act 2014, the permission of Heritage New Zealand Pouhere Taonga must be sought prior to the modification, damage or destruction of any archaeological site, whether the site is unrecorded or has been previously recorded. An archaeological site is described in the Act as a place associated with pre-1900 human activity, which may provide evidence relating to the history of New Zealand and includes shipwrecks. These provisions apply regardless of whether a resource consent or building consent has been granted by Council.

Commented [GU25]: Note to Applicant: Please specify how or what such modifications might include? Because no Archaeological approvals are being required under this FTAA process, the Panel asks whether conditions 64 and 65 are necessary and whether, if any such items are discovered, the Consent Holder would need to apply for an Authority.

Lighting

66. The Consent Holder must, as far as reasonably practicable, minimise non-navigational lighting used at night, by ensuring:
- (a) Curtains, blinds or shutters which are effective at preventing light spill at night are provided for all windows on the barges anchored at the marine farms;
 - (b) The curtains, blinds and shutters installed in accordance with clause (a) above are closed to prevent light spill at night, unless required to be open to facilitate the safety of staff;
 - (c) Only external lighting that is required for navigation, deck and boat handling work, or health and safety purposes is installed at the marine farms;
 - (d) Lights for deck and boat handling work are only to be used while that work is being undertaken;
 - (e) All external work lights fitted to marine farm structures are to be designed, fitted and operated so as to minimise glare, light spill and reflection, except where required for navigation or health and safety purposes;
 - (f) Light intensity of fitted lighting units is as low as practicable and longer wavelength ("warm white") colour is used; and
 - (g) That where vessels operate at the marine farm at night, except for vessel navigation lighting, any external lights are only to be used to:
 - i. Facilitate the safety of staff;
 - ii. Prevent harm to salmon; or
 - iii. Protect each of the marine farm structures, or ancillary infrastructure, from damage or failure.

Boat Traffic

67. The Consent Holder must, as far as reasonably practicable, minimise boat traffic associated with the marine farm operation within 200 metres of the coastline, subject to allowing for the requirements outlined in condition 68 below.
68. Marine farm staff and contractors must only access land on the adjacent coastline via existing landing sites (e.g. those used by tourism and charter operators), unless under specific circumstances (such as search and rescue, clean up, recovery of equipment, pest control, health and safety or attending to an incident involving marine fauna).

Management of seabed and water column effects

69. The Consent Holder shall ensure that the marine farming activities authorised by this consent do not cause:

- (a) adverse effects on the ecosystem function of biogenic habitat (bryozoan-sponge reefs (including associated patchy low-relief bryozoan sponge habitat) and bushy bryozoan thickets) existing up to the date of commencement of the consent;
- (b) the mean dissolved oxygen (DO) concentration 300m in the predominant current direction from the outside edge of the sea pens to fall below 5 mg/L for two successive months. DO concentration shall be measured from a depth profile with data averaged within 1 m depth bins;
- (c) Chlorophyll-a concentrations 800 m in the predominant current direction from the outside edge of the sea pens to be greater than 3.5 µg/L for two successive months;
- (d) total nitrogen concentrations at any monitoring station 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. “Adverse effects on the ecosystem function of biogenic habitat” will be identified using the indicators set out in Table C-2, Appendix C or any amendments to those indicators pursuant to condition 81.

Details of sampling methodologies for determining compliance with (a) – (d) above are contained in the EMMP required by conditions 71 - 73.

Commented [GU26]: Note to Parties: Amendment added from Appendix C.

Commented [BH27R26]: Environment Southland - comfortable

Adaptive Management

70. Marine farming at the site shall be monitored as required by conditions 71 – 73 and managed in accordance with:

- (a) the Environmental Quality Zones (EQZ) and Adaptive Management Triggers (AMT) contained in Appendix C to these conditions; or
- (b) any amendment to the EQZ or AMTs made subject to conditions 80 and 81 and certified in accordance with condition 2; and
- (c) the adaptive management sections of the Environmental Monitoring and Management Plan (EMMP) required by condition 71.

71. Following the commencement of this consent, the Consent Holder must submit an EMMP prepared by a SQEP to the Manager for certification in accordance with condition 2.

72. The objectives of the EMMP are to:

- (a) Detail the monitoring programme that will be implemented to assess the effects of the marine farming activity on the water column and seabed, including pre-development (baseline) monitoring;
- (b) Detail the adaptive management regime that will be implemented under this consent;
- (c) Achieve compliance with condition 69;
- (d) Detail how the EQZ and AMT may be adjusted throughout the term of the consent, subject to conditions 80 and 81.

73. The EMMP must be prepared taking into account relevant recommendations in the *“Recommendations for seabed monitoring at the proposed Hananui salmon farming area”* and the *“Water Column Assessment”* submitted with the application lodged with the Environmental Protection Authority on 26 November 2025 (FTAA-2511-1138) and the draft EMMP submitted to the Environmental Protection Authority on 1 July 2026 and, at a minimum, include the following information:

- (a) The seabed and water column monitoring plan that will be implemented to assess the actual effects of the marine farming activity against the AMT, including:
 - i. Pre-development and operational monitoring;
 - ii. Sampling locations that will provide sufficient pre-development (baseline) information for all potential stages of production of the farms, including potential relocation sites should farm locations be amended in accordance with conditions 10 and 85;
 - iii. Duration and timing of sampling;
 - iv. Sampling design and analytical methods to be used;
 - v. Parameters to be analysed;
 - vi. An assessment of any changes to the seabed and water column monitoring plan as a result of pre-development monitoring and why these are justified; and
 - vii. Reporting requirements to be met in the Annual Report.
- (b) The EQZ and AMT, consistent with condition 70 against which monitoring results shall be compared and which will be used as triggers for adaptive management actions to ensure compliance with condition 69;
- (c) A description of the different marine farm adaptations that may be implemented if the AMT are exceeded;
- (d) A model review framework that identifies the model validation and re-modelling requirements for progression between stages.

Interpretation:

Model validation means the systematic use of monitoring and operational data, including actual feed inputs and measured environmental responses, to compare depositional model predictions against observed conditions and quantitatively and qualitatively assess the accuracy, reliability, and fitness-for-purpose of the depositional model under operational conditions.

- 74. Pre-development monitoring under the EMMP shall occur for the following minimum durations:
 - (a) 24 months for seabed monitoring of biogenic habitats;
 - (b) 12 months for seabed monitoring of sandy habitats;
 - (c) 12 months for water column monitoring.
- 75. Prior to the introduction of fish to the marine farms, the Consent Holder shall provide a Pre-Development Monitoring Report which analyses the results of the pre-development monitoring, and is prepared by a SQEP, to the Consent Authority. The report shall include:
 - (a) A description of the monitoring undertaken;
 - (b) An assessment of the results of the monitoring;
 - (c) Details of the existing environment (environmental parameters, benthic habitats) at the time of monitoring based on the monitoring results;
 - (d) Recommendations for any updates to the monitoring section of the EMMP;
 - (e) Recommendations for any updates to the AMT required to address monitoring recommendations under condition 75(d). *Note: any such updates will be subject to the process outlined in conditions 80 – 81.*
- 76. The consent holder shall produce an Annual Report and shall provide it to the Consent Authority within three months of the anniversary of the commencement of the consent, and then annually from that date, throughout the life of the project. The Annual Report shall include:
 - (a) Details of all monitoring undertaken in accordance with the conditions of this consent;
 - (b) Actual Annual Feed discharged during the year covered by the Annual Report;
 - (c) A record of harvestable number of salmon;

- (d) Comparison of the annual monitoring data with the compliance limits in condition 69, AMT in the EMMP and requirements in conditions 35 (Marine Mammals), 42 (Seabirds), 49 (Sharks) and 56 (Biosecurity);
- (e) A summary of any seabird, marine mammal and/or shark mortality, injury or entanglement events caused by the consent holder's activities;
- (f) A description of actions that have been or will be implemented where monitoring data or incident records indicate non-compliance with consent conditions or a Management Plan or other document certified under this consent; and
- (g) All other information required to be included in the Annual Report under a condition of this consent and Management Plan or other document certified under this consent.

Advice note: The Annual Report shall be prepared recognising that it can be made publicly available by the consent authority, and will be disclosable by the consent authority on receipt of a request under the Local Government Official Information and Meetings Act 1987.

77. The EMMP shall be subject to review, by a SQEP, at least every 5 years from the completion of installation of the first sea pen, and:

- (a) As part of any Stage Progression Report prepared in accordance with condition 82.c; and
- (b) As part of any marine farm relocation undertaken pursuant to condition 85.

78. Any amendment to the EMMP arising from any review shall be submitted to the Manager, for certification in accordance with condition 2.

79. In preparing the EMMP under condition 71, and undertaking any reviews, the consent holder shall seek feedback from a representative or representatives of Ngā Rūnanga ki Murihiku. That feedback, along with an explanation of the consent holder's response to the feedback shall be provided to the Manager, as part of material submitted for certification.

80. Notwithstanding condition 70 and Figure 1 in Appendix C, the size and shape of the EQZs may be reviewed and amended by the consent holder once fish have been introduced to the marine farms, where monitoring results indicate that the size or shape of the EQZ should be amended to better reflect observed seabed conditions, depositional patterns, solids flux, or the residual solids footprint from discharges at the marine farms. If the consent holder seeks to amend the shape and area of the EQZs the following process shall be followed:

- (a) The consent holder shall provide the consent authority with a report prepared by a SQEP, that assesses the results 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;
- (b) 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.

81. Notwithstanding condition 70 and Appendix C, the AMTs may be reviewed and amended by the consent holder:

- (a) During the period of pre-development (baseline) monitoring to address any monitoring recommendations that arise;
- (b) Once fish have been introduced to the marine farms, in order to improve certainty that the AMTs are workable in practice and represent the most appropriate triggers to enable adaptive management measures to be employed before any significant adverse effect is encountered;

Provided that, at all times, the AMTs ensure that condition 69 continues to be met, and that the following process for amending AMTs is followed:

- (c) The consent holder shall provide the consent authority with a report prepared by a SQEP, that assesses the results of monitoring, provides analysis and reasoning for any proposed changes to the AMTs, and proposes specific AMT amendments;

Commented [GU28]: Note to Parties: Parties to consider whether feedback from DOC should also be sought.

Commented [BH29R28]: Environment Southland - relatively neutral on this, while noting that oversight of environmental monitoring of a RMA resource consent of this nature primarily the responsibility of the (regional) consent authority

Commented [GU30]: Note to Parties: The Panel is concerned about the enforceability of this phrase. Please consider how this could be made more specific.

Commented [BH31R30]: Environment Southland - understand the panel's concern. Suggest change to "The consent authority certifies that with any alteration to the zones the seabed effects continue to comply with Rule 69(a)"

- (d) The consent authority certifies that any alteration to the AMTs will not result in the seabed or water column effects being inconsistent with the conditions of this consent.

Staging

- 82. Progression from Stage 1, or any alternative stage, to Stage 2 shall only occur if:
 - (a) A minimum of two full production cycles has been completed at Stage 1 during which:
 - i. At least 12,500 tonnes of feed has been used across all four farms in two 12-month periods;
 - ii. The marine farm has been operated and monitored in accordance with the certified EMMP; or
 - (b) An alternative stage has been completed in accordance with recommendations in the relevant Stage Progression Report (SPR) and has been operated and monitored in accordance with the certified EMMP; and
 - (c) a SPR for the completed stage has been prepared by a SQEP, recommends that progression from Stage 1 or any alternative stage is appropriate, and has been certified by the Manager Resource Management, Environment Southland in accordance with condition 2
- 83. The objective of the SPR is to determine whether the marine farm can progress to Stage 2, or any alternative stage, while continuing to comply with condition 69.
- 84. Each SPR must:
 - (a) include analysis of the results of monitoring undertaken in accordance with EMMP;
 - (b) include a description and analysis of any modelling undertaken as a requirement of the EMMP; and
 - (c) recommend one of the following based on monitoring and modelling:
 - i. Progression to Stage 2;
 - ii. Progression to Stage 2, but incorporating adaptive management measures to address matters identified through monitoring or modelling; or
 - iii. Progression to an alternative stage, with maximum annual feed discharge level, farm location and minimum stage duration to be specified in the SPR;
 - iv. No progression until appropriate remedial actions are taken, in the event that progression is not possible while continuing to comply with condition 69.

Notes:

- *Any alternative maximum feed discharge level specified in accordance with condition 84.c.iii shall not exceed 25,000 tonnes across all four farms.*
- *While a SPR is being prepared and certified, production may continue under the current stage subject to meeting the compliance limits in condition 69 and other conditions of this consent.*

Alternative farm locations

- 85. As part of the adaptive management of the marine farm, the Consent Holder may relocate marine farms to the alternative farm sites shown on Plan A and / or to any location within 500 m of the initial farm site, subject to:
 - (a) Preparation of a Farm Movement Plan (FMP). The purpose of an FMP is to confirm that the relocation will satisfactorily address issues identified through the adaptive management process and that the potential adverse effects of the changed layout relating to seabed deposition and the safety of the marine farm structures will not exceed those considered at the time of granting the consent. An FMP shall be prepared by a SQEP and, at a minimum, shall include the following information:
 - i. A clear description of the trigger or issue that has prompted the relocation proposal;

- ii. A seabed survey of the alternative location to confirm that the outside edge of the sea pens will not be located within 500 m of any biogenic habitat situated outside the Proposal Area boundary shown on Plan A;
- iii. An assessment to confirm that the marine farm structures can be safely and securely installed and maintained at the new location(s);
- iv. Depositional modelling that demonstrates continued compliance with limits in condition 69 and that seabed deposition effects from the relocated farm(s) will remain within the AMT in the EMMP (and Appendix C); and
- (b) Submission of the FMP to the Manager for certification in accordance with condition 2; and
- (c) Providing updated “as-built” plans to the Consent Authority in accordance with condition 18(b) and Condition 2 and notifying the Harbourmaster of the relocated farms and the associated amended exclusive occupation area.

Review

- 86. The consent authority may, in accordance with Sections 128 and 129 of the Resource Management Act, serve notice, during the months of August to October each year or if non-compliance with the conditions of this consent is determined, of its intention to review the conditions of the consent for the purposes of:
 - (a) Dealing with any adverse effect on the environment which may arise from the exercise of this consent and which is appropriate to deal with at a later stage, or
 - (b) Considering any changes to information on the effects of marine farming, particularly information gained from monitoring, or
 - (c) Considering any changes required to the adaptive management approach implemented at the site, or
 - (d) Complying with the requirements of a regional plan, national environmental standard, or national planning standards.

Hananui Community, Environmental, and Health & Education Funds

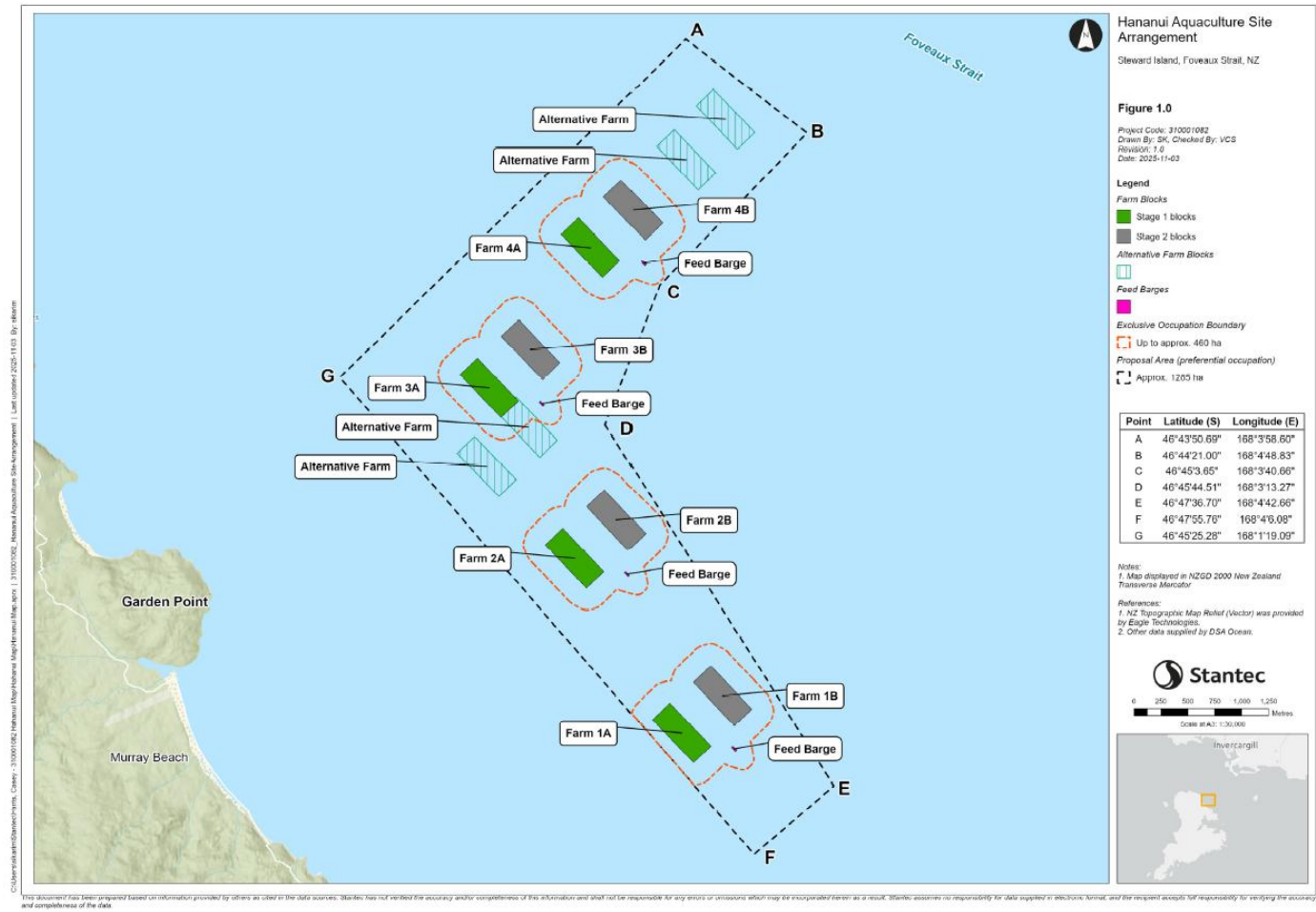
- 87. The Consent Holder shall establish and maintain the following funds to support positive social, cultural, environmental, and community outcomes associated with the activities of this consent:
 - a. Hananui Community Funds – to support community projects that are important to local communities. Two separate sub-funds shall be established for the Rakiura and Bluff communities, to be managed by trustees comprising local community representatives, including Rūnanga representatives residing within each community.
 - b. Hananui Environmental Fund – to support local projects and initiatives that enhance or restore the Murihiku environment. The fund shall be governed by the Consent Holder and include a project-selection panel comprising representatives of local organisations, Rūnanga, and external experts as required.
 - c. Hananui Health and Education Fund – to support health and education outcomes for people within the Murihiku takiwā through initiatives such as treatment, targeted public-health programmes, and scholarships. The fund shall be managed by persons with relevant health-care and education expertise and include Rūnanga representation.
- 88. Prior to the completion of installation of the first sea pen, the Consent Holder shall prepare a Fund Governance and Implementation Plan (FGIP). The Plan shall:
 - a. Describe the governance structure, decision-making framework, and membership composition for each fund;
 - b. Identify transparent criteria for the selection, approval, and monitoring of supported projects;
 - c. Outline annual reporting requirements to the Consent Authority and participating communities; and
 - d. The FGIP shall be provided to the Consent Authority for their records.

89. For its first contribution, the Consent Holder shall make a total annual financial contribution across all four funds listed in condition 87 of a minimum of 10 cents per fish harvested in the preceding year. Annually following the first contribution, the minimum contribution per harvested fish shall be adjusted to reflect changes in the Consumer Price Index, All Groups, as published by Statistic New Zealand.
90. In any financial year where the Consent Holder can demonstrate that the aquaculture operations have experienced a material financial loss or other exceptional circumstances, the Consent Holder may defer all or part of the annual contribution, provided that:
 - a. Written notice and justification are provided to the Consent Authority and fund-governance bodies; and
 - b. Deferred contributions are recorded and made up in subsequent financial years once operations return to profitability.
91. The first contribution to each fund shall be made within 12 months of the first commercial harvest from Stage 1 operations.

Condition Appendix A – Schedule of Documents

[Relevant to condition 1]

Conditions Appendix B – Plan A



Conditions Appendix C – Adaptive Management Triggers and Environmental Quality Zones

C-1 Water Quality

Water quality AMTs are such that the farm operation shall not cause:

- 93. Total Nitrogen concentrations at any monitoring station 800m in the predominant current direction from the outside edge of the sea pens, to exceed 30 µg/L above the highest concentration measured at any reference site in the same month for two successive months;
 - a. Chlorophyll-a concentrations in nearby sheltered embayments, to exceed 3.5 µg/L for two successive months and be attributed to marine farm activities;
- 94. Mean dissolved oxygen (DO) concentrations 300m in the predominant current direction from the outside edge of the sea pens, to fall below 6 mg/L for two successive months. DO concentration shall be measured from a depth profile with data averaged within 1 m depth bins.

Commented [GU32]: Note to Applicant: It is self-evident that any changes to this appendix would need to also be made in the EMMP.

Commented [GU33]: Note to Applicant: Minor amendment to improve flow.

Commented [GU34]: Note to Applicant: Please clarify why condition 69 specifies same day whereas this specifies same month

C-2 Seabed

C-2.1 Sandy seabed

Environmental Quality Zones (EQZs) for Stage 1 and Stage 2 (Figure 1) are:

- Zone 1 (blue line in figure) or the zone of maximum effect (0.5 kg m² yr⁻¹ solids flux contour).
- Zone 2 (orange line in figure) is the primary footprint (7 g·m⁻² residual solids contour).
- Beyond Zone 2 is a spatially defined area extending 3 km in the predominant current flow direction (north-west / south-east) and 2 km cross-current from the Zone 2 boundary. This area encompasses the 0.7 g·m⁻² residual solids footprint and extends beyond it to capture the maximum spatial extent at which farm-related effects may be detectable.

For areas outside of the Beyond Zone 2 area, natural conditions are expected with no effects attributable to farm activities.

AMTs for each zone are set out in Table C-1.

Deleted: Figure 1

Commented [GU35]: Note to Applicant: Should this statement necessary or should it be an advice note?

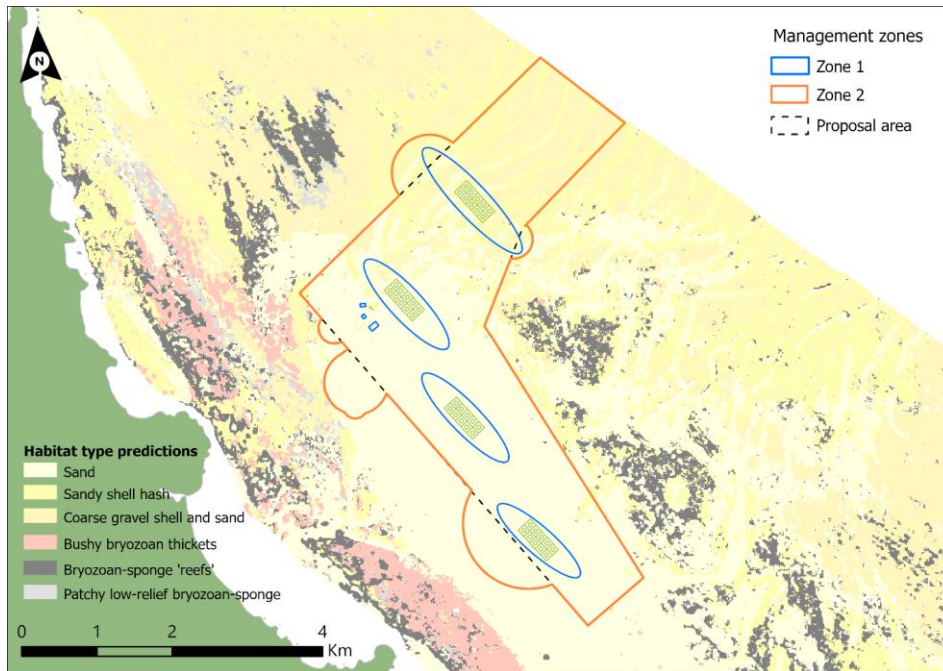


Figure 1A. Consented site with overlaid EQZs based on Stage 1 feed inputs.

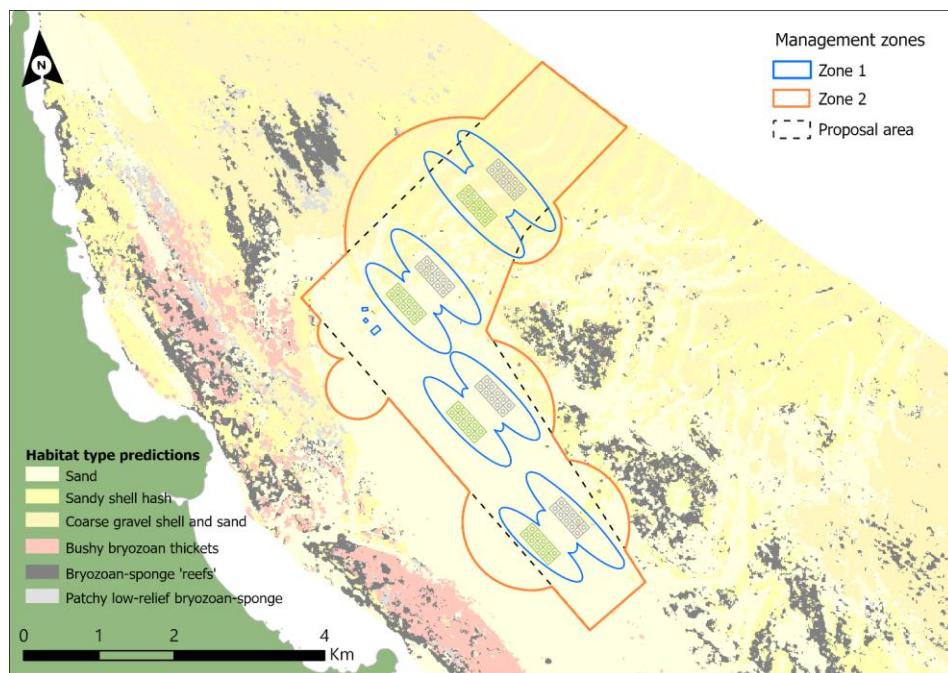


Figure 1B: Consented site with EQZs based on Stage 2 feed inputs

C2-2 Biogenic Habitat AMTs

The farm layout has been designed to minimise deposition of farm-derived material on biogenic habitats. While low-level inputs may occur through resuspension, far-field deposition and accumulation are expected to be minimal and may not be readily detectable. Biogenic habitat monitoring is a precautionary measure, designed to provide early detection of an effect if it arises, through an approach that employs a broad range of monitoring tools.

Given the limited precedent for organic enrichment effects on key taxa and the time required for such effects to become detectable, establishing AMT for biogenic habitats at this stage would be premature. Instead, potential adverse impacts to ecosystem function should be assessed through multiple lines of evidence relative to background conditions and over time, allowing farm-related effects to be distinguished from natural variability and changes in individual indicators to be interpreted in the context of broader ecosystem change, in accordance with Table C-2.

Table C-1. Guiding environmental principles, adaptive management triggers (AMT) and indicators, associated thresholds and response triggers for sandy habitats. Under the tiered monitoring approach, Tier 1 indicators are to be used routinely to assess environmental impact and, when breached, should trigger Tier 2 surveys. S^2_{UV} = total free sulphides (ultraviolet (spectrophotometry) method), b-MBI = bacterial Metabarcoding Biotic Index, DO = dissolved oxygen, AMBI = AZTI's Marine Biotic Index, BQI = Benthic Quality Index, N = total abundance, S = taxa richness, H' = Shannon–Wiener diversity index, d = Margalef's diversity index, J' = Pielou's evenness, ES = Enrichment Stage

Guiding principles – sandy habitats	AMT indicators and associated thresholds	Response trigger
Zone 1		
Peak production: full-suite monitoring		
Farm shall not become very highly enriched (all areas < cf. ES 5)	AMT for identifying very high enrichment (ES 5): - Quantitative indicators (station average): $S^2_{UV} > 800 \mu\text{M}$ or standard method - Redox / pH index > 3.0 - b-MBI > 4.5 - Macrofaunal indicators (AMBI > 5.1, BQI < 2.6, expert judgement that other available indicators [e.g., N, S, H', J' and d] indicate very high enrichment) - Station average near-bottom water column DO $< 90\%$ reference - White, anaerobic bacterial coverage $> 50\%$. - Visible free outgassing from sediments.	If two or more AMT are triggered at any Zone 1 station, or if visible free outgassing is observed, farm management response actions, as outlined in the EMMP, should be initiated.
Interim stations: tiered monitoring		
Farm shall not become very highly enriched (all areas < cf. ES 5)	Tier 1 AMT for identifying very high enrichment (ES 5): - Quantitative indicators (station average): $S^2_{UV} > 800 \mu\text{M}$ or standard method / in tandem for a while - Redox / pH index > 3.0 - Station average near-bottom water column DO $< 90\%$ reference - White, anaerobic bacterial coverage $> 50\%$ - Visible free outgassing from sediments. Tier 2 AMT for identifying very high enrichment (ES 5, archived): - Quantitative indicators (station average):	Tier 2 is triggered when any two or more Tier 1 indicators are triggered at any Zone 1 station or outgassing is observed; archived Tier 2 samples should be processed. If Tier 2 indicators are exceeded, farm management response actions, as outlined in the EMMP, should be initiated.

Guiding principles – sandy habitats	AMT indicators and associated thresholds	Response trigger
	- o b-MBI > 4.5¹ - o Macrofaunal indicators (AMBI > 5.1, BQI < 2.6, expert judgement that other available indicators [e.g., N, S, H', J' and d] indicate very high enrichment).	
Zone 2		
Zone 2 shall not become highly enriched (all areas < cf. ES 4)	Tier 1 AMT for identifying high enrichment (ES 4): • Station average: - o $S^{2-}_{UV} > 500 \mu M^2$ - o b-MBI > 4.	Tier 2 should be triggered when either or both Tier 1 indicators are exceeded at any Zone 2 station.
	Tier 2 AMT for identifying high enrichment (ES 4): Quantitative macrofaunal indicators (station average): - o AMBI > 4.4* - o BQI < 4.0* - o Expert judgement that other available indicators (e.g., N, S, H', J' and d) indicate high enrichment.	Farm management response (see EMMP) should be initiated when Tier 2 indicators are triggered (AMBI, BQI, expert judgement) at any Zone 2 station. <i>If only expert judgement available, indications of high enrichment = farm response action required. If AMBI and BQI can be calculated, then 2/3 indicators triggered = farm management response triggered.</i>
Beyond Zone 2		
Beyond Zone 2 shall not become moderately enriched (all areas < cf. ES 3)	Tier 1 AMT for identifying moderate enrichment (ES 3): • Station average: - o $S^{2-}_{UV} > 250 \mu M$ or, > upper 95% CI value for relevant reference stations - o b-MBI > upper 95% CI value for relevant reference stations.	Tier 2 should be triggered when either or both Tier 1 indicators are exceeded at any Beyond Zone 2 stations.
Minor enrichment permitted but not sufficient to cause ecological degradation or loss of biodiversity	Tier 2 AMT for identifying moderate enrichment (ES 3): Quantitative macrofaunal indicators (station average): - o AMBI > upper 95% CI for relevant reference stations - o BQI < lower 95% CI for relevant reference stations - o Expert judgement that other available indicators (e.g., N, S, H', J' and d) indicate moderate enrichment.	Farm response actions (see EMMP) should be initiated when Tier 2 indicators are triggered (AMBI, BQI, expert judgement) at any Beyond Zone 2 stations. <i>If only expert judgement available, indications of moderate enrichment = farm response action required.</i>

¹ Incorporation of this index at the Hananui proposal area would require validation against infaunal data over at least 2 years before applicability as a Tier 1 AMT indicator.

² Point equivalent to approximately the transition between 'Moderate' and 'Poor' status based on international data published by Fisheries and Oceans, Canada, and Cranford et al. (2020), and as recommended in the Aquaculture Stewardship Council benthic monitoring whitepaper (ASC 2022). Assumes use of the UV spectrophotometry of sediment pore water method.

Guiding principles – sandy habitats	AMT indicators and associated thresholds	Response trigger
		<i>If AMBI and BQI can be calculated then 2/3 indicators triggered = farm management response triggered.</i>

Table C-2. Guiding environmental principles, indicators for identifying adverse effects to ecosystem function and response triggers for biogenic habitats

Guiding principles – biogenic habitats	Indicators for identifying adverse effects to ecosystem function	Response trigger
No adverse effect sufficient to disrupt ecosystem function	Video footage (video and still imagery) analyses • Quantitative: ○ Statistically significant change in the percent cover of key taxa relative to appropriate reference station(s)³ ○ Statistically significant change in community composition (positive or negative) relative to appropriate reference station(s). • Qualitative ○ Presence of any fish-farm derived material ○ Evidence of physical disturbance. Habitat complexity • Statistically significant changes in the total area of habitat extent (m²), structural complexity (rugosity), and / or seafloor composition (proportion of different substrate types) over time. Soft sediment sampling (sentinel stations) Tier 1 AMT for identifying moderate enrichment (ES 3): ○ $S^2_{UV} > 250 \mu M$ or, > upper 95% CI value for relevant reference stations or standard method ○ b-MBI > upper 95% CI value for relevant reference stations. Tier 2 AMT for identifying moderate enrichment (ES 3): Quantitative macrofaunal indicators ○ AMBI > upper 95% CI for relevant reference stations	If a statistically significant change in cover for key taxa or community composition is detected based on the BACI design and in conjunction with farm activities, farm management actions (see EMMP) should be initiated. Evidence of physical disturbance should be evaluated using expert judgement alongside other indicators, such as farm-waste tracers, to determine whether the farm or external forces (e.g. ship anchoring, oyster dredging) are the likely source. If a statistically significant change in these parameters is detected based on the BACI design and in conjunction with farm activities, farm management actions (see EMMP) should be initiated. If either or both Tier 1 indicators are triggered at any sentinel station, expert judgement should be required to assess whether there is evidence of biogenic habitat impact before proceeding to Tier 2.

³ Implies the use of a beyond BACI approach to test for a significant control vs impact interaction term. The same statistical design will be applied for univariate (change in the percentage cover of key taxa, total area of extent, habitat extent, rugosity) and multivariate analyses (change in community structure, seafloor composition).

	○ BQI < lower 95% CI for relevant reference stations ○ Expert judgement that other available indicators (e.g., N, S, H', J' and d) indicate moderate enrichment.	If Tier 2 indicators are triggered (AMBI, BQI, expert judgement) at any sentinel station, farm management response (see EMMP) should be initiated. <i>If only expert judgement available, indications of moderate enrichment = farm management response triggered. If AMBI and BQI can be calculated, then 2/3 indicators triggered = farm management response.</i>
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