

MUSSEL FARM BIOSECURITY PLAN

This plan is for the mussel farms owned and operated by Zane Smith and Jim Maass-Barrett. It documents their existing practices that reduce the risk of a biosecurity incident, which are similar to other operators in Big Glory Bay. The practices are also as recommended and agreed with Aquaculture NZ and Marine Farmers Association for mussels, oysters and other shellfish.

Given the enclosed nature of the Bay, a consistent Bay-wide biosecurity plan is desirable but not yet in place. The owners are committed to working with other farmers in the Bay to prepare such a plan but it won't replace the need for an individual one.

Note – all references to stock are references to the shellfish species that are authorised to be farmed under the resource consent.

Objective	Policy	Implementation
Stock health & management		
Maintain stock health to optimum levels.	Keep stock stress to a minimum by maintaining appropriate stocking densities, minimising transfers and monitoring stock and water quality regularly.	<ul style="list-style-type: none"> • Avoid spreading pests and diseases by inspecting stock and lines before transfer to other sites. • Decrease stocking density to avoid overcrowding and shedding. • Monitor water quality and feed availability for stock. • Record actions and monitoring results.
Stock movement & containment		
Avoid the introduction of pests and diseases onto the farms.	Use appropriate and proven management practices to minimise the risk of introducing pests and diseases due to stock movements onto, within and off the farm.	<ul style="list-style-type: none"> • Only introduce stock of known health status. • Only introduce stock from areas that are monitored to ensure they are free of marine pests. • Only use mussel spat collected in accordance with the Code of Practice – Ninety Mile Beach (Te Oneroa A Tohe) Weed/Mussel Spat Collecting, Storage, Transport and Seeding. • Monitor long lines regularly to check for marine pests and stock health issues. • Keep records of inspections and stock movements.

Water quality

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| <p>Minimise the pest and disease risks that may enter the farm from the water it is located in.</p> | <p>Use best management practices to minimise the risk of water being the pathway for introducing pests and diseases (note – as it is not possible to control water in an open system such as this one, options are limited to management and “house-keeping”).</p> | <ul style="list-style-type: none">• Ensure only clean vessels enter the site.• Monitor water for pests and diseases.• When pests or disease are detected at other sites within Big Glory Bay, avoid vessel and stock movement between sites. |
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Equipment & vessels

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| <p>Avoid introducing and spreading pests and diseases onto, within and off the farm from equipment and vessels.</p> | <p>Ensure all vessels and equipment working in and around the site are free of marine pests and diseases.</p> | <ul style="list-style-type: none">• Check all vessels used for any activity on the farm to ensure they are free of marine pests and have not been in contact with diseased stock.• Use equipment that is either:<ul style="list-style-type: none">○ new;○ has only been used on the farm and not removed from it; or○ is cleaned and sterilised to the standard required by best practice.• Inspect all lines regularly for signs of new or different organisms and report any findings to Environment Southland and MPI.• Record inspections, including what is found, and note any actions required. |
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People management

Avoid staff and visitors transferring pests and diseases onto, within and off the farm.

Note – the open nature of a mussel farm is such that access cannot be controlled at all times.

Ensure all staff and visitors are assessed for biosecurity risk before accessing the farm, and mitigate that risk as necessary appropriate.

- Provide information on biosecurity risks to staff and visitors.
- Do not allow any domestic animals on the site, including on vessels working in and around the farm.
- Require all those accessing the farm to be assessed for biosecurity risk.
- Wherever possible, eliminate the risk but otherwise mitigate it with methods that are by recommended by recognised agencies such as MPI and Aquaculture NZ.
- Where the risk can not be mitigated and the potential consequences are significant, including consequences for other farmers, deny access to the site.
- Keep records of visitors to the site.

Staff training & education

All staff and visitors are trained to understand their biosecurity responsibilities.

Require all staff and visitors to the farms to be informed on potential biosecurity and disease risks and how to avoid transferring them.

- Require all new staff, as part of their induction into employment on the farm, to receive training on:
 - what are the biosecurity risks to the farm and how are they identified;
 - where information can be found about marine pests and diseases relevant to the type of farming;
 - what action to take if a possible marine pest or diseased stock is identified;
 - who the appropriate agencies are to contact when a possible pest or disease is found (note – it does not have to be ‘actual’ if the identification is not certain); and
 - where and what to record in the event of finding a biosecurity risk.
- Require those wishing to visit the farm to complete a biosecurity risk assessment, and to take whatever action is necessary to avoid wherever possible, but otherwise mitigate (if that is acceptable) any risk identified.
- Keep records of all training and education provided.

Record keeping

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| Be able to trace and determine the origin of pest or disease in the event of them being found on the farm. | Keep records of all key information relating to stock and staff relating to this biosecurity plan. | <ul style="list-style-type: none">• Maintain records to trace stock and their associated health status, onto, within or from the farm.• Maintain records for all aspects of the biosecurity plan, including staff training; inspection and maintenance of farm infrastructure and equipment; and visitor logs. |
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Waste management

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| Avoid the introduction or spreading of pests and diseases through the removal and disposal of farm waste. | Have procedures in place and equipment available for the collection and disposal of farm waste. | <ul style="list-style-type: none">• All non -organic waste to be secured and removed from vessel to be disposed of in a suitable approved facility.• All benign organic matter to be returned to the water at harvest.• Any diseased or dead stock to be secured and removed to be disposed of in an approved disposal facility, once expert advice determines this to be the best course of action. |
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Monitoring/ Surveillance

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| Minimise the biosecurity risk to the farm by implementing appropriate monitoring and surveillance practices. | Put in place a monitoring and surveillance programme to identify any biosecurity or disease risk on the farm. | <ul style="list-style-type: none">• Regularly inspect all stock for abnormalities and mortalities, and for the presence of unusual or unidentified organisms.• Investigate suspected health problems in stock.• Investigate any sightings of any unusual or unidentified organisms.• Set up standard operating procedures for staff to notify the manager/owner and/or authorities in the event of a biosecurity issue being identified.• Record all information relating to inspections. |
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Auditing

- Ensure that the biosecurity management is relevant, up to date, and effectively addressing the site biosecurity risks.
- Carry out regular internal and external audits of the biosecurity plan and actions relating to it.
 - Carry out an annual internal review of the biosecurity management plan.

Contingency plans

- Ensure contingency plans are in place to minimise the impact of a biosecurity incident.
- Prepare a contingency plan for direct and indirect incidents that may affect biosecurity on farm.
 - Prepare a contingency plan to address:
 - any biosecurity on the farm; and
 - any biosecurity incident on any other farm in Big Glory Bay.
 - Ensure all staff are familiar with and understand the contingency plan, and what to do in the event of an incident.
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