

State Significant Infrastructure Approval

Section 115ZB of the *Environmental Planning and Assessment Act 1979*

I approve the State Significant Infrastructure application referred to in Schedule A, subject to the conditions in Schedules B to E.

These conditions are required to:

- prevent and/or minimise adverse environmental, economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

The Hon. Pru Goward MP
Minister for Planning

Sydney

21 November 2014

SCHEDULE A

Application no.:

SSI-5657

Proponent:

NSW Department of Primary Industries

Consent Authority:

Minister for Planning

Land:

Three commercial extensive aquaculture Leases totalling 70 hectares in the open marine embayment of Jervis Bay. The Leases are to be located offshore from Callala Beach near the Shoalhaven Local Government Area (see Figure 1 in Appendix A).

State significant infrastructure:

Jervis Bay Aquaculture Project

The Department has prepared a consolidated version of the consent which is intended to include all modifications to the original determination instrument.

The consolidated version of the consent has been prepared by the Department with all due care. This consolidated version is intended to aid the consent holder by combining all consents relating to the original determination instrument, but it does not relieve a consent holder of its obligation to be aware of and fully comply with all consent obligations as they are set out in the legal instruments, including the original determination instrument and all subsequent modification instruments.

SUMMARY OF MODIFICATIONS

Application Number	Description	Decider	Determination Date
SSI-5657-Mod-1	Relocation and expansion of three mussel farms	Executive Director	20 March 2025

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DEFINITIONS

Term	Description
APVMA	Australian Pesticides and Veterinary Medicines Authority
Aquaculture lease	A lease issued under Section 163 of the <i>Fisheries Management Act 1994</i>
Aquaculture permit	A permit issued under Section 146 of the <i>Fisheries Management Act 1994</i>
Broodstock	Sexually mature individuals of a cultured species that are kept for breeding purposes
Benthic Fauna	Benthos, or organisms which inhabit the seabed
Buoy	Infrastructure support buoy which may be either surface or subsurface (see Figure 1 in Appendix B)
Council	Shoalhaven City Council
Cultured stock	The organisms cultivated on the Leases (i.e. Shellfish, marine algae)
Daylight hours	The period when it is light; i.e. the time between dawn and dusk
Decommissioning	The formal process of removing all Lease infrastructure i.e. longlines from the Leases
Department	Department of Planning and Environment
Deployment	The initial installation of the longline infrastructure, anchors and navigation buoys and associated infrastructure at the Lease areas, as described in the EIS and RTS
Development	The development as described in the EIS and RTS
Draft EMP	The draft Environmental Management Plan included in the EIS and RTS
DPI	Department of Primary Industries
EIS	The Environmental Impact Statement titled <i>Commercial Shellfish Aquaculture Leases Jervis Bay, NSW</i> , prepared by the Department of Primary Industries and dated October 2013
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Extensive Aquaculture	Low-impact aquaculture (i.e. aquaculture which does not use supplementary food to grow the product under cultivation) of cultured stock on long-lines.
Feasible	Feasible relates to engineering considerations and what is practical to build
FM Act	<i>Fisheries Management Act 1994</i>
FM Regulation	<i>Fisheries Management (Aquaculture) Regulation 2012</i>
Ha	Hectares
IALA	International Association of Lighthouse Authorities
Leases	The three commercial aquaculture Leases including Lease 1 and Leases 2 and 3
Lease 1	The site of Shellfish Lease AL/15/003 , which is defined by the aquaculture lease shown indicatively on Figure 1 in Appendix 1
Leases 2 and 3	The site of Shellfish Leases AL15/001 and AL15/002 , which are defined by the aquaculture leases shown indicatively on Figure 1 in Appendix 1
Longline	A structure consisting of anchors, mooring lines and buoy supported backbone lines from which cultivation apparatus is attached to grow the cultured stock
Minister	Minister for Planning, or delegate
Modification Assessments	<p>The document assessing the environmental impact of a proposed modification of this approval and any other information submitted with the following modification applications made under the EP&A Act:</p> <ul style="list-style-type: none">SSI-5657-Mod-1 – <i>Application to modify the approval for the Commercial Shellfish Aquaculture leases in Jervis Bay NSW Project (SSI-5657)</i> prepared by the Aquaculture Management Unit (NSW Department of Primary Industries) dated 9 November 2023 as amended by <i>Submissions Report – Modify the approval for the Commercial Shellfish Aquaculture Leases in Jervis Bay NSW Project (SSI-5657)</i> prepared by the Aquaculture Management Unit (NSW Department of Primary Industries) dated 21 May 2024, including additional information in correspondence from the Department of Primary Industries and Regional Development dated 30 July 2024 and 6 February 2025 and Draft Jervis Bay Mussel Spatfall Monitoring Program prepared by the Department of Primary Industries and Regional Development dated 4 March 2025
MP Act	<i>Marine Parks Act 1997</i>
NOW	NSW Office of Water
NPWS	National Parks and Wildlife Service
OEH	Office of Environment and Heritage
O'Hanlon report	The independent report prepared by O'Hanlon Design Pty Ltd included with the RTS, titled ' <i>Visual Impact Assessment prepared for Fisheries NSW</i> ', dated 10 April 2014
Operation	Any activity associated with the Leases with the exception of deployment activities, including commissioning trials of equipment, stocking the longlines, cleaning, maintenance and research/monitoring associated with the Leases
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Proponent	Department of Primary Industries or any party acting upon this approval
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Secretary	Secretary of the Department, or nominee

Term	Description
Spat	Small juvenile mussels
Spatfall	The process by which young shellfish larvae attach to a hard surface or substrate
Spawning	The release of spawn or larvae of shellfish
Sub-surface support buoys	The buoys not visible at the water surface used to maintain the integrity of the longline infrastructure (see Figure 1 in Appendix B)
Surface support buoys	The buoys visible at the water surface used to maintain the integrity of the longline infrastructure (see Figure 1 in Appendix B)
RMS	NSW Roads and Maritime Services
RTS	Response to Submissions report titled <i>Commercial Shellfish Aquaculture Leases Jervis Bay, NSW</i> , prepared by the Department of Primary Industries and dated May 2014
Site(s)	The 50 hectare lease areas located offshore from Vincentia and Callala Beach, Jervis Bay, as shown in Figure 1 in Appendix 1
SSI	State Significant Infrastructure
Waters	Means all waters that are within the limits of the State and include rivers, creeks, lakes, lagoons and artificial dams, tanks, reservoirs, ponds, canals, channels, waterways, estuaries and the ocean

**SCHEDULE B
ADMINISTRATIVE CONDITIONS****Obligation to Minimise Harm to the Environment**

- B1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the development.

Terms of Approval

- B2. The Proponent shall carry out the development generally in accordance with the:
- (a) SSI Application SSI-5657;
 - (b) EIS;
 - (c) RTS;
 - (d) Modification Assessments;
 - (e) Draft EMP;
 - (f) development plans (see Appendix A and Appendix B);
 - (g) Mitigation Measures Table (see Appendix C); and
 - (h) conditions of this approval.
- B3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- B4. The Proponent shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:
- (a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained within these reports, plans or correspondence.

Access

- B5. The Secretary or any officer of the Department shall be allowed access to the Leases covered by an aquaculture permit at all reasonable times and the permit-holder shall co-operate by facilitating inspection of the Leases. Information obtained from these inspections will be regarded as confidential and will not be divulged to other permit holders unless necessary for the purposes of regulation of the industry or for disease control.

Limits of Approval

- B6. This approval shall lapse 5 years after the date on which it is granted, unless the deployment of the lease infrastructure has commenced on or before that date.
- B7. A maximum of 150 surface support buoys are permitted to be deployed at Lease 1 (over a maximum area of 20 ha) unless additional surface buoys are approved by the Secretary in accordance with Condition C7.

Note: Condition C7 allows the Secretary to approve increased development at Lease 1 (from 150 surface support buoys to a maximum of 312 surface support buoys). The use of additional surface support buoys at Lease 1 will only be permitted if the Secretary is satisfied with the Performance Review detailed in C7.

- B8. A maximum of 50 ha in total of extensive aquaculture is permitted at Leases 2 and 3, including no more than 750 surface support buoys on each Lease.
- B9. The Proponent shall ensure that the Leases are only stocked with the following species:
- (a) Blue Mussel (*Mytilus galloprovincialis* and *Mytilus planulatus*);
 - (b) Scallops (*Pecten fumatus* and *Chlamys asperima*);
 - (c) Akoya Pearl Oyster (*Pinctada imbricata*);
 - (d) Sydney Rock Oyster (*Saccostrea glomerata*)
 - (e) Angasi / Flat Oysters (*Ostrea angasi*); and
 - (f) other species approved for by the Secretary for culture.

- B10. The hours for vessel movements on the Lease site(s) is restricted to daylight hours unless in response to emergency incidents, such as after severe weather or during deployment activities.

Statutory Requirements

- B11. The Proponent shall ensure that all licences, permits and approvals are obtained by the Aquaculture Permit holder for the Lease(s) as required by law and maintained as required throughout the life of the

development. No condition of this approval removes the obligation for the Proponent or Aquaculture Permit holder for the Lease(s) to obtain, renew or comply with such licences, permits or approvals.

Land Based Operational Activities

- B12. Prior to any deployment activities, where necessary the Proponent shall obtain approvals and licences from Council in relation to:
- (a) any land based facility or depot. These facilities are required to be located on appropriately zoned land (and approved by Council under Part 4 of the EP&A Act);
 - (b) the use of Huskisson Wharf; and
 - (c) the obstruction of a road reserve area from the use of any wharf or boat ramp. If this occurs, a Section 138 Approval under the *Roads Act 1993* is required to be obtained from Council.
- B13. During New South Wales school and public holidays, all vessel trailers are to be returned to an approved depot following the launch of vessels at the Woolamia and Callala Bay boat ramps.
- B14. Prior to deployment at any Lease, the Proponent must obtain:
- (a) an aquaculture permit in accordance with the FM Regulation;
 - (b) an aquaculture lease in accordance with the FM Act;
 - (c) a seafood business licence under the *Food Regulation 2000*; and
 - (d) a permit issued under the MP Act.

Staged Submission of Plans or Programs

- B15. With the approval of the Secretary, the Proponent may:
- (a) submit any strategy, plan, program (or the like) required by this approval on a progressive basis; and
 - (b) combine any strategy, plan, program (or the like) required by this approval.

Operation of Plant and Equipment

- B16. The Proponent shall ensure that all plant and equipment used for the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

Compliance

- B17. The Proponent shall ensure that any strategy, plan, program (or the like) incorporates mitigation measures identified in the documents listed in condition B2, as relevant, and as modified by this approval.
- B18. The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and the need to comply with, the conditions of this approval relevant to their respective activities.
- B19. The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the Lease sites, including contractors, sub-contractors and visitors.

SCHEDULE C LEASE INFRASTRUCTURE DEPLOYMENT, OPERATION AND MAINTENANCE

Deployment of Lease Infrastructure

- C1. The Proponent shall prepare and implement a Construction and Deployment Environmental Management Plan, to the satisfaction of the Secretary. The plan must be prepared in consultation with Council and any other relevant stakeholders, and:
- (a) be approved by the Secretary at least one month prior to deployment;
 - (b) include details of the species to be farmed;
 - (c) include detailed plans of infrastructure to be used at each of the proposed Leases, including the final lease layout and mooring plans, and include maximum number, type and colour of buoys to be used at each Lease site;
 - (d) detail all reasonable and feasible design measures used to minimise the potential visual impact of the development from Callala Beach and Vincentia (including orientation);
 - (e) detail the location of the land-based site(s) (if any) for the construction or storage of Lease Infrastructure and indicative timeframe for all deployment activities;
 - (f) include if necessary, details on traffic, noise and waste management;
 - (g) describe the procedures that would be implemented to keep the local community and relevant agencies informed about construction/deployment activities; and procedures to receive and handle complaints; and
 - (h) describe the procedures to decommission any construction site, including removal of all construction facilities and restoration of the site to its original state.
- C2. No construction activities are permitted to be undertaken at public wharfs and boat ramps.
- C3. No deployment activities are to be undertaken at public wharfs and boat ramps during peak periods including long weekends, public holidays and during the Christmas and Easter school holidays.

SURFACE BUOY AND VISUAL IMPACT MANAGEMENT

Buoy Management at All Leases

- C4. The Proponent must ensure the surface support buoys are:
- (a) 800mm in diameter or less, and
 - (b) maintained so that a maximum of 400mm of each buoy is visible above the surface of the water.
- C5. The Proponent must ensure that the surface support buoys are routinely maintained and cleaned of bird guano.

Lease 1

C6. Deleted

Lease 1 Performance Review

C7. Deleted

Leases 2 and 3

- C8. Prior to the Operation of Leases 1, 2 and 3, the Proponent shall consult with RMS regarding the minimum number of buoys that shall remain in the water for each longline when they are not stocked. The Proponent shall implement RMS's recommendations, to the satisfaction of the Secretary.

Support Buoy Protocol

- C9. Prior to deployment, the Proponent shall update the Support Buoy Protocol (in the draft EMP), to the satisfaction of the Secretary, to include the mitigation measures described in conditions C4, C5, C6 and C8.

NAVIGATION SAFETY

- C10. Prior to the deployment of the lease infrastructure, the Proponent shall ensure:
- (a) the site is surveyed in accordance with the DPI's Aquaculture Lease Specifications and the navigational markers are appropriately positioned to delineate the lease area;
 - (b) the RMS is satisfied with the proposed lit navigational markers (set initially to 1 nautical mile) which delineate the Lease area(s) and that they comply with the IALA Buoyage System;
 - (c) RMS is notified of the final lease coordinates to ensure updates are made to navigation charts and/or 'Notices to Mariners'; and

- (d) RMS, Council, Jervis Bay Tourism and Marine Rescue NSW are provided with suitable advisory material on Lease locations.

STRUCTURAL INTEGRITY

- C11. The Proponent shall prepare and implement a Structural Integrity and Stability Monitoring Program, prior to deployment and to the satisfaction of the Secretary. The Program shall include but not be limited to:
- (a) weekly monitoring including an inspection checklist to investigate the effectiveness of the infrastructure design, including how often repairs are made and whether line tautness is being maintained; and
 - (b) details of servicing requirements of anchors, ropes, chains and connectors. Servicing must be undertaken at least annually;
 - (c) details of actions that would be undertaken to rectify any structural integrity issues, particularly in the event that infrastructure breaks away from the Leases after storm events.
- C12. The Proponent shall manage the Lease areas to ensure public safety at all times. This includes:
- (a) implementation of the Structural Integrity and Stability Monitoring Program;
 - (b) recording any navigation issues;
 - (c) regularly reviewing complaints and vessel incident reports;
 - (d) ensuring lines and ropes are taut at all times;
 - (e) removal of bio-fouling organisms from infrastructure on a regular basis to reduce the potential to attract wild fish, harbour disease or parasites and harm watercraft users who may come into contact accidentally with the Lease infrastructure; and
 - (f) removal of debris.
- C13. The Proponent is responsible for the timely clean-up of any material that becomes adrift from the Leases or leaks during any stage of the Project (and ultimately washes up on Jervis Bay beaches or foreshore areas).

DECOMMISSIONING

- C14. Should the Leases be decommissioned, the Aquaculture Permit holder for the Lease(s) shall ensure that the lease area(s) are cleared of all infrastructure including all moorings and longlines, within one year of cessation of operation.
- C14A. Prior to the relocation of Lease 2 and Lease 3, as approved under SSI-5657-Mod-1, the Proponent must prepare and submit to the Secretary, a Screw Anchor Management Plan. The Plan must:
- (a) be prepared to the satisfaction of the Secretary;
 - (b) include management actions for all screw anchors left *in situ* after the longline infrastructure has been removed;
 - (c) provide details of management actions to be implemented to prevent adverse impacts to the marine ecosystem and prevent the anchors from causing any navigational hazards;
 - (d) include a stakeholder communications plan;
 - (e) provide details of a monitoring program, that includes:
 - a. key performance indicators, to evaluate the effectiveness of the management actions;
 - b. monitoring of the seabed and epibenthic flora and fauna using a remote operated vehicle (ROV);
 - c. a trigger action response plan that identifies triggers for investigating and responding to any adverse impacts; and
 - (f) include details of mitigation measures to address potential impacts, including removal of the screw anchors, if required prior to decommissioning.
- C14B. The Proponent must implement the approved Screw Anchor Management Plan approved under condition C14A for any screw anchors left *in situ* after the longline infrastructure has been removed until such time the Leases are decommissioned, and all infrastructure is removed in accordance with condition C14.
- C15. The Proponent shall prepare and implement a Decommissioning Management Plan, to the satisfaction of the Secretary. The Plan must:
- (a) be approved by the Secretary one month prior to decommissioning the development;
 - (b) include a schedule for the orderly decommissioning of the development;
 - (c) include procedures for notification of the boating public, RMS or any other relevant Government agency, of the decommissioning and removal of any structures including the timing of removal;
 - (d) include procedures to be implemented for the safe removal of any structures;
 - (e) include measures to mitigate any environmental impacts associated with the removal of the development including, but not limited to, the disturbance of sediment and potential ecological impacts; and
 - (f) include details of monitoring that would be undertaken during and following the removal of the development.

SCHEDULE D SPECIFIC ENVIRONMENTAL CONDITIONS

CULTURED STOCK MANAGEMENT

Stocking of the Leases

- D1. The Proponent shall only stock the Leases with cultured stock that is from natural spat-fall or sourced in accordance with the NSW DPI hatchery and translocation protocols.
- D2. The Proponent shall only stock the Leases with cultured stock that are:
- (a) known to have spawned from the endemic population (for those species that are identified as having distinct populations); or
 - (b) broodstock originating from the east coast of Australia for other species.
- D3. The Proponent shall maintain a record of all purchases of cultured stock including the date, names and addresses of sources, species, life-cycle-stage, quantities and health, **and report all details in the Compliance Report required under condition E7 of this approval.**
- D4. The Proponent shall ensure that harvest of shellfish occurs prior to spawning where possible.

Spatfall Monitoring Program Report

- D4A. Within six months of the determination of SSI-5657-Mod-1, the Proponent must commence a Spatfall Monitoring Program and subsequently report the findings of the Program to the Secretary on an annual basis for a minimum period of three years, unless otherwise agreed to by the Secretary.
- D4B. The Spatfall Monitoring Program Reports required under condition D4A must:
- (a) be submitted to the Secretary within three months of the completion of the first year, second year and final year of monitoring;
 - (b) be generally consistent with the draft Spatfall Monitoring Program prepared by the Department of Primary Industries and Regional Development dated 4 March 2025;
 - (c) for the first-year and second-year report, include recommendations for any additional monitoring requirements for the second and third year of monitoring, respectively;
 - (d) for the third-year report, include recommendations for any future ongoing monitoring requirements to be carried out to inform ongoing management of the Leases; and
 - (e) include:
 - a.details of program methodology and findings;
 - b.details of spatial and seasonal trends observed over the monitoring period; and
 - c.an action plan and timetable for any remedial actions required to be implemented.

Stock Health

- D5. The Proponent shall prepare a Disease, Parasite and Pest Management Plan in accordance with the Draft EMP, to assist in the identification and treatment of potential diseases, parasites and pests. The Plan shall include details on the monitoring of the health of cultured stock and inspection of longline infrastructure to identify any disease or parasite issues that may arise.
- D6. The Proponent shall monitor and record biofouling amount and composition, and details of any biofouling removed from the Leases.
- D7. The Proponent shall only administer chemicals in accordance with APVMA requirements or veterinary prescription.
- D8. The Proponent is to comply with all relevant reporting requirements for any disease events, carry out any government directions ordered for the treatment or destruction of diseased cultured stock, including quarantine of the facility; and not sell, give away or release to waters, cultured stock if it is known or suspected to be infected with a declared disease.

MARINE FAUNA

Entanglement

- D9. The Proponent shall finalise and implement the Marine Fauna Interaction Management Plan detailed in the Draft EMP prior to the commencement of operation, to the satisfaction of the Secretary. The Plan shall detail measures to remedy, alleviate and reduce the incidence of marine fauna entanglements. The Marine Fauna Interaction Management Plan shall include:

- (a) procedures for the recording of all observations of marine fauna interactions with the lease areas including longlines and vessels, as outlined in the EIS and the RTS;
- (b) contact details of an Entanglement Committee, which would monitor the implementation and effectiveness of the Marine Fauna Interaction Management Plan, and provide advice to the Proponent in the unlikely event of marine fauna entanglement with the Lease infrastructure; and
- (c) response procedures, drills and training that would be carried out to ensure appropriate responses to deal with entanglement incidences.

WATER QUALITY

Compliance

D10. The Proponent shall comply with Section 120 of the POEO Act.

D11. The Proponent shall monitor water quality in accordance with the NSW Shellfish Program administered by the NSW Food Authority under the *Food Act 2003*.

Benthic Monitoring Program

D12. The Proponent shall prepare and submit a Benthic Monitoring Program, to the satisfaction of the Secretary within 6 months of the date of this approval. The Program shall include but not necessarily be limited to:

- (a) representative background monitoring to establish baseline conditions for the Leases, including benthic fauna and TOC parameters, for a suitable time period;
- (b) the use of multiple control sites and identification of the frequency of sampling to ensure the monitoring program is spatially and statistically meaningful;
- (c) collecting data at least annually after the Leases are approved, irrespective of whether the Leases are stocked with shellfish;
- (d) a minimum monitoring period of at least three years from the commencement of operation;
- (e) identification of trigger(s) and ameliorative measures (including video surveys) in the event that adverse impacts to benthic fauna relevant to the development are identified;
- (f) identify triggers that would decrease monitoring efforts; and
- (g) reporting of the monitoring results to the Secretary and OEH annually within the Annual Report, including commentary on any effects of the Leases compared to relevant guidelines, pre-lease sampling or control sites.

Waste Management

D13. Waste generated outside the development shall not be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by a licence under the POEO Act, if such a licence is required in relation to that waste.

D14. The Proponent shall develop a Waste Management Plan prior to the commencement of operation, to the satisfaction of the Secretary. The plan is to include measures to ensure that:

- (a) all waste including biofouling is appropriately stored, handled and disposed of in a timely manner;
- (b) waste generated by the project is minimised;
- (c) details of where all waste would be stored; and
- (d) all waste generated by the Project is classified in accordance with the *EPA's Waste Classification Guidelines* and disposed of to a facility that may lawfully accept the waste.

Noise

D15. During construction, deployment, ~~and~~ operation ~~and decommissioning~~ of the development, the Proponent shall implement all reasonable and feasible noise mitigation measures, to the satisfaction of the Secretary.

SCHEDULE E
ENVIRONMENTAL MANAGEMENT, COMMUNITY INVOLVEMENT AND REPORTING

ENVIRONMENTAL MANAGEMENT

Environmental Management Plan

- E1. Prior to the commencement of operation, the Proponent shall revise and update the draft Environmental Management Plan (EMP), included with the RTS for the development to the satisfaction of the Secretary. The revised EMP is to include:
- (a) the strategic framework for environmental management of the development;
 - (b) the statutory requirements that apply to the development;
 - (c) the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development;
 - (d) the management measures that would be implemented to address environmental issues;
 - (e) how the environmental performance of the development would be monitored and managed;
 - (f) the procedures that would be implemented to respond to any non-compliances and emergencies including a contact number to report emergency events; and
 - (g) include copies of the various strategies and plans that are required under the development.

Management Plan Requirements

- E2. The Proponent shall ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:
- (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development; and
 - effectiveness of any management measures (see (c) above);
 - (e) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (f) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
 - (g) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Revisions to Strategies, Plans and Programs

- E3. Within 3 months of the submission of an:
- (a) incident report under condition E6;
 - (b) annual environmental management report under condition E4; and/or
 - (c) a modification to this approval,

The Proponent must review, and if necessary, revise the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

- E3A. Within three months of the approval of SSI-5657-Mod-1, the Proponent must update the Environmental Management Plan approved under condition E1 to the satisfaction of the Secretary to include maritime heritage management procedures. The Updated Plan must:

- (a) be prepared in consultation with Heritage NSW;
- (b) include a contingency plan and reporting procedure for the management of Unexpected Heritage Finds and Human Remains prepared by a suitably qualified heritage specialist; and

- (c) provide details of maritime heritage induction training for construction workers and how induction records will be maintained.

COMMUNITY INVOLVEMENT

Access to Lease Area

- E4. The Proponent, at its discretion, may permit limited access to the site to facilitate tourism activities. Access to the site where feasible, must not compromise the objectives of the development and the safety of infrastructure and personnel.

Community Stakeholder Plan

- E5. The Proponent shall prepare and implement a Community Stakeholder Plan for the development to the satisfaction of the Secretary. This plan must be approved by the Secretary prior to commencement of deployment, and include:
 - (a) identification of all relevant community and other stakeholders;
 - (b) details of procedures and mechanisms used to inform the community (including local aboriginal communities) and stakeholders of the development's progress and potential employment opportunities;
 - (c) processes to receive and manage feedback and complaints; and
 - (d) phone, email and mail contact details for the development, including a 24 hour contact number.
- E6. Within two years of the date of this approval, unless otherwise agreed to by the Secretary, the Proponent shall submit a report to the Secretary demonstrating that they have actively attempted to work with local businesses, community groups, local aboriginal communities or other local bodies to incorporate regional tourism and local employment and/or training opportunities into the Project. The report shall outline initiatives undertaken, the success or otherwise of these initiatives and what additional activities (if anything) will be undertaken for the duration of the development.
- E6A. Within three months of the approval of SSI-5657-Mod-1, the Proponent must update the approved Community Stakeholder Plan required under condition E5 to include details of how the findings of the Spatfall Monitoring Program (being carried out in accordance with condition D4A) will be communicated to the community and key stakeholders. The Plan must be updated to the satisfaction of the Secretary.
- E6B. The Proponent must implement the updated Community Stakeholder Plan approved by the Secretary under condition E6A for the duration of the development.

REPORTING

Compliance Reporting

- E7. Within 12 months of the commencement of operation, and annually thereafter, the Proponent shall submit a **Compliance** Report to the Secretary, OEH and NPWS. As a minimum, this report must **be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department, 2020) and must:**
 - (a) identify the standards and performance measures that apply to the development;
 - (b) describe the monitoring that has been carried out in the last 12 months;
 - (c) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - (d) include records of maintenance activities;
 - (e) provide details of all monitoring results undertaken under this approval and an analysis of any trends or key findings or incidents involving threatened species and/or marine fauna, including:
 - impacts on marine habitats – including benthos and sediments;
 - marine fauna entanglement;
 - (f) **include details of, and the reasons for, any significant delay in harvesting mussels prior to spawning and details of remedial actions taken to prevent this from re-occurring;**
 - (g) identify any non-compliance during the previous year;
 - (h) include details of any navigational incident related to the operation of the development;
 - (i) include details on chemical use, disease and/or introduced pests; and
 - (j) describe what actions were, or are being, taken to ensure compliance **and what measures will be implemented over the next year to improve the environmental performance of the development.**

The Secretary may require the Proponent to address certain matters in relation to the environmental performance of the development, in response to review of the Annual Report and any comments received from relevant authorities and/or Council. Any action required to be undertaken shall be completed within such period as the Secretary may agree.

Incident Reporting

- E8. Within 24 hours of detecting a serious incident such as marine fauna entanglement or suspected disease outbreak and/or significant unexplained mortality of cultured stock, the Proponent shall notify the Secretary and other relevant agencies of the incident.
- E9. Within 6 days of notifying the Secretary and other relevant agencies of an incident, the Proponent shall provide the Secretary, OEH and other relevant agencies with a written report that:
- (a) describes the date, time, and nature of the incident;
 - (b) identifies the cause (or likely cause) of the incident;
 - (c) describes what action has been taken to date; and
 - (d) describes the proposed measures to address the incident.

Regular Reporting

- E10. The Proponent shall provide regular reporting on the environmental performance of the Project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

AUDITING

Independent Environmental Audit

- E11. Within 2 years of the deployment of infrastructure, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this approval, and any other relevant approvals; (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these consents.

Note: This audit team must be led by a suitably qualified auditor, and include experts in aquaculture and any other fields specified by the Secretary.

- E12. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

- E13. Within 6 months of the date of this approval, the Proponent shall:
- a) make copies of the following publicly available on its website:
 - (i) the documents referred to in Condition B2;
 - (ii) all current statutory approvals for the development;
 - (iii) all approved strategies, plans and programs required under the conditions of this approval;
 - (iv) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - (v) a complaints register, updated on a monthly basis;
 - (vi) the Annual Reports and Compliance Reports of the development;
 - (vii) any Independent Environmental Audit of the development, and the Proponent's response to the recommendations in any audit;
 - (viii) any other matter required by the Secretary; and
 - b) keep this information up to date,
- to the satisfaction of the Secretary.

APPENDIX A: LOCATION PLAN

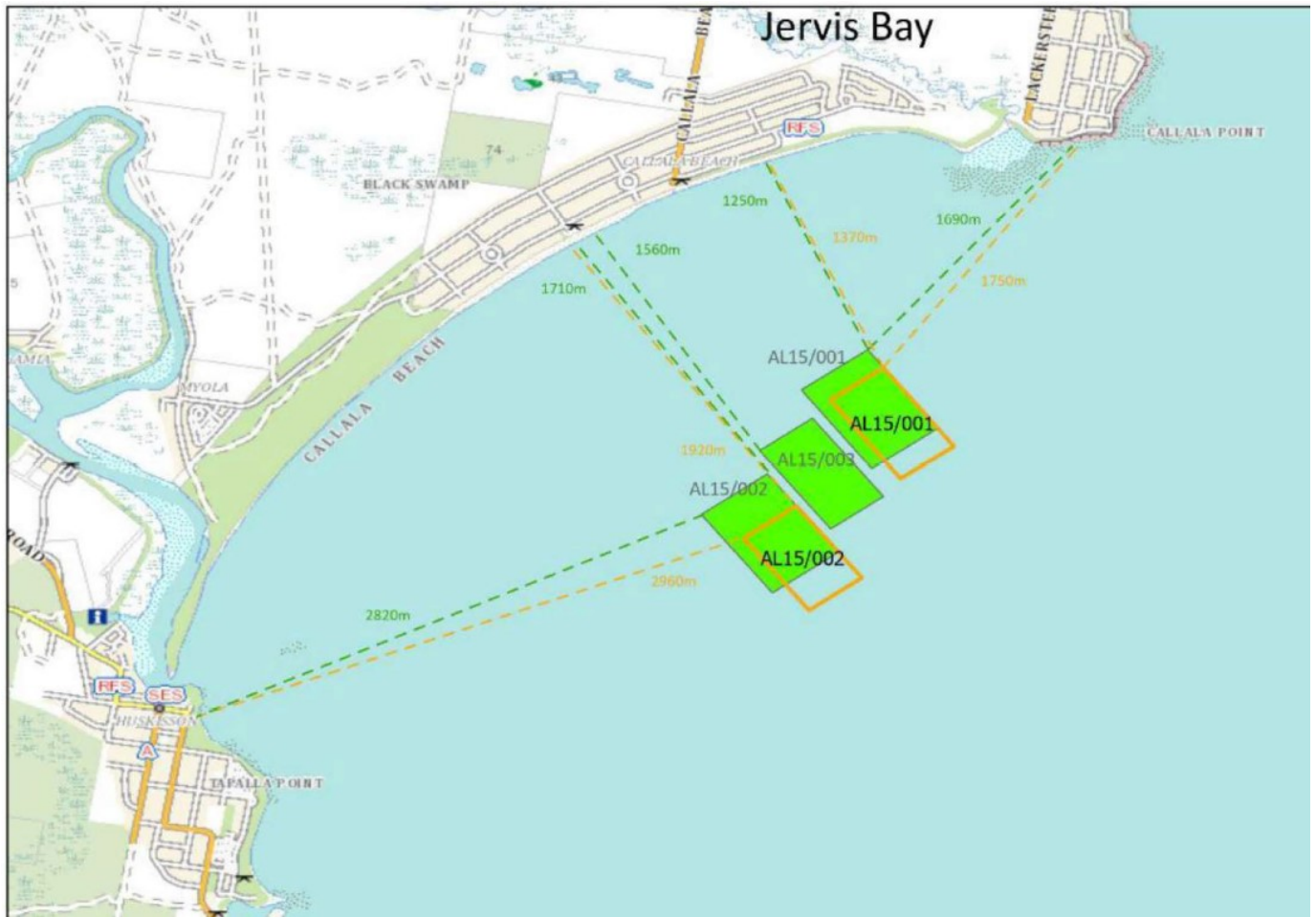


Figure 1: Approximate location of the Lease areas (SSI-5657-Mod-1)

APPENDIX B: LEASE INFRASTRUCTURE and TYPICAL SETUP

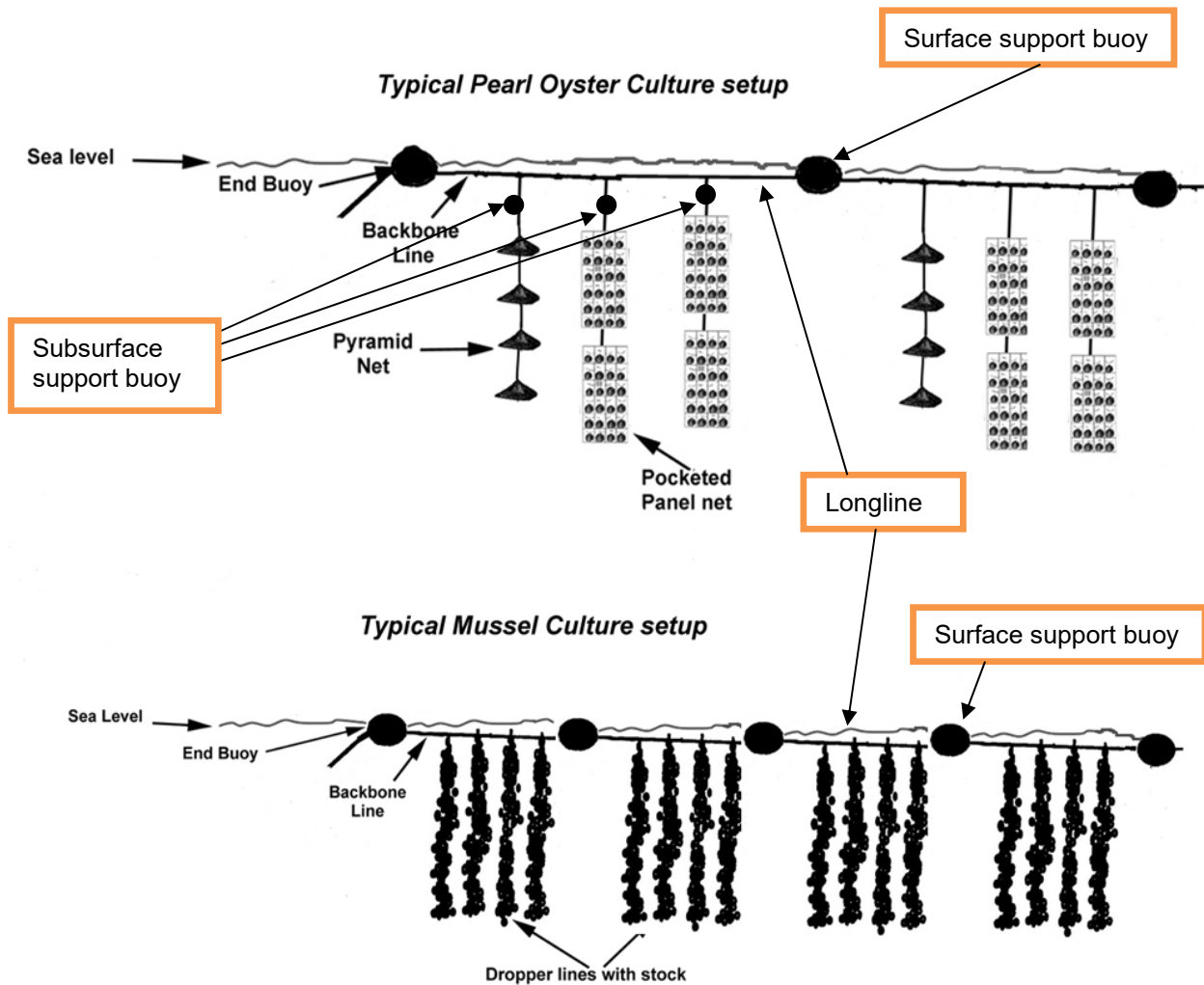


Figure 1: Typical mussel and pearl farm longline infrastructure components

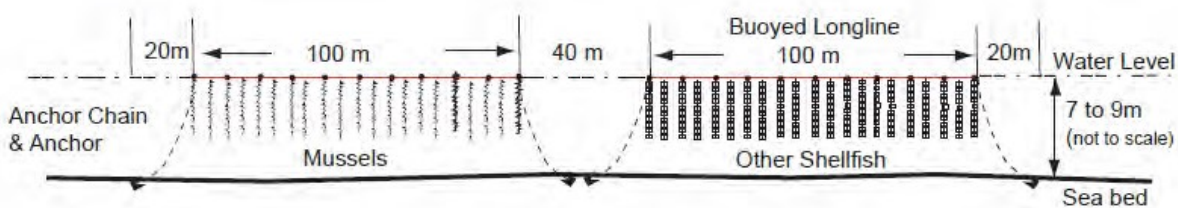


Figure 2: Typical cross section of a shellfish 'longline' aquaculture Lease

APPENDIX C: MITIGATION MEASURES TABLE

FOR INFORMATION

Appendix 2: The updated mitigation measures table includes issues identified and mitigation measures from the original EIS, that were reassessed in the Modification Report. The mitigation measures table has been updated to address issues raised in the submissions. New issues raised in submissions are highlighted in red. New mitigation measures in response to the submissions are highlighted in orange.

Issue identified in EIS	Matter	Mitigation measures
Species under cultivation Section 12 of the Response to Submissions	<p>Concerns were raised about the origin of the cultivated species <i>Mytilus galloprovincialis</i>, which is considered by some to be a non-indigenous/exotic species to the area that could have environmental implications.</p>	<p>The Response to Submissions addresses concerns of invasive species using reference to several scientific literature papers.</p> <p>A genetic analysis on the wild and farmed populations has commenced in Jervis Bay and other sites of the south coast of NSW where mussel biofouling is found. Sites sampled include Twofold Bay (including farmed stock), one site between Jervis Bay and Twofold Bay, and two sites between Jervis Bay and Sydney. These sites have been selected based on existing mussel distributions and genetic data.</p> <p>The objective of this analysis is to determine what species of blue mussel is present in Jervis Bay currently, both wild and on the farm.</p> <p>The genetic analysis will include;</p> <ul style="list-style-type: none"> (a) number, species and age of mussels collected; (b) location and date the mussels collected; (c) details of the methodology used to determine the genetic characteristics of the mussels collected; and (d) a clear summary of the findings of the study. <p>The genetic analysis will be repeated annually to build a robust dataset to determine to what extent the wild mussels are progeny of farmed mussels. The analysis will be repeated until this wild – farmed link can be determined. The results will be recorded in a Genetic Analysis Report. Genetic analysis will be undertaken by the University of Queensland.</p> <p>It is anticipated that all mussels will be the endemic hybrid of <i>Mytilus galloprovincialis</i> and <i>M. planulatus</i>.</p>
Artificial lights Section 14 of the Response to Submissions	<p>Concerns were raised about lights on the cardinal markers causing visual pollution at night.</p>	<p>The use of lights is unavoidable due to navigational safety requirements in accordance with Section 17 of the <i>Maritime Safety Act 1998</i>.</p> <p>As stated in the Modification Report, the number of cardinal markers (and therefore lights) will decrease if the proposed modification is approved, from ten to six. The impact of artificial lights will therefore decrease, further reducing the risk to the visual amenity of Jervis Bay.</p>

Issue identified in EIS	Matter	Mitigation measures
		All lights will be in accordance with IALA Buoyage System requirements (set to 1 nautical mile). Navigation lights will be low intensity flashing white strobe lights with a low profile. Vessel lights are shielded and concentrated downwards and only operate at night during emergency works.
Further expansion Section 4 of the Response to Submissions	Concerns were raised that this modification would provide a precedent for further aquaculture expansion in Jervis Bay.	As stated in the Modification Report, NSW DPIRD has no intention of seeking additional areas for long line aquaculture in Jervis Bay. Suitable sites for longline aquaculture are assessed as per constraints criteria in the NSW Marine Waters Sustainable Aquaculture Strategy. There are no other suitable sites within Jervis Bay for longline aquaculture other than the current lease site and its surrounds identified in the proposed modification.
Increased mussel biofouling Section 13 of the Response to Submissions	Claims of increased spatfall on boats and natural structures has been attributed to the presence of the mussel farms.	<p>In the Response to Submissions, NSW DPIRD have provided results of additional scientific literature with evidence of mussel population abundance and distribution in Jervis Bay before mussel farming began.</p> <p>Multiple reports and entries of photographic evidence show that there is a mussel population boom along the south coast of NSW currently occurring, with increased numbers of mussels being found along the South coast of NSW and Victoria. This supports DPIRD position that the mussels are following a boom-and-bust cycle, with the past season having a high recruitment rate that is within scope of natural variation, as outlined by many studies and historical observations of mussel populations.</p> <p>NSW DPIRD are designing and coordinating a Spatfall Monitoring Program to test if spatfall changes when the farm is moved and increases in area. The aim is to determine what the natural level of variation of mussel recruitment is in Jervis Bay, and if the farming operations are causing a significant increase in the abundance of wild mussels in Jervis Bay. Collectors will be deployed and monitored at study sites around the Bay for three years to see if spatfall changes over time. The sites have been selected based on one year of existing data, and local knowledge. This will result in a minimum of four years of data collectively, including one year of data from previous observations, to gain a better understanding of local mussel spatfall trends. Mussel recruitment monitoring will include consideration of environmental parameters, farm stocking density and other potential sources of mussel recruitment.</p> <p>The future of the monitoring program will be reviewed after three years and future actions considered in consultation with NSW DPI.</p>

Issue identified in EIS	Matter	Mitigation measures
		<p>The outcomes of the Spatfall Monitoring Program will be communicated to all stakeholders via the Community Stakeholder Plan, which will also be updated to reflect that advisory and educational material will be provided to the community on the genetic analyses and also the Spatfall Monitoring Program. DPIRD will establish and administer an advisory group comprising key stakeholders (Jervis Bay Marine Parks, South Coast Mariculture, DPIRD, key associations, traditional owners, Jerrinja Tribal Council and Jerrinja LALC. The advisory group will meet ever 6 months or as otherwise needed.</p> <p>The Water Quality and Benthic Monitoring Program (WQBMP) and annual reporting will continue (also as per condition C.4), and benthic sampling embedded in the design of this Program, will be reinstated once the third lease is in operation. This would include the use of existing triggers and consideration of management responses (such as reduction in stocking density, or fallowing) if required. The WQBMP will be updated to reflect this.</p>
Visual amenity Section 14 of the Response to Submissions	Concerns were raised that the modification will cause a dramatic decrease of the visual amenity of the bay, affecting the view from Callala Beach.	Additional photographs have been provided in the Response to Submissions as requested, to show the anticipated visual impacts of the mussel farm operations from Callala Beach during the day.
Navigation and interactions with other waterway users Sections 18 and 19 of the Response to Submissions	Concerns were raised about public access to permanent assets and impacts the Jervis Bay Cruising Yacht Club racing courses. Concern was raised regarding lack of public boat ramp facilities.	<p>Although not managed by NSW DPI, the Response to Submissions noted that a public boat ramp has been upgraded by Council. Furthermore, that SCM do not use boat ramps in Jervis Bay, SCM uses a commercial jetty.</p> <p>Further assessment was undertaken regarding Jervis Bay Cruising Yacht Club racecourses. Club maps online suggest that the modification would not interfere with current racecourses.</p> <p>TfNSW indicated no objection or concerns around navigation- as per Submission register.</p>
Water quality and sedimentation. Section 17 of the Response to Submissions	Concerns were raised about the potential impacts of increased mussel farming on water quality and the benthic environment.	<p>As stated in the Modification Report, WQBMP and annual reporting program will continue.</p> <p>In the Response to Submissions, it is stated that the benthic sampling, which is not required to be currently undertaken as three years of sampling have shown no significant impact on the sediment have resulted from mussel aquaculture, will be reinstated once the third lease is in operation if approved. This would include the use of existing triggers and consideration of management responses (such as a reduction in stocking density,</p>

Issue identified in EIS	Matter	Mitigation measures
		<p>or fallowing) if required.</p> <p>The Vincentia lease monitoring (x1) site will be removed from the WQBMP relocated under AL15/003. Control site 3 will be moved about 260m northwest to provide for a 500m buffer from the relocated AL15/002. Control sites 5 and 6 (Vincentia sites) will be moved closer to the relocated leases in Callala Bay. This repositioning assures consistency with the current WQBMP sampling design. The exact location of the three proposed control sites to be moved (3, 5 and 6) will be determined based on ROV footage to ensure samples are being collected from sandy substrates. Once locations are finalised, the six control sites will continue to be used in the WQBMP.</p> <p>SCM will relocate the Xylem weather monitoring buoy to the northern-most point (i.e., downstream) of the proposed lease areas to maximise the chances of detecting impacts to water quality due to farming activities.</p>
Habitat loss and shading. Sections 13 and 17 of the Response to Submissions.	Concerns were raised regarding potential negative impacts on benthic habitats if increased mussel biofouling on the subtidal surfaces and benthic floor results from the increased farming.	<p>As stated in the Modification Report, the WQBMP and annual reporting will continue if the proposed modification is approved.</p> <p>NSW DPIRD are designing and coordinating a Spatfall and Genetics Monitoring Program to test if spatfall changes when the farm is moved and increases in area, and aim to determine if the wild mussel populations are significantly derived from the spatfall of farmed populations. Details as above.</p>
Entanglement and ingestion of marine debris. Section 20 of the Response to Submissions.	Concerns were raised about the lack of published evidence provided in relation to the entanglement or death of large fauna.	<p>As stated in the Modification Report, there have been no marine fauna entanglement reported since operations began in 2019. This information is available on the SCM website in their annual environmental reports. SCM will update their Marine Fauna Interaction Management Plan (MFIMP).</p> <p>The revised MFIMP will take into consideration the current NSW Environment and Heritage Marine Wildlife Management Manual and inclusion of the local Aboriginal community if carcasses are discovered because of entanglement with farming operations.</p>
Waste disposal Section 5 of the Response to	Concerns were raised about how waste created by mussels (mussel faeces and metabolism) impact water quality for recreational users	The WQBMP and annual reporting program will continue, and benthic sampling be reinstated once the third lease is in operation. This would include the use of existing triggers and consideration of management responses (such as a reduction in stocking density, or fallowing) if required.

Issue identified in EIS	Matter	Mitigation measures
Submissions.	(i.e., swimmers). How is this waste captured and disposed of?	<p>SCM will continue to uphold its testing and reporting requirements as part of the mandatory NSW DPIRD Food Authority Shellfish Program, and Best Aquaculture Practice certification.</p> <p>Waste from mussel faeces and metabolism cannot be captured. SCM will relocate the Xylem weather monitoring buoy to the northern-most point (i.e., downstream) of the proposed lease areas.</p>
Economics Section 21 of the Response to Submissions.	<p>Concern was raised that there is an increase in mussel biofouling due to mussel aquaculture that is causing economic impacts on boat owners.</p> <p>Concerns were raised that the visual amenity impact is spoiling the 'pristine, unspoilt' views of Jervis Bay potentially impacting tourism.</p> <p>The true economic benefits to the community as claimed in the Modification Report were doubted by some.</p>	<p>If the modification is approved, SCM will update their Community Stakeholder Communications Management Plan (version 4), to reflect any new engagement opportunities, events, charities and communications with stakeholders in Jervis Bay.</p> <p>SCM has provided evidence of the number of people they employ, and other assessments have been used to determine the potential economic benefit of the proposed modification to Jervis Bay.</p> <p>SCM provided NSW DPIRD a list of employees, demonstrating the employment of 43 people (a combination of full time and part time) in January 2024. This is an increase for the 30 employed at the time of writing the modification application. The list provided to NSW DPIRD included the average income (i.e., salary) of each. Due to commercial in confidence, this data cannot be shared.</p> <p>The issue of spatfall was highlighted previously in the document.</p>
Decommissioning Sections 1, 2 and 7 of the Response to Submissions.	<p>Clarity was sought regarding the current use of screw anchor technology in Callala Bay leases, and approval for these anchors.</p> <p>Information about the removal of the screw anchors was requested, along with more information about staging the relocation.</p>	<p>As has been the approved process for the existing operations, SCM will continue to provide annual reports to NSW DPHI with updates of removal and redeployment activities. As per approval condition C.1, SCM operate in accordance with an approved Construction Deployment and Traffic Management Plan V4.2 2023. This plan illustrates the layout of the currently approved leases and talks the reader through the steps taken prior to and during deployment. This plan also includes a Decommissioning Management Plan. A requirement of this plan was that it be approved by the Secretary one month prior to deployment. If the proposed modification is approved, SCM will update the Construction Deployment and Traffic Management Plan to indicate the proposed removal and redeployment activities including a revised expected timeframes and duration schedule.</p> <p>If the proposed modification is approved, an updated Decommissioning Management Plan will be prepared. The updated Decommissioning Management Plan would include the requested details about the processes and approach for removal of infrastructure, in consultation with NSW DPIRD and with the Department of</p>

Issue identified in EIS	Matter	Mitigation measures
		<p>Defence, DPHI-Crown Lands and local Aboriginal communities.</p> <p>A Screw Anchor Removal Risk Assessment was developed by NSW DPIRD, which indicates that the environmental risk of removing the screw anchors could be higher than leaving them in situ. A Screw Anchor Management Plan will be developed by DPIRD. The screw anchors would remain in situ until decommissioning of the farm, if approved.</p> <p>In the Response to Submissions, a decommissioning and deployment strategy and timeline will be created and made public for interested stakeholders. NSW DPIRD has contacted the Department of Defence confirming lease coordinate changes and decommissioning. DPHI- Crown Lands has been consulted with regard to screw anchors being left in situ until decommissioning of the farm. The Department has no objection to leaving the anchors in situ, provided that the anchors are assets managed by NSW DPIRD, subject to DPIRD policy and procedure.</p> <p>The WQBMP will be reviewed to include ROV surveys of the areas where 88 screw anchors would remain in situ rather than being removed, in accordance with the outcomes of the Screw Anchor Risk Assessment.</p> <p>Reference to Stage 3 Full Commercialisation in the Modification Report was clarified.</p>
<p>Noise - environmental impacts.</p> <p>Section 15 of the Response to Submissions.</p>	<p>Consideration should be given to noise impacts on marine fauna, and that noise impacts should be quantified where possible.</p>	<p>SCM provided more specific technical detail about the noise emitted from the hydraulic drill during the installation of screw anchors.</p> <p>SCM will maintain operating in accordance with its Marine Fauna Interaction Plan, condition D.9. This may be reviewed if required. An observer is required to on board during all vessel movements in accordance with the observer protocol. NSW Environment and Heritage (NSW EH) will be consulted during any revision.</p>
<p>Noise - social impacts</p> <p>Section 15 of the Response to Submissions.</p>	<p>Concerns were raised that insufficient evidence was provided to support the conclusions around noise impacts, and the recommendation is that further assessment of noise during</p>	<p>A more detailed assessment of noise has been provided, including what noise mitigation measures will be employed during deployment and construction. In the assessment, Interim Construction Noise Guidelines for the approach to carrying out a qualitative construction noise assessment were considered.</p>

Issue identified in EIS	Matter	Mitigation measures
	construction and operations is required.	
Land-based infrastructure Not raised in the Response to Submissions.	The proposed modification activities will continue to use the existing land-based facilities.	<p>This was not raised as an issue during the submissions process. The proposed modification does not include the development of any new land-based sites.</p> <p>SCM will review their Traffic Management Plan to ensure the safety of staff and other road users involved with vehicle transport. To comply with noise regulations the movements of vehicles, notably trucks and construction vehicles, will be limited to normal working hours and signage will be erected to warn motorists of traffic entering and leaving land-based sites if considered necessary. SCM's equipment and vessels undergo regular checks, visual inspections, and examinations to ensure the safety and performance of all equipment involved.</p>
Structural integrity and stability Section 6 of the Response to Submissions.	<p>Concerns were raised about impacts of the anchors scraping along the seafloor.</p> <p>Concerns were raised about mussels falling off the ropes and buoys washing ashore during storms.</p>	<p>As stated in the Modification Report, SCM adopted the use of screw anchor technology in 2019. These anchors do not scrape the seafloor. Screw anchor technology is considered the most environmentally sensitive anchor type and is expected to improve the structural integrity of the leases. The Response to Submissions provides further clarity to some common misconceptions around the structural integrity of screw anchors. A video of a screw anchor being installed at the seafloor was also made available on NSW DPIRD website.</p> <p>The Response to Submissions provided clarification about the depth profile of the sites where the relocated leases would be installed, and benefits of screw anchors and subsurface buoys in mitigating the risks of mussels falling off ropes during storms.</p> <p>SCM will continue to implement of the Waste Management Plan in accordance with conditions D.13 & D.14. In accordance with mandatory record keeping, records indicate there have been no complaints relating to waste disposal, including results of an audit.</p>
Coastal processes and climate change	Clarification was sought regarding conclusions made about climate change risk.	A typographical error in the Modification Report was addressed in the Response to Submissions. The risk of climate change to the mussel aquaculture operations remains low.

Issue identified in EIS	Matter	Mitigation measures
Section 16 of the Response to Submissions.		
Marine vessel and vehicular transport. Not raised in the Response to Submissions.	SCM are acquiring a second vessel for existing operations. Vessel movements are not anticipated to increase currently approved trips.	This was not raised as an issue during the submissions process. SCM will operation in accordance with their Traffic Management Plan.
Aboriginal and European heritage Sections 9 and 22	<p>Claims were made that no inspection was undertaken of the seabed to ascertain if Underwater Cultural Heritage (UCH) sites exist in the proposed relocation area.</p> <p>Concerns were raised about whether SCM have employed Aboriginal people as the EIS claimed it would do.</p>	<p>The Response to Submissions includes further assessment in accordance with the NSW Heritage Act 1977, the Control of Naval Waters Act 1918 and the National Parks and Wildlife Act 1974 with relation to UCH and Aboriginal UCH.</p> <p>NSW DPIRD undertook additional searches of UCH databases including NSW Maritime Heritage Database, NSW State Heritage Inventory, Local Council Database and Commonwealth Australasian Underwater Cultural Heritage Database. These searches suggest no presence of UCH in or around the proposed lease areas. The maps showing the new search results have been included in the Response to Submissions.</p> <p>In late 2024 DPIRD contracted a marine surveyor and a maritime archaeologist, and the 'Jervis Bay Mussel Farming Modification Application: Underwater Cultural Heritage assessments' report was prepared and provided by Mountain Heritage, 3 February 2025. A multi-beam Echo sounder survey was completed over the lease area, which not identify any potential shipwreck or other potential anomalies within the investigation subject site. The proposed location for the three leases is flat, gently sloping seabed from northwest to southeast.</p> <p>As recommended an unexpected finds procedure will be implemented for the project.</p> <p>If the proposed modification is approved, SCM will undertake a visual inspection of the seabed of new lease areas with ROV. If UCH sites are found prior to works being undertaken, a Statement of Heritage Impact will be done. If UCH are found unexpectedly during works, an Unexpected Finds Policy will be developed, in line with the Underwater Cultural Heritage Act 2018.</p>

Issue identified in EIS	Matter	Mitigation measures
		As per the EIS and Modification Report, SCM describes its relationship and continued communications with the local Aboriginal community, the Jerrinja LALC and employment of Aboriginal peoples.
Work Health and Safety. Not raised in the Response to Submissions.		This was not raised as an issue during the submissions process. All management plans, protocols and WHS programs outlined in the EIS will continue.
Genetics, disease and introduced pest species. Sections 12 and 24 in the Response to Submissions.	<p>Concerns were raised that the species cultivated were exotic to NSW.</p> <p>Concerns were also raised that translocation of spat from Twofold Bay into Jervis Bay could increase risk of introduction of pest and disease.</p>	<p>A genetic analysis on the wild and farmed populations will be completed. As described above the genetic analysis will include;</p> <ul style="list-style-type: none"> (a) number, species and age of mussels collected; (b) location and date the mussels collected; (c) details of the methodology used to determine the genetic characteristics of the mussels collected; and (d) a clear summary of the findings of the study. <p>The objective of this testing is to determine what species of blue mussel is present in Jervis Bay currently, both in the wild and on farm. It is anticipated that all mussels will be the endemic hybrid of <i>Mytilus galloprovincialis</i> and <i>M. planulatus</i> consistent with stock already analysed from NSW coastal waters. If the Modification application is approved and genetic testing confirms details of hybrid populations DPIRD will amend aquaculture permit, lease and translocation policy documents to reflect this finding.</p> <p>In accordance with condition D,5, a Disease, Parasite and Pest Management Plan (DPPMP) was developed. NSW DPIRD Aquatic Biosecurity translocation protocols have also been implemented to mitigate against risks to stock genetics, disease, and introduced pest associated with the translocation of mussel spat (juvenile mussels) from other estuaries into NSW and from interstate hatcheries. As part of these protocols, spat produced in shellfish hatcheries must be spawned using approved broodstock.</p> <p>SCM has provided Annual Environmental Management Reports (2019-2023). Since deployment and cultivation began in 2019, there have been:</p> <ul style="list-style-type: none"> • No significant unexplained mortalities or illnesses of mussels

Issue identified in EIS	Matter	Mitigation measures
		<ul style="list-style-type: none"> • No new introduced pest/species identified on the lease • No observable changes in benthic communities • No mass mortality events • No evidence of increased/ changes in species/population dynamics. <p>SCM will update their Disease, Parasite and Pest Management Plan in consultation with NSW DPIRD to address the recommendation to reassess the risk of invasive species in light of new pest species and increased boat traffic to Twofold Bay. The NSW DPIRD Spat Translocation Protocol 2022 is reviewed as necessary to ensure the risk assessment and process remains current and effective for the management of risks of invasive species to JBMP. Any revisions will be captured in the reviewed DPPM.</p>
Vessel strike and acoustic pollution Section 15 (i.e., noise) in the Response to Submissions.	Consideration should be given to noise impacts on marine fauna, and that noise impacts should be quantified where possible.	The potential for acoustic pollution impacts on marine fauna are not expected to change from original EIS. No reports of any strikes or negative marine fauna interaction have been reported. The risk of the proposed modification having a significant impact on the behaviour of marine fauna was assessed to be low. The operations are small scale, utilizing an area of unobstructed waters in Jervis Bay with a buffer zone between the leases and key aggregation areas (e.g., natural reefs, seagrass beds and Sanctuary Zones). If the proposed modification is approved, the risk of changes in behavioural patterns is not expected to change. SCM will continue to implement and review the Marine Fauna Interaction Management Plan.
Threatened/Protected Species and Matters of National Environmental Significance Section 25 of the Response to Submissions.	<p>Concern was raised about seahorse management. There is also a need for a self-assessment of Matters of National Environmental Significance (NES) under the <i>Environmental Protection and Biodiversity Conservation Act 1999</i>, with particular consideration for potential impacts of mussel biofouling on shorelines of Currumbene Creek.</p>	<p>As stated in the EIS and in the Modification Report, a self-assessment for potential impacts on Matters of NES for EPBC was undertaken in line with the 'Significant Impact Guidelines 1.1. EPBC Act 1999. Commonwealth of Australia 2013.'</p> <p>The self-assessment was extended to consider specific concerns regarding biofouling in Currumbene Creek and impacts of biofouling on shorelines.</p> <p>In response to the submissions SCM will integrate seahorse protection in the Marine Fauna Interaction Management Plan and the Marine Fauna Entanglement Avoidance Protocol. The Marine Fauna Interaction Committee membership will be reviewed, and a seahorse expert will be a member.</p>
Behavioural changes	Community stakeholders claimed there was lack of data for evidence	As stated in the Modification Report and annual environmental reports, SCM have not had any entanglements with marine fauna since operations began and continue to operate in accordance with their Marine Fauna

Issue identified in EIS	Matter	Mitigation measures
Section 26 of the Response to Submissions.	<p>provided in relation to entanglement or death of large marine fauna.</p> <p>There were also fears that the mussel farm will increase the danger of shark frequency and attacks at Callala Beach.</p> <p>There were also concerns that the local dolphins are congregating around the leases and juvenile Port Jackson Sharks have been found under the lease where they were not found historically.</p>	<p>Interaction Management Plan (MFIMP).</p> <p>In response to the submissions, and as per EHG recommendation, SCM will update their MFIMP taking into consideration the current <u>Marine Wildlife Management Manual</u> and inclusion of the local Aboriginal community if carcasses are discovered as a result of entanglement with farming operations.</p> <p>NSW DPIRD have also further consulted with dolphin tour operators who claim that, regarding the mussel farm and the dolphins, they currently have not observed any significant changes to their behaviour however, there has been no official studies done therefore they cannot comment on this topic specifically. They noted that with an increase in whale populations it's likely that more whales will use Jervis Bay as a resting point in their migration.</p> <p>In the Response to Submissions, it is stated that SCM has not observed any apex predator (i.e., Tiger and Bull sharks). The anecdotal evidence surrounding the juvenile Port Jackson sharks suggest that the enriched benthic habitat and associated fish assemblages are providing a high-quality environment for these sharks.</p>
<p>Areas of conservation significance</p> <p>Section 11 in the Response to Submissions.</p>	<p>The leases are in Jervis Bay Marine Park. Concerns were raised about broader implications for the Marine Park including cultivation of a perceived exotic species, impacts to the seafloor from screw anchors and impacts to benthic ecosystems.</p>	<p>The Response to Submissions confirms that marine park permits will be sought as required prior to any works being undertaken.</p> <p>SCM will also take Remote Operating Vehicle (ROV) video footage prior to installation of screw anchors to confirm that the proposed lease areas are suitable in terms of benthic habitat and to detect sensitive habitats and threatened species, which, if present will be avoided. Underwater surveying of the area for UCH did not detect any assemblages that required reporting on. NSW DPIRD marine park staff will take part in this process, noting the areas are within a Habitat Protection Zone of Jervis Bay Marine Park.</p> <p>The Modification Report refers to section 55 of the <i>Marine Estate Management Act 2014</i> (MEM Act) and the Marine Estate Management (Management Rules) Regulation 1999 and includes reference to further detailed requirements of s55 of the MEM Act. If the proposed modification is approved the three leases would remain within the Habitat Protection Zone (HPZ) of JBMP. The majority of the proposed modification activities will also be undertaken in currently approved and used areas.</p> <p>Aquaculture in a HPZ is permissible with consent of the relevant Ministers for the marine estate and subject to the management rules for the Jervis Bay Marine Park (s1.18 (1) and (2); Marine Estate Management (Management Rules) Regulation 1999.</p>

Issue identified in EIS	Matter	Mitigation measures
Safety Section 23 of the Response to Submissions.	Concern was raised over safety issues associated with decreasing cardinal markers, and increased biofouling on boats that clog fittings.	<p>As stated in the Modification Report, the reduction of navigational markers has been supported by TfNSW and is in line with international standards of markings, compliant with the IALA buoyage system.</p> <p>The Response to Submissions reiterated the point that regardless of the sources of biofouling, vessel owners are responsible for the maintenance of their boats.</p>
Mapping Section 3 of the Response to Submissions.	<p>Mapping coordinate errors need to be corrected.</p> <p>Maps of seagrass and saltmarsh were requested in respect to the relocated lease areas.</p>	<p>Typographic errors in lease coordinates were addressed and corrected.</p> <p>Also, as requested, an addition of a map illustrating seagrass, mangrove, saltmarsh in both the proposed and current lease locations.</p>
Consultation process Section 8 of the Response to Submissions	Some were concerned that the consultation process was too short, and not taken seriously	<p>The proposed modification was exhibited as per NSW DPHI guidelines and instructions, using the Major Projects Planning Portal. Two weeks exhibition time was consistent with NSW DPHI Guidelines. Before public exhibition, NSW DPIRD undertook consultation with community groups and stakeholders via in person meetings, phone calls and emails. All consultation data, including during the development of the EIS is made publicly available.</p> <p>As stated in the Modification Report, if the modification is approved, SCM will update their Community Stakeholder Communications Management Plan to reflect new engagement opportunities, events, charities and communications with stakeholder in Jervis Bay.</p>