

Application for Fast-track Approvals Bill Listed Project



North Western Mussels Limited
Waikato West Coast Mussel Spat Nursery
Critical Industry Infrastructure

May 2024

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Executive Summary

This application is being made by North Western Mussels Limited (NWML) for a groundbreaking mussel spat nursery off the coast of Whāingaroa/Raglan. The application comprises 700 hectares across four sites and is underpinned by ten years of research and a comprehensive suite of independent expert assessments. Although it is not an application to grow market ready mussels, it is critical for the viability of mussel farming in the North Island, and nationally significant for New Zealand's Greenshell mussel industry. It has the potential to provide resilient seed mussels for over 35,500 tonnes of harvested product, sufficient to develop the currently consented farming space in the Hauraki Gulf as well as supply some juveniles to the Bay of Plenty region.

NWML have been carrying out research in the west coast Waikato environment for more than 10 years and the proposed locations are unprecedented for the ability to catch and hold plentiful and resilient spat. The characteristics of the proposed location, being the clear, cool, nutrient rich waters of the Tasman Sea, mean that the spat can build up their food sources and increase resilience, effectively fattening them up, so they have much better survival or 'retention' rate when introduced to farming areas.

The application is consistent with the purpose of the Fast Track Approvals Bill (the Act) as it will provide regionally significant spat/seed nursery infrastructure to the Waikato mussel industry, thereby ensuring its ability to meet its doubling export value potential. This aquaculture project will implement the spat nursery actions of the Government's Aquaculture Strategy and deliver significant benefits to the Waikato region.

The significant regional benefits include the following:

- Mussel spat is identified as a priority in the Government's Aquaculture Strategy including the 'Agreed Plan for Securing Mussel Spat Supply'.
- The proposal will enable regionally significant aquaculture infrastructure that provides economic benefits to the Waikato region.
- The project supports climate change mitigation for the Waikato mussel industry, and mussel farming is known to be a sustainable source of low carbon protein.
- The project is consistent with the policies and objectives of the Waikato Regional Policy Statement, the Waikato Regional Coastal Plan (WRCP) and the proposed Waikato Regional Coastal Plan.

There is a critical need for this application to be fast-tracked as the application is currently a prohibited activity under the WRCP. The current review of the WRCP includes provisions to enable spat nursery applications but this is not anticipated to be operative for at least five years. NWML lodged an application to the Waikato Regional Council (WRC) for a private plan change and concurrent resource consent application in May 2023, but this application is expected to be lengthy and costly. The Waikato mussel industry needs spat now.

The project will enable efficient operation of the fast-track process as the application has been accepted by WRC and is in the late stages of the provision of further information under s92 of the Resource Management Act (RMA). This means that a full suite of assessments of the activity on the environment has been undertaken and the effects are anticipated to be no more than minor.

NWML are conscious that the location is Māui dolphin habitat and have sought expert advice on potential effects on Māui dolphin and other marine mammals in the proposed location. WRC have sought a peer review of the NWML expert advice which concurs with its findings. In particular it is considered that effects can be managed through a staged and monitored development programme carried out in consultation with a marine mammal

expert, as well as with implementation of a comprehensive Marine Wildlife Management Plan (MWMP).

NWML have sought Department of Conservation input into the proposal and are awaiting any recommendations to further refine the activity and/or the MWMP.

The project is not in any customary marine title area, protected customary rights area, or aquaculture settlement area under s12 of the Māori Commercial Aquaculture Claims Settlement Act or identified within an individual lwi settlement. NWML have been engaging with lwi and hapū throughout the evolution of the project and this application includes a summary of engagement to date and an assessment of cultural effects.

The NWML shareholders and clients represent half of the Waikato mussel industry, and the application has support from the Coromandel Marine Farmers' Association, Aquaculture New Zealand and Pare Hauraki Kaimoana. All agree that fast tracking this proposal is the only way to meet the spat needs of the industry at least in the short to medium term.



Overview

This application is being made by North Western Mussels Limited (NWML) for a groundbreaking mussel spat¹ nursery off the coast of Whāingaroa/Raglan. The application comprises 700 hectares across four sites and is underpinned by ten years of research and a comprehensive suite of independent expert assessments. Although it is not an application to grow market ready mussels, it is critical for the viability of mussel farming in the Waikato region, and nationally significant for New Zealand's Greenshell mussel industry. It has the potential to provide resilient seed mussels for over 35,500 tonnes of harvested product.

Submitter Details

NWML is a joint venture company with common mussel industry shareholders of Gulf Mussel Farms, OP Columbia² and the Vela Group³. The activity will be undertaken by Gulf Mussel Farms, who have a long history of marine farming in the Waikato region and operate in accordance with all industry best management practices including the A+ Sustainable Management Framework for Greenshell Mussels⁴. Gulf Mussels undertake the mussel farming operations for Pare Hauraki Kaimoana. Collectively these companies represent around half of the mussel industry in the Hauraki Gulf.

Contact details are as follows:

Applicant name	North Western Mussels Limited
NZBN	9429042087281
Address	1620 Manaia Road, RD1, Coromandel, 3581
Applicant representative	Jake Bartrom
	Director
	Gulf Mussel Farms
Phone	s 9(2)(a)
Email	s 9(2)(a)

The applicant's agent is as follows:

Agent Rebecca Clarkson		
	Principal Advisor	
	Aquaculture Direct Limited	
Phone	s 9(2)(a)	
Email	s 9(2)(a)	

Project Location

The application is for 700 hectares of new mussel spat nursery space, in four discrete blocks, in the coastal marine area (CMA) of the Tasman Sea in the west coast of the Waikato region, at least 3.1 km from the coastline, and generally between Papanui Point in the south and Parikotuku Point in the north.

¹ Spat refers to the juvenile (post-larvae) growth stage of mussels.

² https://www.opcolumbia.co.nz/

³ https://www.velafishing.co.nz/page/about-vela/

⁴ www.aplusaquaculture.nz



Proposed spat nursery sites in the west coast of the Waikato region

The maps and plans are uploaded as a separate attachment 'NWML Maps and Plans' and set out in **Appendix Five.**

Neither the Crown nor any other person owns, or is capable of owning, the CMA, as set out in the Marine and Coastal Area (Takutai Moana) Act 2011. Applications have been made for customary marine title over the area. There are currently no Statutory Acknowledgement Deeds of Recognition over the application area.

Project Details

Brief Summary

Project Name	Waikato West Coast Mussel Spat Nursery – Critical Industry Infrastructure
Brief Summary	This application is for a groundbreaking mussel spat nursery off the coast of
	Whāingaroa/Raglan. The application comprises 700 hectares across four sites and is
	underpinned by ten years of research and a comprehensive suite of independent expert
	assessments. It is critical for the viability of mussel farming in the North Island, and
	nationally significant for New Zealand's Greenshell mussel industry.

1.0 Purpose

The Waikato Regional Coastal Plan (WRCP) acknowledges the significance of marine farming, including mussel farming, as 'an important industry within the Waikato Region, contributing social and economic benefits to the local, regional and national economy'. Waikato Regional Council has recently adopted its Aquaculture Strategy which anticipates a doubling in industry value by 2044.

In addition, the mussel farming industry has a sustainable growth goal that could contribute up to a third of the Government's goal for aquaculture to be a \$3 billion industry by 2035.⁶ To enable this the industry, through its Spat Strategy⁷, is projected to require a 40% increase in spat supply by 2025 and a 70% increase by 2035 - as well as better retain the existing spat supply on the mussel farms.

Spat on-growing and nursery activities are a critical element of the mussel farming industry's operational resilience. It is common practice in the mussel industry to 'hold' the spat that is caught on a spat farm until the optimum conditions have been reached for it to be transferred to the grow out site. Mussel farmers often undertake an intermediate seeding process where they strip the spat from the lines then 'reseed' at the same site, or a site better conditioned for juvenile mussels, prior to the grow out phase. This is called the nursery phase. Depending on a range of conditions it may be beneficial to hold spat up to a maximum of 90 mm (average 50 - 70 mm) in size prior to final seeding on other farms. This optimises resilience and survival rates in transfer to the final growing environment.

The Government recognises the need for new spat nurseries in its 'Agreed Plan for Securing Mussel Spat Supply'⁸ and its investment roadmap to accelerate the aquaculture strategy⁹.

⁵ WRCP 6.1

⁶ https://www.mpi.govt.nz/dmsdocument/15895-The-Governments-Aquaculture-Strategy-to-2025

⁷https://drive.google.com/file/d/1L28eNXLLcdMoPv-ByVBMr85EdEk64RD1/view

⁸ https://www.mpi.govt.nz/dmsdocument/58018-Agreed-plan-for-securing-mussel-spat-supply-

⁹https://www.mpi.govt.nz/dmsdocument/60346-Accelerate-the-Aquaculture-Strategy-Investment-Roadmap-2023-progress-update

However new mussel nurseries are prohibited activities under the WRCP. The plan is being reviewed but the new plan is not expected to be operative for up to ten years.

NWML have invested significant time and resource into progressing a more sustainable source of wild mussel spat. They have monitored spat availability through research permits in the Northland, Auckland and Waikato Regions over the last ten years and have confirmed that the west coast of the Waikato region is unprecedented for the ability to catch and hold plentiful and resilient spat. The characteristics of the proposed location, being the clear, cool, nutrient rich waters of the Tasman Sea, mean that the spat can build up their food sources and increase resilience, effectively fattening them up, so they have much better survival or 'retention' rate when introduced to farming areas.

This proposal offers the mussel farming industry a unique and critical opportunity to access a secure, diverse and resilient spat supply, directly in keeping with the Government's Aquaculture Strategy and the Spat Strategy. Providing for the location as a spat nursery, as well as catch area, will enable the holding of spat in cooler west coast waters over the summer periods so that it can be introduced onto other mussel farms in optimal health and at optimal times for on growing. This will enable year-round productivity and employment.

2.0 Activities

The application is for a new coastal permit for four separate sites off the coast of Whāingaroa/Raglan to catch and seed Greenshell mussel spat (*Perna canaliculus*), and to grow and harvest Greenshell mussel seed (at an average size of 70 mm and a maximum size of 90 mm), including non-exclusive occupation of 700 hectares of the coastal marine area.

Consent is also sought to allow to install and maintain structures (and replace them as required), to seed, grow and harvest marine farming product from the marine farm (including the discharging of coastal seawater and discharge of biodegradable and organic waste matter) and all other activities that are ancillary to the operation of the farm.

Further detail about the proposed activities is included in the separate attachment 'NWML Activities and Effects' and set out in **Appendix One**.

3.0 Staging

Development can commence within three months of the granting of consent, subject to consent conditions. The NWML shareholders have committed funding, the necessary equipment is readily available, and the industry has a critical need for spat.

It is then proposed to implement the project over stages.

A staging development plan (SDP) will be formulated to ensure that appropriate monitoring is in place to inform development of further stages. The SDP includes provision for monitoring of marine mammals and hydrodynamic effects in consultation with relevant experts prior to moving from one stage to the next. Importantly, in recognition that Site D is closest to juvenile Maui dolphin inshore activity during summer, and surf breaks of regional significance, it is proposed to delay that development until after sites A to C.

Further detail about the proposed SDP is included in the separate attachment 'NWML Activities and Effects' and

set out in Appendix One.

4.0 Regulatory Regime

A coastal permit for aquaculture activities is required under the Resource Management Act 1991 (RMA). New spat nurseries are prohibited activities in the entire Waikato region under the operative Waikato Regional Coastal Plan. Under the RMA an application for a concurrent plan change is required.

Once consent is granted, the Ministry for Primary Industries must make an Aquaculture Decision on the coastal permit under the Fisheries Act 1996 (s186E).

Once consent is granted, the Crown has an obligation to provide settlement assets under the Māori Commercial Aquaculture Claims Settlement Act 2004.

5.0 Relevant Authorities

The RMA provides for a coastal permit to be granted by the Waikato Regional Council (WRC).

The Minister for Aquaculture may amend regional coastal plans in relation to aquaculture activities in the coastal marine area under sections 360A to 360C of the RMA.

The Minister for Conservation has a role in providing approval of regional coastal plans under Schedule 1 of the RMA. If WRC grants a concurrent plan change application and issues a coastal permit the commencement of the coastal permit is subject to the Minister of Conservation approving the plan change.

6.0 Existing Applications

NWML applied to the Waikato Regional Council on 24 May 2023 for a plan change to the WRCP which seeks to introduce:

- A new zone (Raglan Mussel Spat Catching and Holding Zone) specifically to enable mussel spat catching and mussel spat holding activities over an area of approximately 700 ha off the west coast of the Waikato Region, near Raglan - mapped and scheduled as an addition to Appendix 3 of the WRCP;
- A new policy in Chapter 6 of the WRCP;
- A new rule in Chapter 16 of the WRCP to provide for mussel spat catching and mussel spat holding
 activities in the new zone as a discretionary activity; and
- Consequential changes to Rules 16.5.1, 16.5.5B, 16.5.5.C and 16.5.6 of the WRCP.

An evaluation in accordance with section 32 of the RMA has been undertaken and concludes that the proposal will more effectively and efficiently achieve the objectives of the WRCP.

Pursuant to section 165ZO of the RMA, NWML also made a concurrent application on 24 May 2023 for a coastal permit for mussel spat catching and mussel spat holding activities in the Raglan Mussel Spat Catching and Holding Zone under the proposed new provisions in the WRCP.

WRC issued a s92 request for further information on 2 February 2024. NWML anticipate providing all additional required information by 30 May 2024.

7.0 Key Milestones

Development can commence within three months of the granting of consent, subject to consent conditions. The

NWML shareholders have committed funding, the necessary equipment is readily available, and the industry has a critical need for spat.

Development is proposed to be in stages in consultation with marine mammal and hydrodynamic experts.

Once each stage is approved, construction is proposed to be undertaken 25 lines at a time. As more is learned about the logistics of operating in the west coast environment, adaptations to the construction process and specifications may be made. Timing is also highly dependent on weather conditions and operational logistics.

An indicative timeline is included in the separate attachment 'NWML Activities and Effects' and set out in **Appendix One**.

Note that this staged development approach provides multiple opportunities to monitor and manage the activity and innovate to optimise the operation.

Consultation

The application is for an area of the coastal marine area which is under the jurisdiction of the Waikato Regional Council. The Waikato Harbourmaster is responsible for maritime safety in the region. Maritime New Zealand provides guidelines to manage navigational safety risks from aquaculture.

There are no Treaty Settlements or statutory acknowledgements currently pertaining to the coastal marine area of the west coast of the Waikato Region:

- The land area north of Raglan is subject to the Waikato-Tainui Raupatu Claims Settlement¹⁰. Waikato-Tainui have remaining settlement claims, but they do not include the application area¹¹.
- The coastal hapū south of Raglan, including hapū associated to Waikato-Tainui and Maniapoto, are currently seeking mandate to progress settlements.
- The Maniapoto Deed of Settlement¹² does not include the application area.

The proposed sites cover the rohe moana of the following Iwi/hapū:

- Ngāti Tāhinga (Pukerewa and Weraroa Marae)
- Ngāti Tāhinga (Te Akau Marae)
- Ngāti Mahanga, Ngā Toko Toru, Tamainupo, Tainui-Tāhinga, Ngāti Taiainupo

The Ngā Hapū o Te Uru o Tainui Customary Fisheries Forum was established in 1999 and has responsibility for managing customary non-commercial fishing in the proposed area.

There are no Mātaitai or Taiāpure in the proposed area.

There are twelve applications for recognition or customary marine title pertaining to the proposed area under the Marine and Coastal Area Act. The project is not in any customary marine title area, protected customary rights area, or aquaculture settlement area under s12 of the Māori Commercial Aquaculture Claims Settlement Act or identified within an individual lwi settlement.

¹⁰ https://waikatotainui.com/about-us/settlements/

¹¹ https://www.govt.nz/assets/Documents/OTS/Waikato-Tainui/Waikato-Tainui-remaining-claims-deed-of-mandate.pdf

¹² https://www.govt.nz/assets/Documents/OTS/Maniapoto/Maniapoto-Deed-of-Settlement-Summary-May-2021.pdf

The proposal sits within Maui dolphin habitat and the Department of Conservation has a role in the Maui Dolphin Threat Management Plan to manage the dolphin population.

The Waikato mussel farming industry has a critical need for a resilient supply of mussel spat and seed. Pare Hauraki Kaimoana are a key stakeholder in this industry.

Consultation detail is uploaded as a separate attachment 'NWML Summary of Consultation' and set out in **Appendix Two**.

Iwi Authorities and Treaty Settlements

There are no Treaty Settlements or statutory acknowledgements currently pertaining to the coastal marine area of the west coast of the Waikato Region:

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Once consent is granted, the Ministry for Primary Industries must make an Aquaculture Decision on the coastal permit under the Fisheries Act 1996 (s186E) which will include an assessment on customary fishing.

Once consent is granted, the Crown has an obligation to provide settlement assets under the Māori Commercial Aquaculture Claims Settlement Act 2004.

An assessment of the cultural effects of the activity is uploaded as a separate attachment 'NWML Cultural Effects Assessment' and set out in **Appendix Three**.

¹³ https://waikatotainui.com/about-us/settlements/

¹⁴ https://www.govt.nz/assets/Documents/OTS/Waikato-Tainui/Waikato-Tainui-remaining-claims-deed-of-mandate.pdf

¹⁵ https://www.govt.nz/assets/Documents/OTS/Maniapoto/Maniapoto-Deed-of-Settlement-Summary-May-2021.pdf

Adverse Effects

The resource consent application includes a full assessment of the effects of the proposal which is supported by a range of independent expert assessments and peer reviews.

The likelihood of effects from mussel spat/nursery activities at the proposed locations has been assessed as either appropriate, no more than minor or trivial. The opportunity for social, economic and ecosystem benefits from this proposal to the local community, the Waikato region and New Zealand would be lost if the sites could not be established. It is of national importance to sustain aquaculture by ensuring diversity and resilience of the Greenshell mussel spat supply.

A summary of the effects is included in the separate attachment 'NWML Activities and Effects' and set out in **Appendix One**.

The combined plan change, and resource consent application including the supporting expert assessments and applicable peer reviews are available **on request**.

National Policy Statements and National Environmental Standards

The New Zealand Coastal Policy Statement (NZCPS)¹⁶ includes directive policies regarding activities within the coastal marine environment. This includes both the land-side area of any new wharf as well as effects within the coastal marine area (CMA) itself.

In a broad sense this means that:

- Activities cannot have a significant adverse effect on natural character (Policy 13b), landscape/features (Policy 15b) or indigenous biodiversity (Policy 11b).
- Activities cannot have an adverse effect on outstanding natural character (Policy 13a), landscapes/ features (Policy 15a) or significant indigenous biodiversity (Policy 11a).

Policy 8 provides for the recognition of the significant existing and potential contribution of aquaculture to the social, economic and cultural wellbeing of people and communities. Regional councils are directed to provide for aquaculture activities in appropriate places. NWML does not consider that the WRCP currently achieves this, so the plan change application sought to amend the WRCP accordingly.

Activities must also take into account the principles of the Treaty of Waitangi and kaitiakitanga, provide for public access to the coast and management risks from coastal hazards.

Mitchell Daysh provided a Proposed Plan Change and Section 32 Evaluation Report as part of the application to WRC. This included analysis of the proposed plan change against the NZCPS which is included in **Appendix Four.**

The National Environmental Standard for Marine Aquaculture¹⁷ only applies to existing aquaculture so is not relevant.

https://www.doc.govt.nz/about-us/science-publications/conservation-publications/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/

 $^{^{17}} https://www.mpi.govt.nz/fishing-aquaculture/aquaculture-fish-and-shellfish-farming/national-environmental-standards-for-marine-aquaculture/$

Eligibility

The proposal will achieve the purpose of the bill by providing aquaculture infrastructure that has both regional and national benefits. The need for new spat nurseries has been expressly identified by the Government as a necessary pillar to enable the industry's potential to contribute to Aotearoa's export led economic recovery. The NWML spat nursery is the most advanced and by far the most productive of any sea based nursery opportunities.

An assessment of eligibility is uploaded as a separate attachment 'NWML Confirmation of Eligibility' and set out in **Appendix Four**.

Climate Change and Natural Hazards

The proposal supports climate change mitigation for the Waikato mussel industry as set out in the 'NWML Confirmation of Eligibility' included in **Appendix Four**. Greenshell mussels are a sustainable, nutritious and low carbon protein food¹⁸¹⁹.

Track Record

Gulf Mussel Farms is a family run mussel farming venture based in the Hauraki Gulf. Allan and Jane Bartrom first set up an experimental farm in 1988 and have been developing their operation ever since. Their son Jake now runs the day to day activities, having grown up around the aquaculture industry, and knows what goes into producing the world's best seafood – and the tremendous opportunity it offers New Zealand to generate export earnings and create green, Kiwi jobs.

Gulf Mussels has four mussel farms and leases and manages several others in the region, bringing economic value into the local community and employing up to 25 local residents. The Bartroms have made a substantial investment into the operation, returning a high proportion of the total value into the local economy. Gulf Mussels operate mussel farms for the Pare Hauraki Fishing Trust, with a long-term contract growing agreement to farm 126 hectares in Group A, and 32 hectares in Group B, in the Firth of Thames.

Gulf Mussel Farms carries out their operation in accordance with environmental best practice including the A+ Sustainable Management Framework for Greenshell Mussels²⁰. Each of the partner companies of NWML have a clean track record with no instances of compliance or enforcement actions taken by any entity with enforcement powers under Acts referred to in the Bill.

¹⁸https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_EncourageCapital_TowardsABlueRevolution_v1 _1. pdf

¹⁹ https://www.aquaculture.org.nz/resources/general

²⁰ www.aplusaquaculture.nz

North Western Mussels Limited – Waikato West Coast Mussel Spat Nursery

Activities and Effects – Appendix One

1.0 Activities

1.1 Activities

The Resource Management Act activities applied for as aquaculture activities are:

Activity	Description
Construction, placement, alteration, removal or demolition of structures used for aquaculture activities (RMA s12(1)(b))	Installation of 11 rows with a total of 451 longlines across four sites, with screw anchors at each end and a series of subsurface longlines including warps, droppers, and floats. Installation to be staged in accordance with a staged development plan, generally comprising 50% development of each row in the first stage with Site D being developed last.
Disturbance of the foreshore and seabed, incidental to the aquaculture activities (RMA s12(1)(c), (e), (g))	Disturbance to the seabed for the purpose of installing screw anchors and any other incidental disturbance commensurate with spat catching/nursery operations.
Deposition of material in, on or under the foreshore or seabed, incidental to the aquaculture activities (RMA s12(1)(d))	Deposition of mussel spat/seed, and mussel spat/seed biological material including shell to the sea floor commensurate with spat catching/nursery activities, including harvesting.
Occupation of the common marine and coastal area by the aquaculture activities (RMA s12(2)(a))	Occupation of 700 hectares of the coastal marine area in 11 rows across 4 sites, with subsurface longlines, spaced at 50 metres apart.
Activities that contravene a rule in the regional coastal plan (RMA s12(3))	Spat nursery activities are prohibited in the west coast Waikato region, however this application is a concurrent Plan Change and Resource Consent application so it is anticipated that a new rule will be created which will allow the activity to be assessed as a discretionary activity.
Discharge of contaminants or water into water, incidental to the aquaculture activities (RMA s15)	Discharge of mussel spat/seed, and mussel spat/seed biological material to the water column commensurate with spat catching/nursery activities, including harvesting.

The total occupied/consented area across the four sites will be as follows:

	Site A	Site B	Site C	Site D	Total
Row 1	60 ha	60 ha	60 ha	60 ha	
Row 2	60 ha	60 ha	60 ha	100 ha	
Row 3	60 ha	60 ha	60 ha		
Total consented area	180 ha	180 ha	180 ha	160 ha	700 ha

1.2 Staging Development Plan

The stages proposed are as follows:

	Site A	Site B	Site C	Site D	Total	
Stage 1	90ha	90ha	90ha	N/A	270ha	
Stage 2	180ha	180ha	180ha	60ha	600ha	
Stage 3	180ha	180ha	180ha	160ha	700ha	

The optimum commercial staging is 25 lines at a time. Construction of the sites will be undertaken by a 4 to 5 person team of specialist contractors and NWML.

The construction process consists of:

- Installing screw anchors:
 - There will be a total of 451 lines, with each line having two screw anchors (one at each end).
 This equates to a total of 82 anchors per row.
 - The anchors are installed with the use of a drill operating from a surface vessel. The anchors will be drilled to approximately 6-12 m depth into the substrate (depending on the specifics of the chosen location). Because the substrate is expected to consist only of sand, minimal resistance and/or disturbance is expected.
- Once the anchors are in place, the backbone and mooring lines and buoys would be attached. Navigation and lighting would then be installed as required.
- Finally, the dropper lines would be hung out to catch spat and/or to seed spat for the juvenile nursery activity.

1.3 Indicative Timeline

An indicative timeline is provided:

Milestone	Timeline
Detailed design	Complete
Procurement	Within 3 months of granting consent
Funding	Already committed
Site works commencement	Within 3 months of granting consent depending on consent conditions
Stage one (183 lines sites A – C)	Developed in groups of 25 lines taking 6 months per group to a total of
	4 years
Completion of stage one	
Stage one monitoring expert consultation	Approximately 6 months dependant on expert timings and findings
Stage two (217 lines sites A – D)	Developed in groups of 25 lines taking 6 months per group to a total of
	4.5 years
Completion of stage two	
Stage two monitoring and expert consultation	Approximately 6 months dependant on expert timings and findings
Stage three (51 lines site D)	Developed in groups of 25 lines taking 6 months per group to a total of
	1 year
Completion of stage three	Within 11 years dependant on expert timings and findings

Note that this staged development approach provides multiple opportunities to monitor and manage the activity

and innovate to optimise the operation.

2.0 Effects

2.1 Summary of Effects

A full assessment of the effects of the activity has been undertaken and is supported by a range of independent expert assessments and peer reviews. A summary is provided here:

Effect	Discussion	Cross Reference
Water Column	There will be negligible water column effects. Typically, little if any effects are detectable beyond the boundaries of the farm and the proposed sites are in a well-flushed environment.	 Section 5.3 of AEE. Baseline Survey, by NIWA. Ecological Assessment, by Coast and Catchment. WRC Peer Review of General Ecological Matters, by Pisces Consulting.
Benthic Habitat	There will be less than minor effects on benthic habitat including reefs or biogenic habitat. The farm rows have been carefully sited over suitable habitat and the proposed area is a highly dispersive environment.	 Section 5.4 of AEE. Baseline Survey, by NIWA. Ecological Assessment, by Coast and Catchment. Additional Baseline Survey, by Coast and Catchment. WRC Peer Review of General Ecological Matters, by Pisces Consulting.
Marine Mammals and Fish	 There will be negligible effects on fish. Potential effects on marine mammals include entanglement, habitat exclusion, trophic effects, marine debris, vessel strike, underwater noise and cumulative effects. There will be no more than minor effects on Māui dolphin. The spatial extent of the proposal is small relative to the range of the Māui dolphin sub-species, and the proposed structures are designed to minimise entanglement risk. The habitat at the proposed sites is not considered valuable for prey. A range of monitoring initiatives and best management practices will be incorporated into the staged development plan (SDP), the operational management plan (OMP) and the marine wildlife management plan (MWMP) to minimise any residual risk. There is an opportunity to utilise the farms to host monitoring devices and carry out research on toxoplasmosis thereby contributing to an increase in understanding of Māui dolphins. There will be negligible to minor effects on other marine 	 Section 5.5 and 5.6 of AEE Marine Mammal Assessment, by Anemone. WRC Peer Review of Marine Mammal Assessment, by SLR. Draft Marine Wildlife Management Plan incorporating recommendations from Anemone and peer reviewed by SLR.

Effect	Discussion	Cross Reference
	management practices will be incorporated into the SDP and the MWMP to minimise any residual risk.	
Seabirds	There will be neutral effects on seabirds. A range of seabirds utilise the area but the potential for entanglement, habitat exclusion, benthic habitat changes, foreign debris, navigational lights disturbance and noise all pose a very low risk to seabirds and some effects may be positive.	 Section 5.7 of AEE. Seabird Assessment, by Wildlands. WRC Peer Review of Seabird Assessment, by Pisces Consulting. Draft Marine Wildlife Management Plan incorporating recommendations from Wildlands.
Biosecurity	There will be no more than minor biosecurity effects. Any residual effects will be mitigated to the extent practical by the applicant operating biosecurity best practices set out in the AQNZ A+ Sustainable Management Framework. A biosecurity management plan (BMP) will be implemented.	 Section 5.8 of AEE. Biosecurity Assessment, by Coast and Catchment. WRC Peer Review of General Ecological Matters, by Pisces Consulting.
Landscape, Natural Character, and Visual Amenity	 Sites A to C are located outside the Very High Coastal Natural Character (VHCNC) area in the Natural Character Study of the Waikato Coastal Environment²¹. The visual and natural character effects will be no more than minor. Site D is located off the coast south west of Mt Karioi and also outside the VHCNC. Site D is within the 5km outstanding natural landscape buffer in the draft Waikato Regional Coastal Plan maps however the plan is subject to submissions and appeals. Furthermore, the scale of the draft landscape overlay in the context of the proposal means that it is not anticipated to be affected in any material sense by the farms in their proposed offshore locations. Due to the distance from shore the greatest level of effect will be experienced from boats rather than from the land and in the context of the seascape the effects will be less than minor. There are limited opportunities for viewing any of the sites in a single outlook from land. The cumulative landscape and visual effects will be less than minor. The natural character of the marine environment has been modified by land-based activities such as run-off, and as the farm is to be sited over soft habitat the effects on the biogenic components of natural character will be no more 	 Section 5.9 of AEE Landscape and Visual Assessment, by WPS Opus. Updated Landscape and Visual Assessment, by Wayfinder (provided to WRC December 2023). WRC Peer Review of Landscape and Visual Assessment, by Graham Mansergh Landscape Architects. Landscape Questions Response, by Wayfinder (provided to WRC February 2024).

^{21 &}lt;a href="https://www.waikatoregion.govt.nz/services/publications/tr201605/">https://www.waikatoregion.govt.nz/services/publications/tr201605/

Effect	Discussion	Cross Reference
	than minor.	
	Overall, the landscape, natural character and visual amenity	
	effects will be no more than minor and appropriate in the	
	context of the location.	
Hydrodynamic	Given the dropper line density and angle to the predominant	Section 5.10 of AEE
effects	current flow, the proposed operations are likely to have	Hydrodynamic Assessment,
	some impacts on wave energy transfers and current velocity	by MetOcean.
	within the nursery.	WRC Peer Review of Hydrodynamic Assessment
	 Further away from the nursery the impacts are expected to be minimal or negligible at the coast. 	Hydrodynamic Assessment, by Tonkin and Taylor.
	Overall, based on the available information, it is likely that	Additional hydrodynamic
	the hydrodynamic impacts of the proposal will be no more	modelling currently being
	than minor.	undertaken by MetOcean
	Further hydrodynamic modelling is being undertaken to	due 30 May 2024.
	ground-truth the expert assessment.	
Navigation	There will be no more than minor navigation effects. The	Section 5.12 of AEE.
safety, security	farm will be installed and marked in a manner that enables	
of structures	safe navigation through and around the farm. Any residual	
and	effects will be mitigated to the extent practical by the	
management of	applicant operating industry best practices set out in the	
debris	AQNZ A+ Sustainable Management Framework and the	
	Operational Management Plan (OMP).	
Fishing	Effects on fishing are not anticipated but will be	• Section 5.13 of AEE.
	appropriately assessed by the Ministry for Primary Industries	
	(MPI). Navigation through and around the farm for fishing	
	vessels will be enabled. Effects on fisheries resources will be	
	no more than minor and, in some respects, positive.	C 1: 544 (AFF
Cultural effects	NWML has sent copies of the draft application to all relevant	Section 5.14 of AEE. Taggets Engagement
	groups and is committed to ongoing engagement and	Tangata Engagement Summany
Recreational	 partnerships. There will be no more than minor recreational effects. The 	Summary.Section 5.15 of AEE.
amenity	proposed sites are away from the coast and not specifically	Section 5.15 of ALL.
amemy	popular with recreationalists. Mussel farms are known to	
	have positive effects for recreational fishing. The farm blocks	
	are sited in a manner that allows for navigation to and along	
	the shore. Public access to the sites will still be enabled.	
Air and noise	There will be no more than minor air and noise effects, and	Section 5.16 of AEE.
	only for people who recreate in the immediate vicinity of the	
	farms. The sites are away from the coast and not specifically	
	popular with recreationalists. Any residual effects will be	
	mitigated to the extent practicable by the applicant	
	operating industry best practices set out in the AQNZ A+	
	Sustainable Management Framework and the Operational	
	Management Plan (OMP).	

Effect	Discussion	Cross Reference
Historic heritage	There will be no more than minor effects on historic heritage.	Section 5.17 of AEE.
Economic and	Effects on fishing are not anticipated but will be	Section 5.2 of AEE.
social effects	appropriately assessed by the Ministry for Primary Industries	
	(MPI). Navigation through and around the farm for fishing	
	vessels will be enabled. Effects on fisheries resources will be	
	no more than minor and, in some respects, positive.	
	Aquaculture plays a key role in the Government's growth	
	agenda. A new spat catching/nursery farm in the cooler	
	waters of the west coast of Waikato will enable the mussel	
	industry to make a greater contribution to achieving the	
	Government's aim of a 3-billion-dollar industry by 2035, as	
	set out in the Government's Aquaculture Strategy.	
	This in turn would support contribution to the range of	
	'wellbeings' envisioned by the Government in its support of	
	aquaculture as a transformational industry.	
	NWML project that the associated production resulting from	
	full operation of the nursery would be in the order of 35,000	
	tonnes per year equating to a value of s 9(2)(a)	
	NZIER project that a 50% increase in production in the	
	Waikato mussel farming area would equate to an additional	
	\$15.8 million to the region's GDP.	
	In any event the economic effects are likely to be significant.	
Food	Mussel farming, is known to contribute positive ecosystem	Section 5.2 of AEE.
provisioning	services, including the provision of a healthy, affordable, low	
and ecosystem	carbon protein source, as well as habitat creation and	
effects	nutrient mitigation.	

2.2 Effects on Māui Dolphin

NWML are conscious that the location is Māui dolphin habitat and have sought expert advice on potential effects on Māui dolphin and other marine mammals in the proposed location. WRC have sought a peer review of the NWML expert advice which concurs with its findings. In particular it is considered that effects can be managed through a staged and monitored development programme carried out in consultation with a marine mammal expert, as well as with implementation of a comprehensive Marine Wildlife Management Plan.

A summary of the potential effects on Māui dolphin and other marine mammals is as follows:

Effect	Maui dolphin	Other marine mammals
Entanglement	Minor as long as weighted spat lines	Minor on dolphins and baleen whales as long as
	used.	weighted spat lines used. Negligible on fur seals.
Habitat exclusion	Minor as 700 hectares in 35.5 km	Negligible.
	range.	
Trophic effects	Minor as 700 hectares in 35.5 km	Negligible.
	range.	

Marine debris	Negligible as long as high quality UV stabilised ropes used, and practices followed.	
Vessel strike	Minor as long as care and slow. Negligible.	
Underwater noise	At most minor.	Negligible.
Cumulative effects	Minor (refined from at least minor). Minor.	

2.3 Overall Assessment

The environmental effects of mussel farming, and by association, spat/nursery activities, have been comprehensively researched and are well known. Effects arise from the visibility of the farms, an impact on navigation and the use of public space, potential effects on the water column due to current attenuation, and potential effects on the seabed due to shell drop and pseudo faeces. In addition, vessels servicing the sites can impact on amenity. Effects are possible on indigenous biodiversity including marine mammals and seabirds, but they will be no more than minor. Mussel farming provides positive economic and social effects as well as ecosystem benefits.

North Western Mussels Limited – Waikato West Coast Mussel Spat Nursery

Summary of Consultation – Appendix Two

1.0 Iwi Consultation

1.1 Introduction

NWML recognise that Iwi/Māori wellbeing is strongly driven by a sense of belonging; connectedness to the land and the sea, the lifeforce (mauri) of place, the ability to express Māoritanga including collection of seafood (kaimoana), and the ability to tell their stories in their own way and in their own language. They do not seek to predetermine cultural effects of the proposal which is why they have sought to engage with mana whenua/tangata whenua from the very early stages of development of the proposal.

NWML do have a view that the application has the potential to provide lwi/Māori with economic, and as a result social, benefits. NWML support the Government's aquaculture strategy in its recognition of 'the importance of partnering with lwi to ensure their values and aspirations, commercially, culturally and as kaitiaki, are provided for. This means going beyond legislative obligations and embracing true partnership. Supporting sustainable industries like aquaculture will be essential to ensuring future generations have the high standards of wellbeing we owe them²²'.

NWML have expressed openness to partnerships which might optimise any settlement assets that may result under the Māori Aquaculture Claims Settlement²³. Their view is that the Ngā lwi i Te Rohe o Te Waiariki programme 'Growing Together towards Smart Māori Aquaculture'²⁴ is a good example of how cultural, economic, social and environmental benefits can be realised through aquaculture.

There are no Treaty Settlements or statutory acknowledgements currently pertaining to the coastal marine area of the west coast of the Waikato Region:

- The land area north of Raglan is subject to the Waikato-Tainui Raupatu Claims Settlement²⁵. Waikato-Tainui have remaining settlement claims, but they do not include the application area²⁶.
- The coastal hapū south of Raglan, including hapū associated to Waikato-Tainui and Maniapoto, are currently seeking mandate to progress settlements.
- The Maniapoto Deed of Settlement²⁷ does not include the application area.

The proposed sites cover the rohe moana of the following Iwi/hapū:

- Ngāti Tāhinga (Pukerewa and Weraroa Marae)
- Ngāti Tāhinga (Te Akau Marae)
- Ngāti Mahanga, Ngā Toko Toru, Tamainupo, Tainui-Tāhinga, Ngāti Taiainupo

²²https://www.mpi.govt.nz/fishing-aquaculture/aquaculture-fish-and-shellfish-farming/aquaculture-strategy-for-new-zealand/

²³https://www.mpi.govt.nz/fishing-aquaculture/fishing-aquaculture-funding-support/maori-commercial-aquaculture-claims-settlement/

²⁴ http://www.smartmaoriaquaculture.nz/

²⁵ https://waikatotainui.com/about-us/settlements/

²⁶https://www.govt.nz/assets/Documents/OTS/Waikato-Tainui/Waikato-Tainui-remaining-claims-deed-of-mandate.pdf

²⁷ https://www.govt.nz/assets/Documents/OTS/Maniapoto/Maniapoto-Deed-of-Settlement-Summary-May-2021.pdf

The Ngā Hapū o Te Uru o Tainui Customary Fisheries Forum was established in 1999 and has responsibility for managing customary non-commercial fishing in the proposed area.

There are no Mātaitai or Taiāpure in the proposed area.

There are twelve applications for recognition or customary marine title pertaining to the proposed area under the Marine and Coastal Area Act. The project is not in any customary marine title area, protected customary rights area, or aquaculture settlement area under s12 of the Māori Commercial Aquaculture Claims Settlement Act or identified within an individual lwi settlement.

The following sets out the engagement initiatives to date and provides confirmation that NWML are committed to ongoing engagement and partnerships with tangata whenua in the area of the proposal.

1.2 2016/17 Engagement

NWML identified in the early stages of the proposal that there was a significant opportunity for partnership with Waikato Tainui. A summary of this opportunity was prepared to serve as a background for any discussions.

A meeting was held in April 2016 with representatives of Tainui Group Holdings (TGH). NWML gave background to the research to date and the potential for the spat catching opportunity. Options for partnerships including optimisation of the 20% aquaculture settlement space were explored. TGH expressed interest in involvement as an economic diversification opportunity expressing more interest in a joint governance and financial partnership rather than operational involvement.

Why a Joint Venture

- In the modern world of delivering mussels from our oceans to the world we need the collaboration of Tangata Whenua, Farmers, Processors and Exporters. We need everybody to bring their resources, knowledge and skills in order to be successful.
- Tangata Whenua are an essential element of a successful aquaculture enterprise off Te Tai o Rehua. Providing access to the water resource, Kaitiakitanga, matauranga maori, and the people.
- A Joint Venture between Tangata Whenua, Gulf Mussel Farms, OP Columbia and Vela Fishing is an aquaculture collaboration that can deliver our highly regarded and sought after seafood from Te Tai o Rehua to the world.
- A Joint Venture that has all the ingredients of success.



NWML Tangata Whenua Joint Venture Proposal

Following the TGH sent through a template joint venture agreement to guide further discussions. A proposal was developed which gave TGH several options depending on preferred proportions of operating interest and lease income. A draft lease agreement was shared to give context to potential and arrangements and income. The proposal included calculations of respective 'water space ownership' components of the venture.

TGH noted that the proposal was of interest to Waikato Tainui and that the marae most 'affected' by the proposal should as a matter of principle, be accorded the most benefit. TGH noted that they were working on arrangements to allow this to occur. TGH asked for more information about the potential financial model and options and indicated that individual marae and hapū would need to be involved in the discussions.

NWML then provided further information about the proposed activity, including the site locations, the background science and high level financial modelling.

In a follow up meeting in November 2016 TGH expressed concerns about the risks and upfront costs and identified that a key requirement would be for NWML to front-foot the application, including covering the costs. After further discussions to May 2017 TGH communicated that the proposal did not meet their investment expectations at that time but they did want to remain involved in discussions and would consult with the Waikato Raupatu River Trust and Nga Hapū o te Uru o Tainui Customary Fisheries Forum.

Through these early phases the following information on the proposal and partnership options had been provided:

- An introductory presentation.
- A business strategy.
- A Waikato Tainui partnership options paper.
- Key terms for a potential joint venture.
- A joint venture proposal.
- Spat catching development and operating cost financial modelling.
- A proposed business structure.
- A proposed lease agreement.

Subsequent personal changes meant that the opportunities for engagement stalled, despite continued invitations from NWML. NWML then turned their focus to developing the application with a view to engaging Waikato Tainui once the proposal was further progressed.

1.3 2018 Engagement

NWML had continued to develop the application then proceeded with a new process of engagement with tangata whenua as well as Marine and Coastal Area Act (MACAA) applicants on the draft application in 2018. Responses were received from Ngāti Whakamarurangi, Ngaati Mahuta ki te Hauaauru and Tainui o Tainui.

A summary of that engagement is included in the resource consent application document.

1.4 2019 Engagement

In the intervening years before the application was revived in its current format NWML in partnership with Pare Hauraki Kaimoana made approaches to Waikato Tainui and Ngāti Maniapoto to understand their interests and values relating to the application area. A productive hui was held with Ngāti Maniapoto but attempts to connect with Waikato Tainui were unsuccessful.

1.5 2022 Engagement

When the application was revived again in 2022 an initial email was sent to a representative of Waikato Tainui on 24 May. Her advice was that the applicant should establish a meaningful relationship with mana whenua

along the west coast area and provided details for a first point of contact.

An email response was subsequently received that the proposal would be raised with Nga Hapū o Te Uru at a monthly hui. Initial feedback raised issues regarding the customary fishing areas and the areas which have been restricted for commercial fishing under the Hector's and Māui Dolphin Threat Management Plan as well as a view that the spat farm at Aotea should be sufficient to provide the industry with its necessary spat.

1.6 2023 Engagement

NWML had continued to develop the application while awaiting any specific responses from Waikato Tainui and on 8 March 2023 emailed a copy of the draft application and an application summary to a group of contacts which had been provided by the Waikato Regional Council. The email was also sent to all MACCA applicants pertaining to the area. Recipients were as follows:

Tangata Whenua Group
Ngā Uri o Tamainupo ki Whaingaroa Trust
Ngā Uri O Māhanga
Ngāti Karewa Ngāti Tahinga Trust
Ngāti Whakamarurangi
Tainui o Tainui
Waikato Tainui
Ngā Hapū me Ngā Marae o te Takutai Moana o Waikato-Tainui

Marae
Mai Uenuku ki te Whenua Marae
Mōtakotako Marae
Poihākena Marae
Pukerewa Marae
Te Akau Marae
Waingaro Marae
Weraroa Marae

MACAA Applicant
CIV-2017-419-080: Iwi of Kāwhia , Aotea and Whāingaroa Harbours
CIV-2017-485-207: Ngāti Apakura
MAC-01-04-001: Kāwhia Tangata, Aotea Whenua, Whaingaroa Moana
MAC-01-04-005: Ngā Tini Hapū o Maniapoto
MAC-01-04-006: Ngāti Apakura
MAC-01-04-012: Te Ruunanga o Ngāati Mahuta ki te Hauaauru
MAC-01-04-014: Ngāa marae o te takutai moana o Waikato-Tainui
CIV-2017-404-575: Ngāti Mahuta ki te Hauāuru
CIV-2017-419-084: Te Whakakitenga o Waikato Inc
CIV-2017-404-526: Ngā Tini Hapū o Maniapoto
MAC-01-04-010: Ngāti Whakamarurangi/Tainui ie Ngāti Koata, Ngāti Motemote, Ngāti Tahinga
MAC-01-04-011: Tainui Hāpu o Tainui Waka

Responses were received from Ngāti Tahinga, Tainui Hapū and Ngāti Whakamarurangi as follows:

1.6.1 Ngāti Tahinga

A representative of Ngāti Tahinga phoned to request bound copies of the application and accompanying expert assessments to be sent to him for distribution to each of the five Ngāti Tahinga Hapū chairs. These were posted on 22 March and no response has been received to date.

1.6.2 Tainui Hapū

The twelve Tainui hapū are described in the 2012 Tainui Oral and Traditional Historical Report²⁸ – Ngāti Koata (ki Whāingaroa), Ngāti Te Ika/Ikaunahi, Ngāti Pūkoro, Ngāti Kahu, Ngāti Te Kore, Ngāti Hounuku, Te Paetoka and Ngāti Te Karu, Ngāti Tira, Ngāti Ruaruhe, Ngāti Tahau, and Ngāti Heke/Haki.

A representative of the Tainui hapū communicated opposition in principle to the application, particularly in relation to their unresolved MACAA applications, concerns about commercial activities in their Rohe Moana, Maūi dolphin and the need for additional spat supplies from the west coast of the Waikato. It was identified that ultimately the decision will be up to the individual west coast marae but that the Nga Hapū o te Uru o Tainui Customary Fisheries Forum had moved a resolution not to support the activity.

In response to a request for further information two bound copies of the application and accompanying expert assessments were sent.

1.6.3 Ngāti Whakamarurangi

A representative of Ngāti Whakamarurangi also communicated opposition, reiterating the view that the Aotea spat farm provides sufficient spat for the industry.

1.7 Post Lodgement Engagement

The finalised application was sent to all Iwi/MACAA contacts at the time of lodging. NWML continue to express a keen willingness to meet with any representatives of hapū and marae in the region and discuss any concerns as well as identify shared values and explore potential partnerships. Offers have been made for hui and field trips as well as the provision of open and transparent information about the application.

1.7.1 Post Lodgement Engagement Summary

Post lodgement engagement is summarised here:

Initial Contact	lwi/hapū Contact	Initial Response	Further Engagement
21/6/23	Waingaro Marae	A representative requested further information and expressed willingness to open up discussions.	A summary of the application and Iwi opportunities on. No response has been received to date but NWML have indicated that engagement is welcome at any time.
21/6/23	Mootakotako Marae	No response.	
21/6/23	Mai Uenuku ki te	No response.	

²⁸ https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_42317979/Wai%20898,%20A099.pdf

	Whenua Marae		
21/6/23	Pukerewa Marae	No response.	
21/6/23	Weraroa Marae	A representative expressed willingness to meet to open up discussions.	Forwarded a summary of the application and Iwi opportunities on 23/6/23. Arranged to meet in Auckland at a time of mutual convenience. Sent a follow up email on 14/7/23 July offering to meet on 20/7/23. No further response.
21/6/23	Poihakena Marae	Applicants attended a hui at Poihakena marae on 2 July. Further details below.	Agreement to host a visit to the Coromandel farms and Manaia marae for Poihakena Marae, and other local marae representatives. Further details below.
5/723	Te Akau Marae	No response.	
7/7/23	Nga Hapū o te Uru o Tainui Customary Fisheries Forum		A representative responded on 2/4/24 that 'Tainui o Tainui and Nga Hapū o Te Uru will be meeting in April to discuss the fast track
7/723	Tainui o Tainui	No response.	consenting bill and activities proposed for Te Tai Hauauru and will make submissions to ensure we retain our mana and rights to decide what activities are appropriate in our rohe moana'.
10/7/23	Waikato Tainui	A representative responded on 28/8/23 requesting a copy of the application.	Forwarded the full application as well as a summary of Iwi opportunities on 1/9/23. E Followed up with an email on 2/4/24 requesting a meeting with Waikato Tainui to discuss the proposal and see if any emerging generations wish to participate in aquaculture. Invitation to host a representation to the Coromandel farms. No response to date.
24/7/23	Tainui Group Holdings	No response.	Resent email on 18/8/23, 23/11/23 21/2/24 and again on 25/3/24. No response to date.
13/9/23	Tahinga Tribal Family Chief	Email from a representative indicating that Tahinga are currently engaged with the Crown on their treaty claims including Tahinga WAI-2270.	
16/10/23	Ngati Maniapoto/ Te Nehenehenui	Email indicating that Maniapoto are interested in learning more about the opportunity.	Responded with update on current consent processing status and commitment to providing updates as the project progresses. Visit to Coromandel mussel farms organised for 31 May.
18/11/23	Moana Rāhui o Aotea	Email expressing concern that they had not been consulted	A link to the full application had been provided by WRC. Applicant emailed

and requesting more	directly	with	а	summary	of	lwi
information on the proposal,	opportur	nities	and	requesti	ng	the
specifically how the initiative	opportur	nity to o	discus	s the projec	t.	
could bring positive impacts to						
the community.						

1.7.2 Engagement at Poihakena Marae

Allan and Jake Bartrom, Harry Mikaere (Pare Hauraki Māori Trust Board) and Stephen Hand (General Manager of Pare Hauraki Kaimoana) attended a hui at Poihakena Marae on Sunday 2 July 2023. 19 Poihakena Marae personal were in attendance.

The purpose of the hui was to provide information to the Iwi about the industry needs and comprehensive research that led to the application as well as an overview of the benefits that Pare Hauraki have received from their involvement in aquaculture since the early 1980s. An offer was made to provide any information and listen to any concerns or expression of cultural values that the Iwi may have.

Topics covered were:

- Early relationships with Hauraki lwi and the benefits that Hauraki lwi now enjoy from growing their aquaculture assets to approximately 40% of the Hauraki industry.
- Climate change implications.
- How can lwi participate.
- Implication and benefits to locals.
- How Iwi can be owners, not just workers.
- Reasoning behind the scale of the proposal.
- Discussion about the Aquaculture Settlement and understanding that Poihakena Marae have concerns that they will not be able to benefit directly from that.
- How NWML handle the challenging conditions out at sea.
- Plans to mitigate effects of breakaway floats and farm lighting.
- Discussion about the Aotea spat catching operation and how it is not sufficient to fulfil the needs of the Hauraki industry.
- Effects on Maui Dolphins and a summary of discussions with DOC about the potential to host research as well as reference to the 149 mussel farms in Hectors dolphin habitat in Banks Peninsula.
- How mussel farming provides a nutritious low carbon protein.
- Whether there was an opportunity for Iwi to achieve ownership of the consent after the first 35 years.
- A summary of the application process and a progress update.
- Discussion about the need for Iwi to express kaitiakitanga.
- Concern for navigation of kayaks and sailing craft for traditional navigation.
- Concern that farms may attract more fishers so there may be more pressure on the local coastguard.

The hui finished with an agreement to arrange a site visit for Poihakena Marae members to the Coromandel aquaculture farms and Manaia marae to further establish relationships. Poihakena offered assistance in coordinating this with other marae and are working towards a date in 2024. NWML have requested a copy of the minutes of the hui but have as yet been unable to obtain these.

2.0 Other Consultation

The application is for an area of the coastal marine area which is under the jurisdiction of the Waikato Regional Council. The Waikato Harbourmaster is responsible for maritime safety in the region. Maritime New Zealand provides guidelines to manage navigational safety risks from aquaculture.

The proposal sits within Maui dolphin habitat and the Department of Conservation has a role in the Maui Dolphin Threat Management Plan to manage the dolphin population.

The Waikato mussel farming industry has a critical need for a resilient supply of mussel spat and seed. Pare Hauraki Kaimoana are a key stakeholder in this industry.

Consultation with these parties is summarised here:

Affected Party	Consultation
Pare Hauraki Kaimoana	 Pare Hauraki Kaimoana, the fully-owned asset holding company of the Hauraki Māori Trust Board support the application noting that: There are significant challenges around securing reliable sources of spat for the seeding of its mussel farms and the need to ensure the resilience and productivity of these farms. More reliable, consistent, high quality sources of spat are needed if Pare Hauraki Kaimoana is to maintain its present production volumes, and greater spat volumes will be needed for Pare Hauraki Kaimoana to further develop its farms and allocated space. In addition, there is a lack of nursery sites in the Waikato/Hauraki region, due partly to the constraint on new marine farming in the current Waikato Regional Coastal Plan, and the industry has few options available in the region for alternative growing locations to enable it to adapt and mitigate adverse environmental conditions and climate change. A sea-based spat catching and nursery site in the cooler waters off the West Coast, as proposed by North Western Mussels Limited would be a strategic asset for the entire Waikato mussel farming industry.
Coromandel Marine Farmers' Association Aquaculture New Zealand	The mussel farming industry has a critical need for a sustainable and resilient supply of mussel spat and seed to ensure it meets its growth potential. The proposal will: • Support the growth of aquaculture for New Zealand • Strengthen the industry's Greenshell mussel spat supply • Build the resilience of the Waikato region
Waikato Regional Harbourmaster Maritime New Zealand	As long as the farm is appropriately marked and lit there are no apparent navigation issues relating to the site.
Department of Conservation	The proposal sits within Maui dolphin habitat and DOC's role in the Maui Dolphin Threat Management Plan is to reduce risk to Maui dolphin to zero. NWML engaged with DOC marine mammal experts prior to making the application and have since provided all relevant information including the expert assessment, the WRC expert peer review, the draft marine wildlife management plan (MWMP) and the WRC expert peer review of the MWMP to DOC. NWML are awaiting any recommendations to further refine the activity and/or the MWMP.

No other parties were identified as potentially affected to the degree that would warrant pre-application consultation, but NWML remain open to engagement with any interested parties as appropriate.

3.0 Changes Made as a Result of Consultation

No changes have been deemed necessary as a result of engagement to date although NWML continue to develop the draft Marine Wildlife Management Plan (MWMP) in conjunction with experts including those from the Department of Conservation. NWML are genuinely committed to ongoing engagement as this application progresses.

North Western Mussels Limited – Waikato West Coast Mussel Spat Nursery

Cultural Effects Assessment – Appendix Three

NWML recognise that Iwi/Māori wellbeing is strongly driven by a sense of belonging; connectedness to the land and the sea, the lifeforce (mauri) of place, the ability to express Māoritanga including collection of seafood (kaimoana), and the ability to tell their stories in their own way and in their own language. Cultural effects have been assessed as far as possible but NWML are open to ongoing engagement.

1.0 Cultural Setting

The coastal land north of Whāingaroa is subject to the Waikato-Tanui Raupatu 1995 settlement²⁹ which was the first historical Treaty of Waitangi grievance settled with the Crown. A key component of their claim was the Waikato River and bylaws now 'allow the tribe to exercise mana whakahaere in managing the use of the fishery in the reivers, lakes and streams within the Waikato Tainui Fisheries Area'. There are remaining unsettled claims including over the west coast harbours.

The Waikato-Tainui Environmental Plan / Tai Tumu, Tai Pari, Tai Ao, identifies the Iwi's key strategic objectives are 'to grow our tribal estate and manage our natural resources.' The overarching purpose of the Plan is 'to provide a map or pathway that will return the Waikato-Tainui rohe to the modern day equivalent of the environmental state that it was in when Kiingi Taawhiao composed his maimai aroha'.

There are five marae in the general vicinity of the application area³⁰. Ngāti Tāhinga are the primary hapū of Pukerewa, Weraroa, Te Ākau and Pohākena marae. Ngāti Tamainupo, Toa Kotara and Te Huaki are the primary hapū of Waingaro marae.

The Ngati Tahinga Environmental Management Plan³¹ 'identifies Tahinga environmental base lines and provides policies and methods to help hapū and whānau to protect those base lines and achiever their environoetal aspirations. The Tahinga EMP is driven by kawa, whakanoa and taikanga. Sustainability is the key foundation from which Tahinga makes decisions regarding the environment'.

2.0 Cultural Associations

NWML understands that it is for Iwi/hapū to describe any cultural or historical associations with the project site and has been undertaking engagement to further understand these associations. The following has been provided to NWML during engagement to date.

2.1 Ngāti Whakamarurangi hapū

'Ngāti Whakamarurangi is a west coast hapū and our rohe begins at Otiu north of Papanui Point and includes the southern side of Karioi to the summit before descending to Te Hutiwai, then south to Te Mata, to Wairēinga Falls where it follows the Pākoka river to Aotea harbour. It then follows the main channel to the mouth of Aotea. It turns north from Pōtahi Point and follows the coastline to Taranaki Point, Haerepō, Papapounamu, Waiau, Paringatai, Matawha, Raukura, Ruapuke, Pākaraka, Papanui Point to Otiu.

²⁹ https://waikatotainui.com/about-us/settlements/

³⁰ https://maorimaps.com/map

³¹ https://www.waikatoregion.govt.nz/assets/WRC/WRC-2019/2386228-Ngati-Tahinga.pdf

The entire rohe of Ngāti Whakamarurangi is culturally significant, and has long been recognised as an outstanding landscape, with high coastal and natural character.

Ngāti Whakamarurangi's CMA stretches from the shoreline to Karewa Island, a distance of some 20 kilometers and runs parallel from Aotea to Otiu. It includes the reef known as Rewatu (mapped as Aotea reef) and we share customary usage and responsibilities with our Ngāti Koata relations to Patuatini (Jackson's reef). This area is within that covered by the application³².

2.2 Te Rūnanga o Ngāti Mahuta ki te Hauāuru

'Te Rūnanga o Ngāti Manuta ki te Hauāuru is the governance body representing the interests of the hapū of Ngāti Hamuta, a hapū of Waikato Tainu. Our marae are Maketu, Arauka and Te Kōraha. We are a coastal hapū with mana whenua and mana moana interests on the Waikato West Coast.

Our rohe moana encompasses the 'Kāwhia Harbour' including Port Tahāroa to the south, Te Puia Springs to the north and Karawea to the north-west. We have exclusively used and occupied this area since 1840 and have established kaitiakitanga over the moana. We continue to exercise this important customary right for the benefit of our hapū.

In terms of the Northern Mussels proposal, we confirm that we do not have customary interests in the area subject to this application³³.'

2.3 Tainui Hapū o Tainui Waka

'Tainui, the applicant group, whakapapa to the original people of the Whaingaroa, Aotea and Kawhia area. Notable ancestors who link whānau and hapū together are: Hoturoa, Rakatāura and Kahukeke, Tāwhao, Pimioatekore and Marutehiakinaa, Kakati, tuirirangi, Koata, Kahfaru, Te Ikaunahi, Hounuku, and others.

Tainui whānau and hapū have continually occupied Te Whānga, Te Kopua and Rakaunui. Te Horea at Te Akau (north of Whaingaroa Harbour) was occupied until 1941 when the Native Land Court gave it to a Pākehā leaving us with a small urupā on that land. Our meeting house Lira te Kakara and papakainga at Te Kopua, were destroyed by the government in the same year to make way for an emergency aerodrome. However, whānau remained on the lands south of the confiscation and are still there today.³⁴

2.4 Ngāti Tahinga

'Tahinga settled in this area for many years and remain to this day. Tahinga are descendants of Hotunui, brother to the captain of the Tainui Waka in the years of the great mitigation to Aotearoa. Tahinga people utilised the environment and the land that they settled on and all its taonga. Tahinga have always had symbiotic relationship as defined in this document.

The land block known as Te Akau was a large tract of country between Wahapū (port Waikato), Te Puaha o Waikato (Waikato River Inlet up to Mercer Te Paina), Whangape Lake, inward to Waihi Lake and across to

³² Heather Thompson communications during 2018 engagement process

³³ Shirley Tuteao communications during 2018 engagement process

https://www.courtsofnz.govt.nz/assets/the-courts/high-court/high-court-lists/applications-marine-coastal-list/civ-2017-419-000083-tainui-hapū-o-tainui-waka/civ-2017-419-83.pdf

Whaingaoa Harbour (Raglan)³⁵.

Ngāti Tahinga hold customary fishing rights pertaining to the area³⁶.

3.0 Cultural Management Plans

NWML have undertaken a preliminary assessment against the following cultural management plans acknowledging that it is for each lwi/hapū to make their own assessment of cultural values.

3.1 Waikato-Tainui Environmental Plan/Tai Tumu, Tai Pari, Tai Ao

The Waikato-Tainui Environmental Plan / Tai Tumu, Tai Pari, Tai Ao, identifies the Iwi's key strategic objectives are 'to grow our tribal estate and manage our natural resources.' The overarching purpose of the Plan is 'to provide a map or pathway that will return the Waikato-Tainui rohe to the modern day equivalent of the environmental state that it was in when Kiingi Taawhiao composed his maimai aroha'. Provisions of particular relevance are outlined below:

Objective	Policy	Assessment
24.3.1 The mauri of marine waters in	24.3.1.1 To ensure that the mauri of	The spat catching/nursery operation
the Waikato-Tainui coastal area is	marine waters in the Waikato-Tainui	will not adversely affect the marine
protected and enhanced and the	coastal area is protected and	biodiversity in or around the
marine biodiversity in the Waikato-	enhanced and that the marine	proposed sites.
Tainui coastal area is restored and	biodiversity in the Waikato-Tainui	
protected	coastal area is restored and	
	protected	
24.3.3 Waikato-Tainui access to	24.3.3.1 To ensure that Waikato-	The proposal will not affect existing
coastal areas for customary	Tainui access to coastal areas for	access to the CMA and the proposed
activities is protected and enhanced	customary activities is protected and	navigational measures will ensure
	enhanced	that the structures are easy to
		identify from the water (such as
		from boats etc).
24.4.3 Activities in the Waikato-	24.3.4.1 To ensure a precautionary	The spat catching/nursery operation
Tainui coast area only occur when	approach to activities in the coast	has a functional need to be located
adverse effects to the environment,	area that may result in adverse	in the CMA, based on the fact that
community, and customary	effects to the environment,	this is where the spat pass through
activities are managed, as	community, and customary	on the current. At the same time, the
determined in consultation with	activities.	adverse effects on the environment
Waikato-Tainui		are less than minor or negligible.

In summary, the proposal is not considered contrary to the Waikato-Tainui Environmental Plan.

3.2 Ngati Tahinga Environmental Management Plan

The Tahinga Environmental Management Plan (TEMP) was developed by the Nga Uri o Tahinga Trust and

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³⁵ Nga Uri o Tahinga Trust (2019). Tahinga Environmental Management Plan https://www.waikatoregion.govt.nz/assets/WRC/WRC-2019/2386228-Ngati-Tahinga.pdf

³⁶ https://gazette.govt.nz/notice/id/2010-go2521

identifies Tahinga environmental baselines and provides policies and methods to help hapū/whānau to protect those base lines and achieve their environmental aspirations.

Under the plan Tahinga play a crucial role in ensuring that whatever activities are undertaken in the rohe, 'the mana of our tūpuna and mauro of the taonga they left us are preserved.' The TEMP identifies a range of issues, objectives, policies and implementation methods and includes, for Tangaroa (marine) that:

- 'Tangaroa is the great provider of kaimoana. For generations Tahinga have looked after many of Tangaroa creatures and the environment they live in. Tahinga people access and use the sea to collect food and medicine to sustain our people.
- Access to the sea and an ability to harvest sea food that is abundant and healthy is central to our customs and traditions. Activities that lead to poor water quality, loss of habitat and a degradation of kai moana are of primary concern to Tahinga.'

It is not considered that the spat catching/nursery operation will have an adverse effect on these values.

3.3 Mōtakotako Marae Hapū Management Plan

The Mōtakotako Marae Hapū Management Plan (MMHMP) was developed to allow Ngāti Whakamarurangi to share information and work cooperatively with one another and with statutory organisations and the community in exercising kaitiakitanga over their rohe.

The MMHMP identifies:

- Key tangata whenua values;
- Key tangata whenua issues;
- The ethic of kaitiakitanga;
- The exercise of kaitiakitanga on the Motakotako Estate; and
- Consultation processes.

The MMHMP largely covers the Mōtakotako Estate which, while not identified on a map, is presumed to cover the area directly in and around the Mōtakotako Marae. As it is, the Mōtakotako Marae is located some distance south of the southern-most proposed spat catching/nursery site. As such, the proposal is not considered to have any direct effects (adverse or otherwise) on the Mōtakotako Estate, or the CMA located directly adjacent to the same.

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Confirmation of Eligibility – Appendix Four

1.0 Overview

The Waikato Regional Council (WRC) has recently adopted the Waikato Regional Aquaculture Strategy towards Waikato being 'world-class in sustainable and innovative aquaculture management with a doubling of our export growth by 2044'. However, the Waikato mussel industry has a critical need for a sustainable supply of resilient mussel spat and seed and the Waikato Regional Coastal Plan (WRCP) currently prohibits new applications, and therefore spat/seed innovation in the region. The industry cannot remain viable unless this initiative progresses at haste.

2.0 Consistency with the Purpose of the Act

A new 700 hectare mussel spat/seed nursery in the productive and cooler waters of the Waikato west coast will provide regionally significant spat/seed nursery infrastructure to the Waikato mussel industry, thereby ensuring its ability to meet its doubling export value potential.

The need for new spat nurseries has been expressly identified by the Government as a necessary pillar to enable the industry's potential to contribute to Aotearoa's export led economic recovery. This aquaculture project will implement the spat nursery actions of the Government's Aquaculture Strategy³⁷³⁸ and deliver significant benefits to the Waikato region. The NWML spat nursery is the most advanced and by far the most productive of any sea based nursery opportunities.

3.0 Requirement for Fast-Track

Mussel farmers need to be able to respond to the environmental conditions of a given season by catching and moving spat between areas, in much the same way as a terrestrial farmer would move their stock to place them in the most favourable environment. As well as catching spat the industry needs to be able to hold spat, on spat 'nurseries' until resilient enough to move to production farms, otherwise the activity of catching wild spat is not feasible. The Waikato industry has no suitable nursery space available.

NWML have been developing this spat nursery proposal for more than ten years but have been hindered because the activity is currently prohibited under the WRCP. A decision was made in 2021 to progress a concurrent private plan change and resource consent application which was lodged with WRC in May 2023. WRC made a s92 further information request in January 2024 and NWML are responding with this further information.

NWML understands that the private plan change and resource application process may take some years to be resolved at hearing and then may be subject to Environment Court appeals. Aquaculture applications of this nature can take more than ten years and cost millions of dollars. The Waikato mussel industry needs spat now. There is a critical need for this project to be fast-tracked.

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³⁷ https://www.mpi.govt.nz/dmsdocument/15895-The-Governments-Aquaculture-Strategy-to-2035

https://www.mpi.govt.nz/dmsdocument/60346-Accelerate-the-Aquaculture-Strategy-Investment-Roadmap-2023-progress-update

4.0 Efficient Operation of the Fast-Track Process

NWML are in the late stages of compiling a response to the WRC s92 request for further information. All necessary information required for WRC to make a notification decision has been provided except for the following:

Requested	Comment	Due Date
Information		
Additional hydrodynamic monitoring	MetOcean found that hydrodynamic effects of the proposal would be no more than minor however the WRC peer reviewer Tonkin and Taylor recommended additional hydrodynamic modelling. This has been contracted from MetOcean.	30 May 2024.
Additional seabird assessment detail.	Wildlands found that the effects on seabirds would be no more than minor and in some ways positive. The WRC peer reviewer Pisces Consulting did not disagree with this assessment but has requested more detail be provided in the expert assessment. This has been contracted from Wildlands.	30 May 2024.
Update of marine mammal aspects of MWMP.	NWML have provided a draft Marine Wildlife Management Plan (MWMP) to WRC and DOC. The WRC marine mammal expert has provided some suggestions for amendment. NWML have provided these to DOC and intend to work with DOC to update the MWMP accordingly.	Depending on DOC's timing.
Expert review of seabird aspects of MWMP.	NWML have provided a draft Marine Wildlife Management Plan (MWMP) to WRC. The WRC peer reviewer Pisces Consulting has recommended this be reviewed by Wildlands to ensure it incorporates all their seabird mitigation recommendations.	30 May 2024.
Expert review of BMP.	NWML have provided a draft Biosecurity Management Plan (BMP) to WRC. The WRC peer reviewer Pisces Consulting has recommended this be reviewed by Coast and Catchment to ensure it incorporates all their biosecurity recommendations.	30 May 2024
Expert review of OMP.	NWML have provided a draft Operational Management Plan (OMP) to WRC. The WRC peer reviewer Pisces Consulting has recommended this be reviewed by Wildlands to ensure it incorporate all their seabird mitigation recommendations.	30 May 2024

All necessary information is expected to be available by 30 June 2024 at the latest. This should enable the efficient operation of the fast-track process.

5.0 Significant Regional Benefits

5.1 Identified as a Priority in a Government and Sector Strategy

The importance of the aquaculture industry was recognised in the Government's 2019 Aquaculture Strategy³⁹. Aquaculture has also been recognised by the Government as a key primary sector to accelerate economic growth for the benefit of New Zealand. In response to the COVID-19 pandemic, the primary sector's Fit for a Better

³⁹ https://www.mpi.govt.nz/dmsdocument/15895-The-Governments-Aquaculture-Strategy-to-2035

World roadmap⁴⁰ emphasises the importance of accelerating aquaculture to stimulate sustainable regional growth, as well as leading the way to a more sustainable future economy.

The 2023 Aquaculture Strategy Implementation Plan⁴¹ sought to deliver support for the industry-led spat strategy. Aligned with the industry strategy the Government also has an 'Agreed Plan for Securing Mussel Spat Supply'⁴². This includes a set of actions towards establishing sea-based nurseries. NWML have already undertaken most of these actions, **it only remains for Government to provide the regulatory pathway.**

Goal	Goal 2 Increase wild spat survival	
Workstream	Workstream 3 Sea-based nurseries	
	The majority of spat deployed to a marine	
	farm doesn't survive to harvest. Sea based	
	nurseries offer an opportunity to on-grow	
	spat in an environment that best provides	
	for their needs before deploying to farms.	
	Increased survivability and retention of	
	spat would mean current wild spat supply	
	can support greater production.	
		Assessment of NWML proposal
Research	Research to understand the characteristics	NWML has ten years of research that prove
actions	of a good sea-based nursery and how these	the proposed locations have the o
	sites increase production.	characteristics.
	Research to test retention of spat on grown	NWML has ten years of research that prove
	in a sea-based nursery.	retention is unprecedented.
Investment	A business model to understand feasibility	NWML has a business model and investment
actions	of new sea-based nurseries for wild and	to commence the operation within three mor
	hatchery spat.	consenting.
	Establishment of new sea-based nurseries	Existing space is not available, the proposed lo
	 if existing space is not suitable. 	is unprecedented for spat supply and retention
Regulatory	Consider regulatory measures to plan for	The activity is currently prohibited. Fast
actions	and consent sea-based nursery sites.	consenting is critical.

5.2 Enabling Regionally Significant Aquaculture Infrastructure that Provides Economic Benefits for Waikato

The Waikato mussel industry was found by NZIER in 2017⁴³ to contribute around 30% of New Zealand's total Greenshell mussel production, an estimated 25,000 tonnes at the time. The report sought to quantify the contribution of aquaculture to the Thames-Coromandel District's economic output, GDP and employment by modelling the likely impact of a 50% increase in productivity in both mussels and oysters as well as new finfish farming activity.

⁴⁰ https://www.mpi.govt.nz/dmsdocument/41031Fit-for-a-Better-World-Accelerating-our-economic-potential

⁴¹ https://www.mpi.govt.nz/dmsdocument/56095-2023-aquaculture-strategy-implementation-plan

⁴² https://www.mpi.govt.nz/dmsdocument/58018-Agreed-plan-for-securing-mussel-spat-supply-

⁴³ Pambudi, D. and Clough, P. (2017). *The economic contribution of marine farming in the Thames-Coromandel District: A Computable General Equilibrium (CGE) analysis.* New Zealand Institute of Economic Research.

The following table shows the 2017 actual figures, the 50% increase and totalled values to enable comparison with the NWML projection of 35,500 tonnes of mussels.

	2017 actual	Added 50% modelled	Total	NWML
Tonnes	24,832	12,416	37,248	35,516
GDP	\$41 million	\$15.8 million	\$55.8 million	\$53.2 million
Export volume ⁴⁴	7,450		11,225	
Export value	\$68.3 million		\$102.5 million ⁴⁵	\$97.7 million
FTEs	300	35	335	320

Note that in 2017 the total Greenshell export value was \$300 million but had increased to \$380 million by 2023 despite declining production. The GDP contribution will likely have increased proportionately.

NWML calculate that the direct employment implications of the proposal will be:

Role	FTE
Four vessels each with four crew	16
Yard/depot	5
Drivers	4
Equipment maintenance	3
Subtotal spat/nursery employment	28

These jobs will be concentrated in the Whāingaroa/Raglan area and are assumed to be in addition to the 320 jobs that a 35,500 tonne increase in Hauraki Gulf mussel production would provide to the region.

The NZIER report also highlighted the following:

- The incomes earned from this production and processing are direct benefits of aquaculture for the district.
- The aquaculture industry also indirectly stimulates other sectors in the district and also outside the district. It brings benefits to the district and national economies, including small local towns.
- 'Iwi are well represented in aquaculture participation in the Hauraki Gulf / Tikapa Moana via private, corporate and trust investments/ownership as well as through direct and indirect employment' and that aquaculture is expected to be a significant revenue driver for Iwi in the future.

By supporting consistency and increases in mussel production the proposal will contribute to an increase in the direct and indirect job opportunities in the Waikato region. These jobs will be associated with the farming and processing activities, and the employment of people in supporting services (e.g. transport and logistics). Aquaculture jobs can be wide and varied and provide many opportunities for career development both at sea and on land.

A study in Southland in 2015⁴⁶ found that:

⁴⁴ Extrapolated from industry data

⁴⁵ Inferred

https://www.mpi.govt.nz/dmsdocument/8211-The-Social-and-Community-Effects-of-Aquaculture-A-case-study-of-Southland-aquaculture

• 'The social effects in Stewart Island and Bluff are remarkable for their positive nature. Despite participants being asked about negative effects experienced, nothing remotely significant was described. Instead, a highly positive and significant social picture has emerged, where the companies and employees have jointly contributed. There is no doubt that the communities of Stewart Island and Bluff are significantly socially richer due to the presence of aquaculture'.

NWML are developing an economic model, but high-level estimates are instalment costs of \$\frac{s}{9}(2)(b)(ii)\$ per line equating to an initial investment (over stages) of \$\frac{s}{9}(2)(b)(ii)\$ plus land-based infrastructure. Running costs are anticipated to be in the order of \$\frac{s}{9}(2)(b)(ii)\$ per year at full production.

In summary, the project is expected to provide spat for **35,500 tonnes of production mussels** which will contribute **\$53.2 million in GDP to the Waikato region and 320 jobs**. This is sufficient resilient seed to enable the New Zealand Greenshell mussel industry to meet its goal of providing up to a third of the \$3 billion goal that the New Zealand Government set for the aquaculture industry by 2035. The spat nursery itself will **employ 28 additional people in the Whāingaroa/Raglan community**. Further GDP will be created from the infrastructure investment of at least **s** 9(2)(b)(ii).

5.3 Supporting Climate Change Mitigation

Aquaculture, like all coastal activities and all farming activities, is particularly susceptible to the effects of climate change and there is recognition that 'adapting to the predicted changes in the short-term while taking mitigation measures in the long-term could be the only way toward sustaining the sector's production⁴⁷. This proposal is an innovative and direct response to the change in farming conditions which have resulted from the warming waters of the Hauraki Gulf.

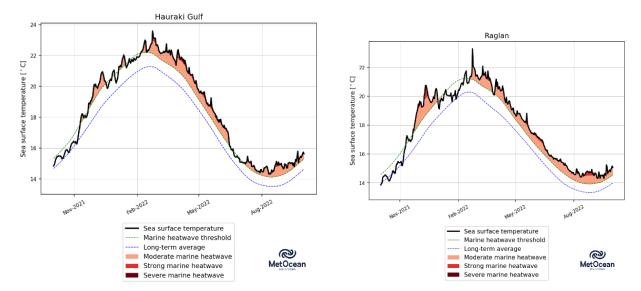
The mussel farms most used by NWML are located in the Hauraki Gulf and Firth of Thames. Over the last few years, the consequence of climate change has been the observed marine heat waves, increasing the sea temperatures. Corresponding during the summer months there is increasing spat and crop mortality. In the 2022 summer these east coast farms experienced an unprecedented 95% spat mortality. The industry cannot tenably continue under these conditions without the ability to adapt. One proposed climate change adaption is to locate spat in nursery areas where the waters are cooler.

Dr Malene Felsing has recently shown the significant difference in water temperatures between the east and west coast of Waikato using data from the Moana Project⁴⁸. 'Below are figures showing that max temperatures in the Hauraki Gulf which reached almost 24 degrees C with many weeks exceeding 22 degrees C. Whereas off Raglan the temperatures had a similar maximum, but the average was consistently below 22 degrees C, even under marine heatwave conditions'.

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⁴⁷ Maulu S, Hasimuna OJ, Haambiya LH, Monde C, Musuka CG, Makorwa TH, Munganga BP, Phiri KJ and Nsekanabo JD (2021) *Climate Change Effects on Aquaculture Production: Sustainability Implications, Mitigation, and Adaptations*. Front. Sustain. Food Syst. 5:609097. doi: 10.3389/fsufs.2021.609097

⁴⁸ https://www.moanaproject.org/



Marine temperature differences between the east and west coast of Waikato

So, overall, it is a lot cooler normally, including last year, on the west coast than on the east coast. Both areas had significant marine heatwaves, but even so the west coast remained considerably cooler.'

NWML's future spat strategy, echoes that of the broader industry in the need to adapt to climate change. A diverse range of spat sources will be required including:

- Beach cast from Te Oneroa a Tohe, as is currently undertaken.
- Hatchery spat.
- Wild caught spat, such as that proposed in this application.

The latter two options, hatcheries and wild spat catching offer opportunities to adapt to climate change. Hatchery technology and development is underway but has its challenges and difficulties as *Perna canaliculus* is a difficult animal to breed in a hatchery compared to species used elsewhere in worldwide hatcheries. Wild spat catching in this application is well developed and has a long-proven history in New Zealand.

All three spat sources have their challenges thus a diverse portfolio of spat sources is required to spread the risk of any one source having a low outcome at any one year. Long term hatcheries offer the advantage of genetic breeding to adapt to climate change, but nursery locations, as in this application will be required to transfer the hatchery spat to the marine environment, something that is lacking in the present farms in the Hauraki Gulf.

The proposed west coast sites will be used for spat catching and spat nursery activities. The first spat catches of the year in autumn will be transferred to east coast farms for the nursery stage. This early transfer will enable the spat to grow some size before summer and thus be more resilient to marine heat waves. Some winter and spring spat will be retained in this west coast nursery's cooler waters, over summer months, to spread the risk from marine heat waves, and the significant losses due to marine heat waves.

This proposal is an important climate adaptation opportunity for NWML, and for the broader mussel farming industry in the Waikato region and will enable the industry to continue to provide positive economic, social, cultural and ecosystem contributions.

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Furthermore, farming seafood is one of the most environmentally efficient ways of producing animal protein.⁴⁹ A recent study by thinkstep-anz found that New Zealand farmed mussels and oysters have among the lowest carbon footprints of all animal proteins and are similar in impact to plant-based proteins like tofu.⁵⁰ This research confirms that New Zealand's aquaculture industry is well paced to be part of our future sustainable, lower emissions economy.

5.4 Consistency with the Waikato Regional Policy Statement and Waikato Regional Coastal Plan

Mitchell Daysh provided a Proposed Plan Change and Section 32 Evaluation Report as part of the application to WRC. This included analysis of the proposed plan change against the Waikato Regional Policy Statement (RPS) and Waikato Regional Coastal Plan (WRCP). This analysis is summarised here:

- The RPS became operative in May 2016 and, as such, is considered to give effect to the overarching direction provided by the NZCPS with respect to the sustainable management of the coastal environment.
- The objectives and policies in the RPS cover a broad range of topics that are potentially relevant to the activities proposed in the Raglan Mussel Spat Catching and Holding Zone, noting that a number of the policies and methods target actions by the WRC and local authorities in the Waikato Region.
- It is considered that the proposed plan change does not impact upon the ability to achieve the management expectations for natural and physical resources in the coastal environment under the RPS. The approach adopted currently in the WRCP in terms of providing for specific aquaculture activities in specific zones, subject to limits and staged development expectations, is respected in this application.
- The WRCP was made operative in 2005. It pre-dates the NZCPS and RPS such that a number of its provisions may not fully reflect the more recent, over-arching policy directives regarding the sustainable management of the coastal environment.
- Overall, it is considered that the proposed plan change is consistent with the objective and policy direction in section 6.1 of the WCRP relating to marine farming.
- It is considered that the proposed plan change can give effect to the management outcomes expected via the WRCP.

WRC notified the proposed reviewed WRCP in August 2023. It is currently subject to a further submission process and the hearing / decision-making process may substantially alter some provisions. As notified it seeks to:

- Acknowledge the benefits of aquaculture, which this proposal will align with given that it will provide
 much needed resilient spat to enable current productivity to stabilise and the industry's growth
 potential to be realised.
- Avoid commercial aquaculture in identified areas that reflect the likes of Policies 11, 13 and 16 of the NZCPS. The proposal is not located within one of these identified areas.
- Require aquaculture activities to avoid significant adverse effects, and avoid, remedy or mitigate other
 adverse effects on a range of values, including navigational safety / recreational use and marine
 mammals, seabirds and shorebirds. These matters have all been considered in the context of the NZCPS
 and RPS, and overall, it is not considered that any significant adverse effects will result from the
 proposal.
- Consider the suitability of the location for the proposed type of aquaculture and species to be farmed,

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⁴⁹https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_EncourageCapital_TowardsABlueRevolution_v1_1.pdf

⁵⁰ https://www.aquaculture.org.nz/resources/general

including consideration of the cumulative effects of other aquaculture in the area. This matter has been considered in the assessment of effects and overall, it is considered that the proposed extension site is a suitable location and appropriate consideration has been given to cumulative effects.

- Adopts a similar approach to the NZCPS with respect to the utilisation of the precautionary approach. As such, the analysis of the proposal against the NZCPS apply equally to these provisions.
- Ensure public recreational use is provided for within aquaculture management areas or marine farms. The proposal does not preclude public recreational use amongst the marine farm lines, as is the norm for marine farms in the Waikato Region.

Overall, it is considered the proposal will be consistent with the relevant policy outcomes currently sought by the proposed WRCP.

5.5 Consistency with the New Zealand Coastal Policy Statement

Mitchell Daysh provided a Proposed Plan Change and Section 32 Evaluation Report as part of the application to WRC. This included analysis of the proposed plan change against the NZCPS which is provided over.

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4.2 **NEW ZEALAND COASTAL POLICY STATEMENT 2010**

The NZCPS came into effect in 2010 and its purpose is to state policies in order to achieve the sustainable management of natural and physical resource in relation to the coastal environment of New Zealand.

Whilst the RPS was been prepared subsequent to the NZCPS coming into effect, consideration has still been given to the overarching directives of the NZCPS for context and recognition that the proposed plan change is required to give effect to the NZCPS.

The NZCPS contains provisions which address the following matters of relevance to the proposed plan change:

- Ecosystem values and coastal water quality (Objective 1 and its associated policies);
- Natural character and landscape values of the coastal environment (Objective 2 and its associated policies);
- Tangata whenua values and interests (Objective 3 and its associated policies);
- Public access and recreational opportunities in the coastal environment (Objective 4 and its associated policies); and
- Enabling social, economic and cultural wellbeing (Objective 6 and its associated policies).

An assessment of the relevant provisions is provided in the sub-sections below.

4.2.1 **Ecosystem Values and Coastal Water Quality**

Objective 1 seeks to safeguard the various elements of the coastal environment and sustain ecosystems. This is intended to be achieve by a range of measures, which seek to:

- Adopt a precautionary approach towards activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse;10
- Avoid adverse effects on significant indigenous biodiversity (e.g. indigenous taxa that is threatened or at risk);11
- Avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects of activities on other habitats, areas and ecosystems in the coastal environment;12

Policy 3 of the NZCPS.

Policy 11(a) of the NZCPS.

Policy 11(b) of the NZCPS.

- Control activities in, or near, the coastal marine area that could have adverse effects on the coastal environment by causing harmful aquatic organisms to be released or otherwise spread;13
- Enhance water quality in areas where it has degraded 14; and
- Have particular regard to the sensitivity of the receiving environment, the capacity of the receiving environment, and the potential for significant adverse effects on ecosystems and habitats when managing discharges to the coastal environment.¹⁵

The WRCP requires a precautionary approach to the development of aquaculture activities - such that aquaculture activities are generally directed to bespoke zones and adverse effects are avoided as far as practicable. The proposed plan change respects the existing policy framework requiring this approach.

With respect to the management of significant indigenous biodiversity, the proposed plan change does not provide for structures outside the Raglan Mussel Spat Catching and Holding Zone as a permitted activity, and any resource consent application for activities within the zone will need to be accompanied by an ecological investigation of the proposed disturbance locations (in accordance with Appendix I of the WRCP). In that regard, any effects on significant indigenous biodiversity associated with structures in the Raglan Mussel Spat Catching and Holding Zone would be considered and assessed through a discretionary resource consent process. In addition, any resource consent application would be considered against a policy context which seeks that adverse effects on significant ecological values be avoided (in line with Policy 11(a) of the NZCPS).

In terms of other habitats and ecosystems in the coastal environment, the NZCPS sets out an effects management framework whereby there is a focus on avoiding significant adverse effects, and avoiding, remedying or mitigating other adverse effects. As with the above, the proposed plan change will enable the potential environmental effects of structures in the Raglan Mussel Spat Catching and Holding Zone on habitats and ecosystems to be assessed and managed through the resource consent process.

Similarly, in response to Policy 12, any biosecurity risks requiring management will be identified and addressed in the context of the discretionary resource consent which would be required prior to establishment of any activities in the Raglan Mussel Spat Catching and Holding Zone.

In respect of the capacity of the receiving environment, the proposal's appropriateness in the context of the NZCPS policies is supported by independent expert assessments of

Policy 12(1) of the NZCPS.

¹⁴ Policy 21 of the NZCPS.

¹⁵ Policy 23 of the NZCPS.

landscape and natural character, ecological effects, effects on marine mammals and effects on seabirds. NWML have also ensured that the sites are located away from known reefs (such as Jackson's Reef south of Whāingaroa/Raglan) and sufficiently distant from shore to minimise any potential environmental effects.

4.2.2 Natural Character and Natural Features / Landscapes

Objective 2 and its related policies seek to:

- Avoid adverse effects on the characteristics and qualities that contribute to the outstanding natural character of areas in the coastal environment;¹⁶
- Avoid adverse effects on the characteristics and qualities that contribute to areas in the coastal environment areas that are outstanding natural features and landscapes;¹⁷ and
- Avoid significant adverse effects, and avoid, remedy, or mitigate other adverse effects of activities, on natural character and other natural features and natural landscapes in the coastal environment.¹⁸

There are no impediments to meeting this objective. The four proposed areas for inclusion in the Raglan Mussel Spat Catching and Holding Zone are located outside of any high natural character areas, whilst anticipated effects from the contemplated activities would be minimal, given the limited "footprint" of surface structures.

A detailed assessment of any effects on natural character or landscapes should be undertaken at the resource consent stage as part of the proposed rule framework, and in this instance are included in the concurrent resource consent application by NWML.

4.2.3 Tangata Whenua Values and Interests

The objectives and policies of the NZCPS direct that the principles of the Treaty of Waitangi be taken into account and that the role of tangata whenua as kaitiaki of the coastal environment be recognised. Policy 2 further elaborates on this by recognising that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, and that opportunities should be provided for tangata whenua to exercise kaitiakitanga over these waters.

NWML has sought to engage with local iwi in preparation of this plan change request and concurrent resource consent application. The engagement undertaken to date is summarised in more detail in the concurrent resource consent application, with further

Proposed Plan Change and Section 32 Evaluation Report – North Western Mussels Limited

¹⁶ Policy 13(1)(a) of the NZCPS.

¹⁷ Policy 15(a) of the NZCPS.

Policies 13(1)(b) and 15(b) of the NZCPS.

engagement expected once the plan change request is lodged. The relevant iwi environmental management plans are also assessed in this report.

There are no specifically identified sites of cultural or spiritual significance in the vicinity of the proposed zone, but NWML are committed to ongoing engagement with iwi as appropriate to further understand the enduring cultural relationships iwi may have in this location.

4.2.4 Public Access and Recreational Opportunities

Objective 4 seeks to maintain and enhance the public open space qualities and recreation opportunities of the coastal environment, including by recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy. Policy 6 also recognises the recreation qualities and values of the coastal marine area.

The Raglan Mussel Spat Catching and Holding Zone will be located well offshore and out of range of most public users (other than what is anticipated to be a very small number of fishermen). This coast is used sparsely by recreational and commercial fishermen based on the relatively difficult weather and water conditions. As a result, any impact of the proposal on such use will be negligible.

Notwithstanding the above, any potential effects on public access and recreational opportunities will be able to be considered as part of the consenting pathway to be provided as part of the proposed plan change. The need for navigational and buoyancy markings will be able to be addressed through the assessment criteria proposed for Rule 16.5.5F.

The Raglan Mussel Spat Catching and Holding Zone is located outside of the identified swell corridors - such that will not have potential to create adverse effects on any regionally or nationally significant surf breaks (Policy 16 and Schedule 1 of the NZCPS).

4.2.5 Social, Economic and Cultural Wellbeing

Objective 6 and its associated policies (including Policy 6) recognise that the protection of values of the coastal environment should not preclude use and development in appropriate places and forms, and within appropriate limits. The objectives and policies specifically recognise those uses which depend on the natural and physical resources of the coastal environment, including for functional reasons.

Related to the above, Policy 8 recognises the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being. Policy 8 also seeks that the regional policy statement and regional plans include provisions for aquaculture activities in appropriate places in the coastal environment and that the social and economic benefits of aquaculture be taken into account.

The establishment of policies and rules for the Raglan Mussel Spat Catching and Holding Zone is considered to directly respond to the directive provided by Policy 8(a). The proposed plan change will enable the future sustainable growth of the mussel farming industry in a manner that allows for effective and efficient use of space in the coastal marine area, whilst allowing potential environmental effects to be managed through the discretionary consent application process.

4.2.6 Summary

Overall, it is considered that the NZCPS seeks to provide for aquaculture activities in the coastal environment in recognition of the social and economic wellbeing that such activities provide. However, provision for aquaculture activities is to occur within the context of appropriate places and within appropriate limits, and where the effects of any specific proposal are managed in accordance with the various policy directives sets out in the various policies of the NZCPS.

The Raglan Mussel Spat Catching and Holding Zone is considered to be a location that is appropriate for aquaculture activities (particularly given its reliability of spat supply) and the proposed rule framework sought as part of this plan change provides for effectives management of any adverse effects.

In light of the above, and subject to the outcomes of further engagement with iwi, it is considered that the proposed plan change gives effects to the NZCPS.

North Western Mussels Limited – Waikato West Coast Mussel Spat Nursery	
Appendix Five Maps and Plans	
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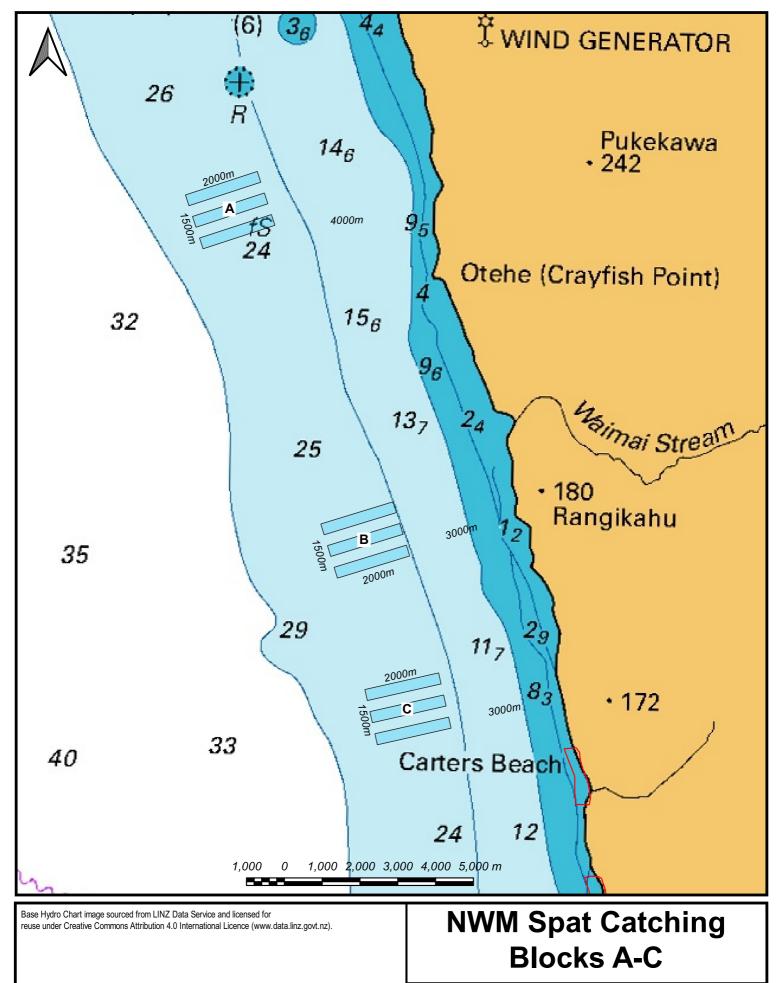


Prepared 8 May 2023

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NWM Proposed New Spat Catching Sites

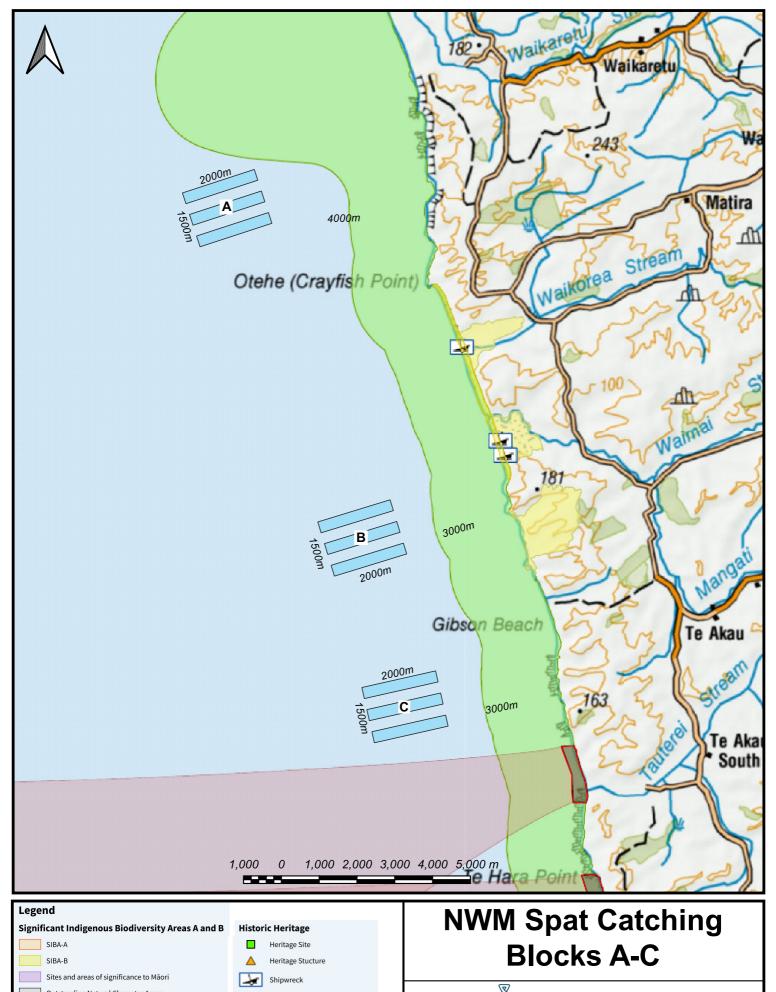
10 15 km

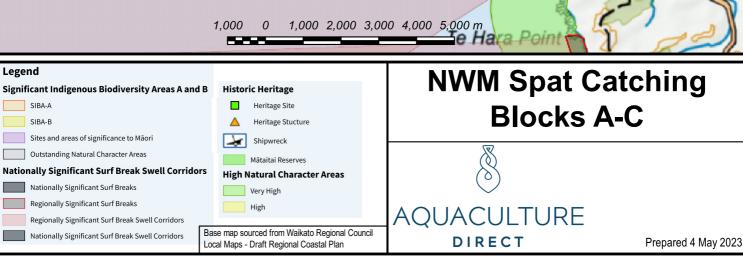


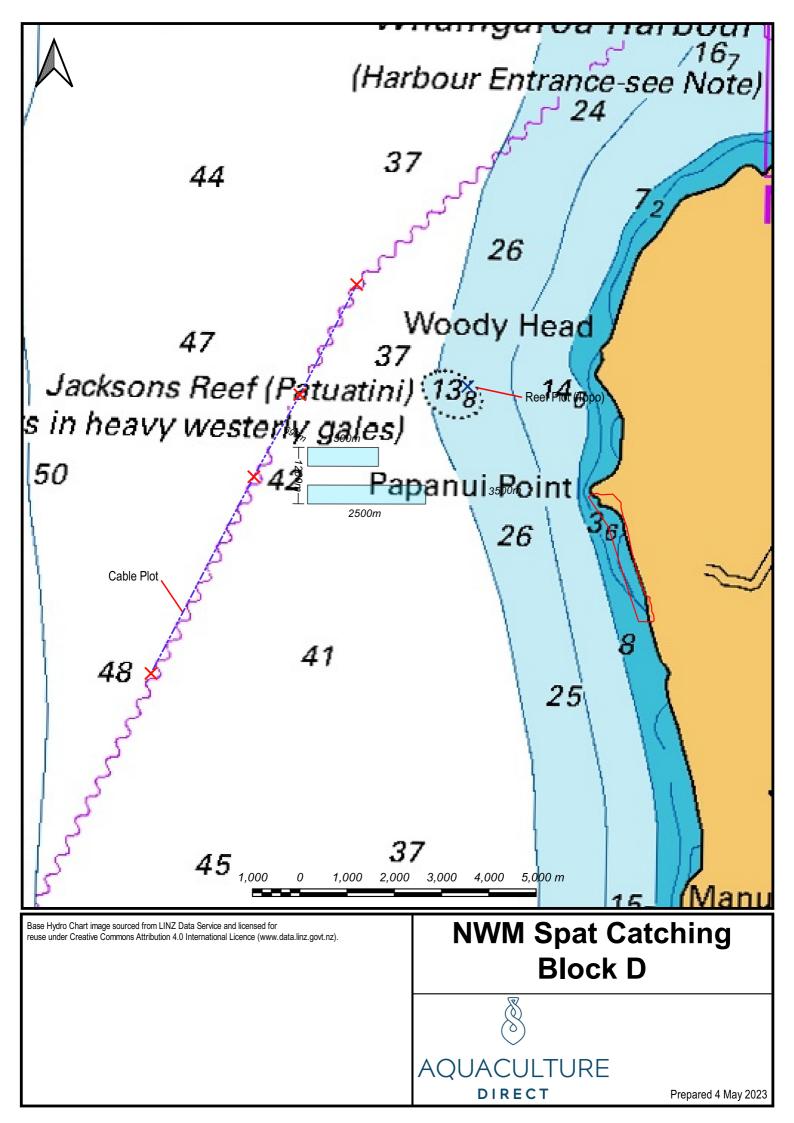
NWM Spat Catching
Blocks A-C

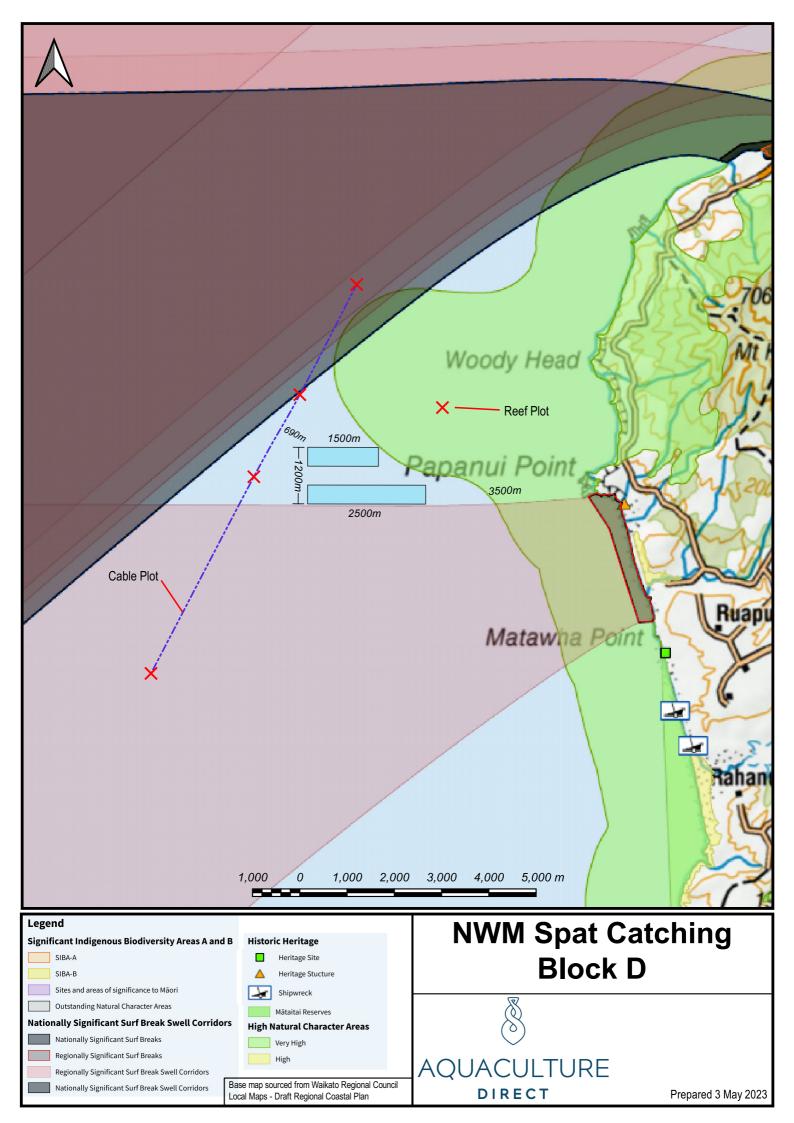
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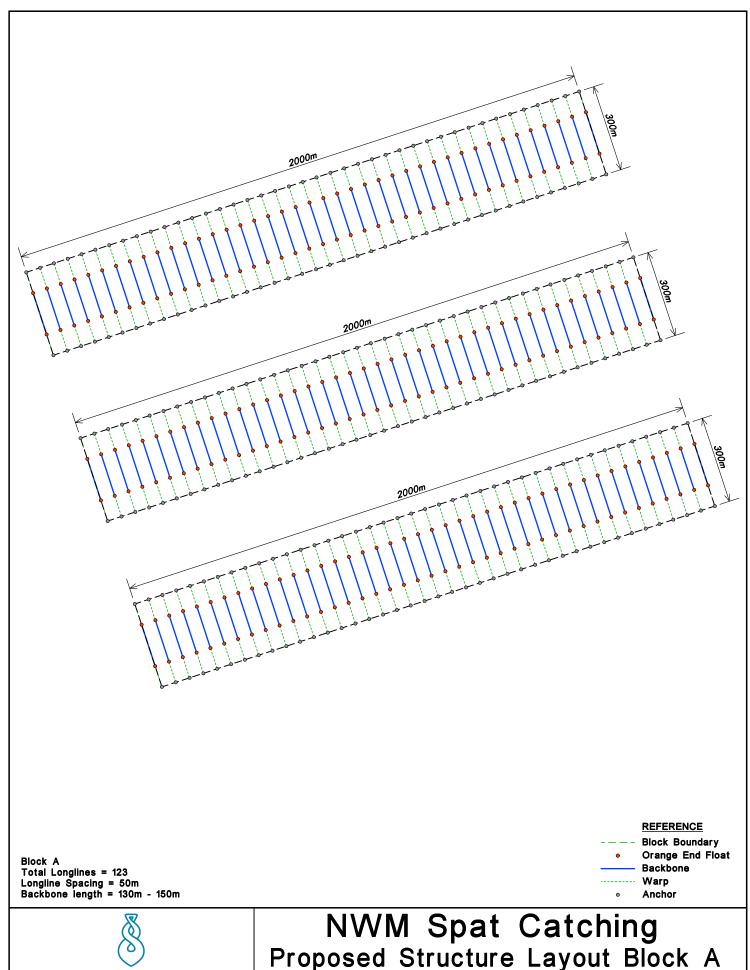
DIRECT Prepared 4 May 2023









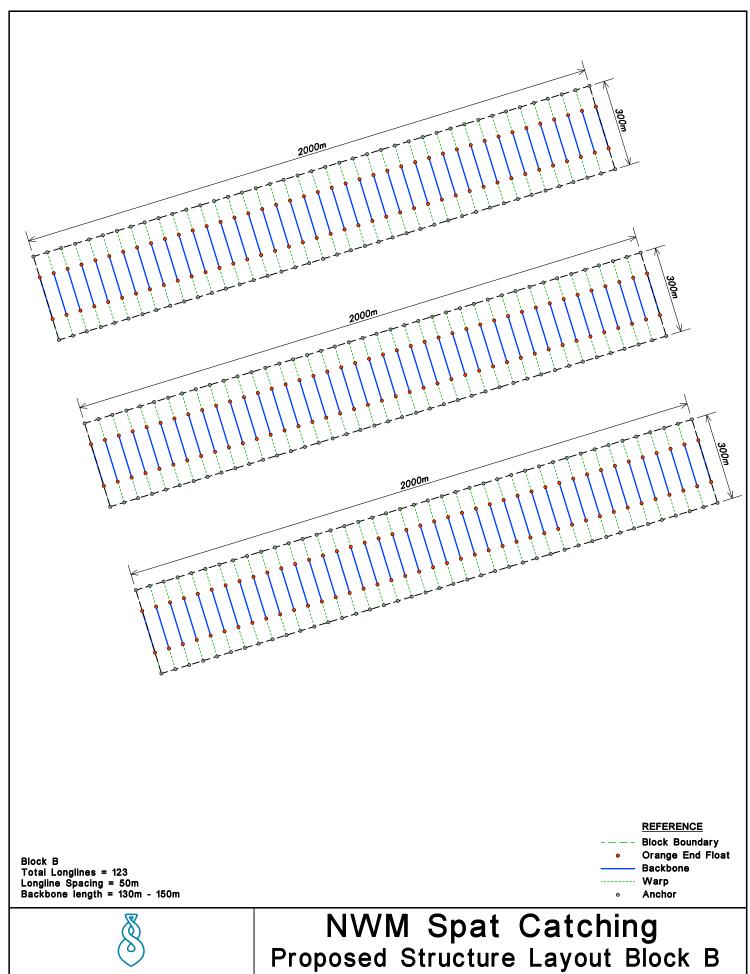




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Proposed Structure Layout Block A West Waikato

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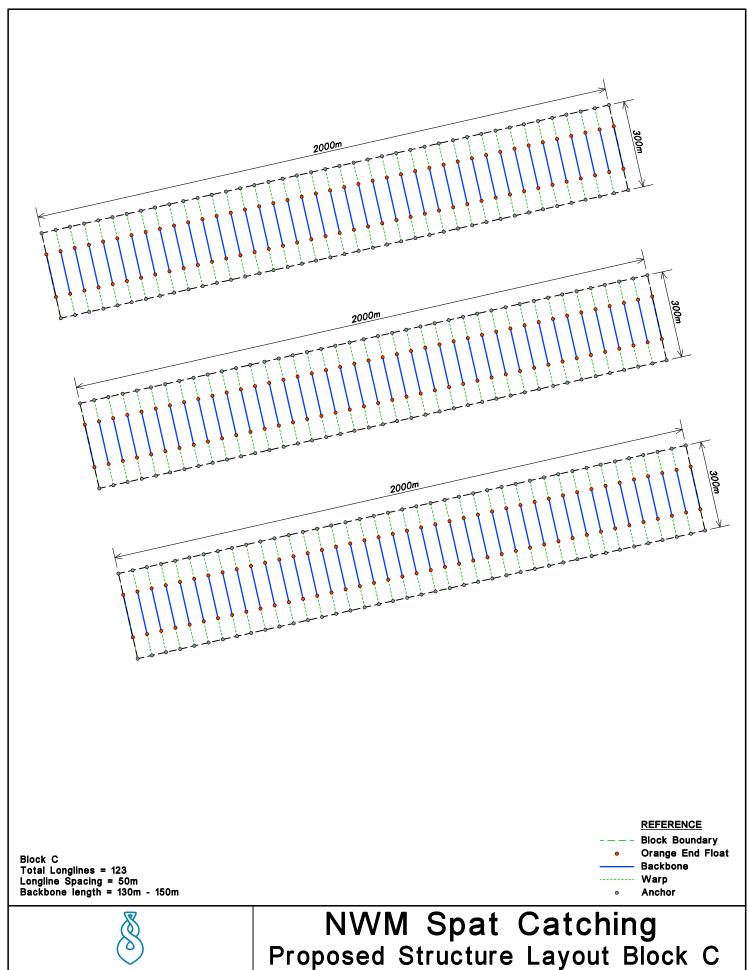


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Proposed Structure Layout Block B West Waikato

SCALE 1:13,000 150 150 300 450 600 750 900 metres

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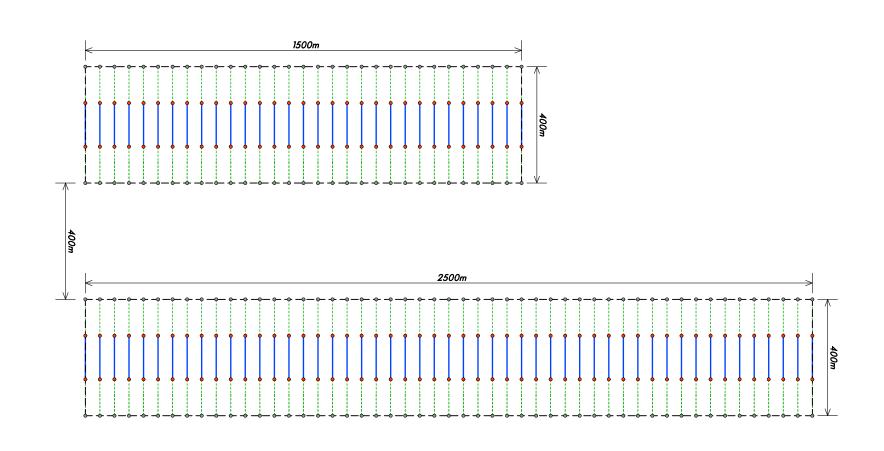




MF_2874b

Proposed Structure Layout Block C West Waikato

SCALE 1:13,000 150 150 300 450 600 750 900 metres





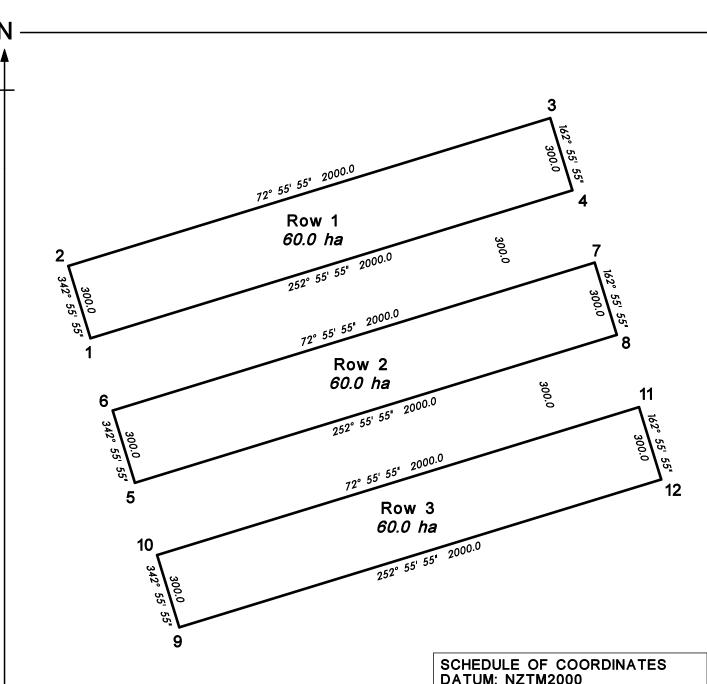
Block D Total Longlines = 82 Longline Spacing = 50m Backbone length = 130m - 150m



MF_2874c

NWM Spat Catching Proposed Structure Layout Block D West Waikato

SCALE 1:13,000 150 0 150 300 450 600 750 900 metres



Block B TOTAL AREA = 180.0ha

Datum: NZTM2000 Waikato Regional Council This site has not been surveyed

SCHEDULE OF COORDINATES DATUM: NZTM2000			
Point	East	North	
1	1753457.8	5830378.0	
2	1753369.7	5830664.8	
3	1755281.6	5831251.8	
4	1755369.7	5830965.1	
5	1753633.9	5829804.5	
6	1753545.8	5830091.3	
7	1755457.7	5830678.3	
8	1755545.8	5830391.5	
9	1753810.0	5829230.9	
10	1753721.9		
11	1755633.9		
12	1755721.9	5829817.9	

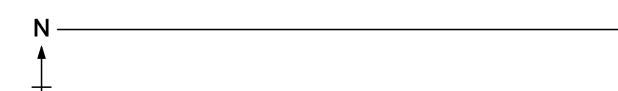


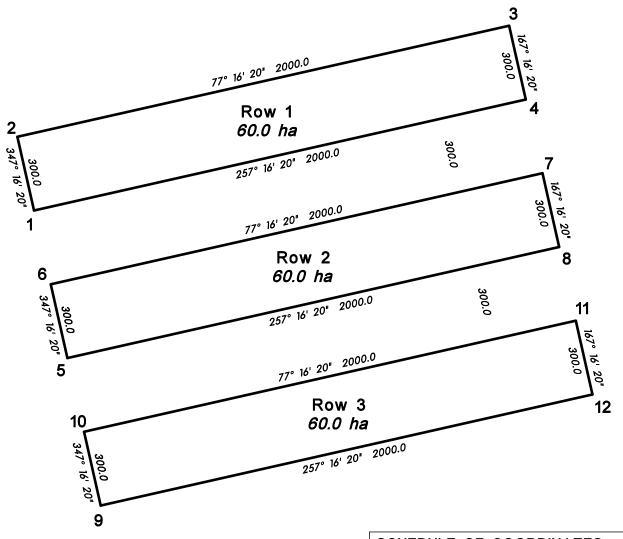
Ref; MF_2847_Site Plans Date; 18 January 2024

Proposed Coastal Permit North Western Mussels

Spat Catching - Block B

SCALE 1:15,000 100 0 200 400 600 800 metres





Block C TOTAL AREA = 180.0ha

Datum: NZTM2000 Waikato Regional Council This site has not been surveyed

SCHEDULE OF COORDINATES DATUM: NZTM2000			
Point	East	North	
1	1754601.6	5825990.3	
2	1754535.5	5826282.9	
3	1756486.4	5826723.5	
4	1756552.4	5826430.9	
5	1754733.8	5825405.0	
6	1754667.7	5825697.6	
7	1756618.5	5826138.3	
8	1756684.6	5825845.6	
9	1754866.0	5824819.8	
10	1754799.9	5825112.4	
11	1756750.7	5825553.0	
12	1756816.8	5825260.4	

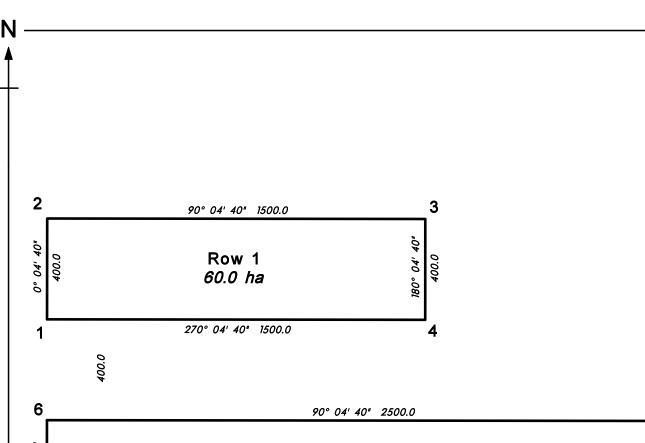


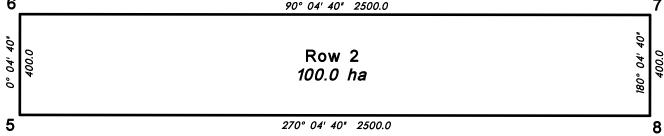
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Proposed Coastal Permit North Western Mussels

Spat Catching - Block C

SCALE 1:15,000 100 0 200 400 600 800 metres





Block D TOTAL AREA = 160.0ha

Datum: NZTM2000 Waikato Regional Council This site has not been surveyed SCHEDULE OF COORDINATES DATUM: NZTM2000

Point	East	North
1	1748518.4	5805610.8
2	1748518.9	5806010.8
3	1750018.9	5806008.8
4	1750018.4	5805608.8
5	1748517.3	5804810.8
6	1748517.8	5805210.8
7	1751017.8	5805207.4
8	1751017.3	5804807.4

AQUACULTURE DIRECT

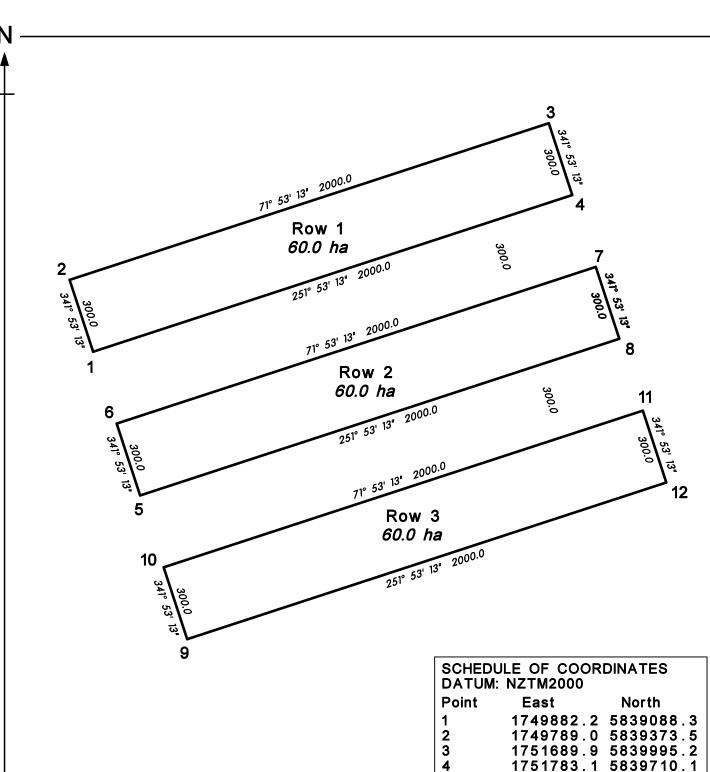
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Proposed Coastal Permit North Western Mussels

Spat Catching - Block D

SCALE 1:15,000

100 0 200 400 600 800 metres



Block A TOTAL AREA = 180.0ha

Datum: NZTM2000 Waikato Regional Council This site has not been surveyed

3 4 1751783.1 5 6 7 1750068.8 5838518.1 1749975.5 5838803.2 1751876.4 5839425.0 1751969.7 8 5839139.8 9 1750255.3 5837947.8 1750162.1 10 5838232.9 11 1752062.9 5838854.7 1752156.2 5838569.6

AQUACULTURE

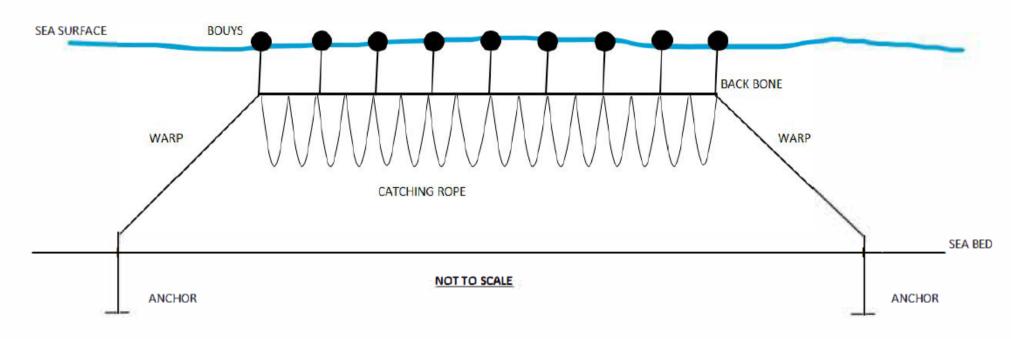
Ref; MF_2847_Site Plans Date; 18 January 2024

Proposed Coastal Permit North Western Mussels

Spat Catching - Block A

SCALE 1:15,000 100 0 200 400 600 800 metres

Waikato West Coast Mussel Spat Catching and Nursery Long Line Structure



Anchors: To be drilled into the seabed 6m - 12m depending on site substrate

Warps: To be 32mm to 44mm diameter rope with 30ton plus breaking strain

Buoys: Spaced 2m to 10m apart

Backbone: 150m in length and 32mm diameter

Catching rope: 8m down in length. 60mm-80mm diameter weighted fribulated self tensioning catching rope