Marine Fauna Interaction Management Plan

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Executive Summary

The **Marine Fauna Interaction Management Plan** outlines procedures and protocols to reduce the likelihood of entanglement, vessel strikes, and behavioural disturbances to marine fauna. The management plan the roles and responsibilities for monitoring and responding to marine fauna interactions, including the appointment of observers during key project activities such as vessel movements

Project Details:

The Eden 1 Project (the Project) is a 200-hectare oceanbased aquaculture lease that will be used for the cultivation of naturally occurring Golden Kelp (*Ecklonia radiata*) in Disaster Bay on the far southern New South Wales (NSW) coastline of Australia. The Project will use taught longline infrastructure to support the growth of Golden Kelp approximately 660m offshore. The primary objective of this management plan is to **minimise the risk of adverse interactions** between the Project's infrastructure and marine fauna, including threatened and migratory species such as whales, dolphins, turtles, seabirds and seals.

The management plan specifies that regular inspections of the lease area will be conducted weekly, either via physical inspection, onshore monitoring, or drone verification to ensure the integrity of infrastructure and to identify potential hazards to marine fauna.

In the event of a marine fauna interaction, the management plan provides clear procedures for responding to entanglements, assessing the condition of affected animals, and implementing appropriate release or rescue actions in consultation with and under the guidance of relevant authorities in NSW. It also includes protocols for documenting and reporting all incidents, including data collection on marine fauna interactions through the Marine Fauna Interaction Register.

This plan is designed to ensure the protection of marine fauna and compliance with relevant environmental regulations while supporting the operational objectives of the Eden 1 Project.

Cover page image: Auskelp, Golden Kelp - 32 days old

1. Project Background

Auskelp Pty Ltd (Auskelp) proposes to establish the Eden 1 Project (the Project), a 200-hectare ocean-based seaweed aquaculture farm in Disaster Bay, off Wonboyn on the NSW far south coast. The lease area is known as AL21/004. This initiative represents the first commercial ocean-based kelp farm in NSW and the first commercial cultivation of Ecklonia radiata (Golden Kelp) globally. The project aims to foster an environmentally positive and sustainable seaweed aquaculture industry, creating economic opportunities for the region while conserving marine ecosystems.

The longline infrastructure will be suspended above the seabed and will not have an ongoing disturbance on benthic habitat. Seafloor disturbance will be restricted to the footprint of the screw anchors, which will be removed at the conclusion of the project. Ocean-based aquaculture infrastructure has the potential to interact with wildlife, including cetaceans, other whales, seabirds, sharks and turtles. Interactions can cause injury or death of wildlife, reduce the integrity and operation of ocean-based infrastructure and present a health and safety risk to personnel.

Auskelp is committed to being a responsible operator and providing the highest standard of wildlife management through staff awareness training and internal policy. This Marine Fauna Interaction Management Plan (MFIMP) has been developed to support the operation of the Eden 1 Project in Disaster Bay. The plan aims to mitigate potential adverse outcomes (marine fauna entanglement causing injury or death).

1.2 Objectives

The management plan has been developed to identify and mitigate potential impacts on marine fauna through direct and indirect interactions with the longline infrastructure of the Eden 1 Project, owned and operated by Auskelp Pty Ltd (Auskelp). The plan includes a Marine Fauna Interaction Protocol, Marine Fauna Monitoring Program and an Observer Protocol which have been prepared as a combined document with the following objectives:

- Minimise interaction with the project and wildlife,
- Prevent interactions that are harmful to wildlife,
- Establish monitoring procedures, and;
- Establish procedures for dealing with entangled wildlife.

The Marine Fauna Interaction Management Plan will be supported with relevant policies, protocols, and safe work method statements to promote a comprehensive approach to all farming operations that have the potential to impact on marine fauna. The management plan will be continuously reviewed and improvements added.



Figure 1.1: Disaster Bay NSW: Eden 1 Project & Test Areas

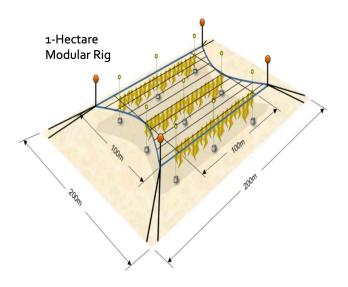


Figure 1.2: 1-Hectare Kelp Dropline Ocean Rig.

2. Legislative requirements and guidelines

2.1 Commonwealth Legislation

Environmental Protection and Biodiversity Conservation Act 1999

- The EPBC Act 1999 is the central piece of legislation governing the management of wildlife, particularly threatened and migratory marine species. This Act provides a legal framework to protect and manage nationally and internationally significant flora, fauna, ecological communities, and heritage places.
- The EPBC Regulations 2000 Part 8 Division 8.1 includes requirements for vessel speeds and minimum distances to cetaceans.

National Guidance on the Management of Whale and Dolphin Incidents in Australian Waters 2013

- Produced by the Federal government, these guidelines establish best practice guiding principles for the management of incidents where whales and dolphins are in distress. This includes situations where animals are entangled in human made materials.
- The guideline reinforces safety as the highest priority and ensure all people engaged in incidents act accordingly at all times.

2.2 NSW State Legislation

Biodiversity Conservation Act 2016 (BC Act):

- This Act identifies and protects threatened species, populations, and ecological communities within NSW.
- It replaces the former Threatened Species Conservation Act 1995 and is administered by the NSW Department of Planning and Environment.

Fisheries Management Act 1994 (FM Act):

- This Act is administered by the NSW Department of Primary Industries and focuses on the conservation of fish stocks, key fish habitats, threatened species, populations, and ecological communities of fish and marine vegetation.
- It includes provisions for the protection of threatened fish and marine vegetation species.

State Environmental Planning Policy (Biodiversity and Conservation) 2021:

- This policy integrates biodiversity considerations into land-use planning and decision-making processes.
- It ensures that developments, including aquaculture operations like seaweed farming, consider impacts on biodiversity and implement measures to mitigate adverse effects.

3. Wildlife Management Requirements

3.1 Approach to Preventing Wildlife Interactions

The Project has been designed to ensure the risk of entanglement and fauna interaction is minimal. Auskelp has adopted the following approaches to preventing wildlife interactions:

Rig Design to Avoid Entanglement:

- Structures have been designed with minimal loose lines or ropes to reduce the risk of wildlife entanglement.
- Tensioned and fixed lines will be used wherever possible to prevent slack that could entrap marine fauna.
- The rig will be made of materials that are durable and resistant to fraying or breakage, ensuring no floating debris enters the water.

Daytime Operations:

- All operations, including seeding, maintenance, and harvesting, will be conducted during daylight hours when visibility is highest, reducing the risk of collisions with marine fauna.
- Clear sightlines and the use of observers onboard will enable proactive detection of wildlife in the area.

Vessel Management:

- Vessel speeds will be limited to a safe threshold to minimise the risk of collisions with marine mammals and turtles.
- Established protocols for maintaining minimum distances from marine wildlife (e.g., dolphins, whales, and seabirds) will be strictly adhered to, in line with NSW and Commonwealth marine mammal interaction guidelines.
- Routes to and from the lease site will be planned to avoid sensitive areas, including rocky outcrops and high-use marine wildlife corridors.

Monitoring and Adaptive Management:

- Wildlife interaction monitoring will be undertaken regularly to ensure any unforeseen issues are identified and addressed promptly.
- Adaptive management measures will be implemented if interactions occur, such as modifications to rig design, vessel operation procedures, or additional monitoring efforts.

Minimising Light and Noise Disturbance:

- The project will limit artificial lighting and noise during operations to avoid disorienting or attracting marine wildlife.
- Machinery and vessels will utilise noise-reduction technology wherever feasible.

Compliance with Best Practices:

- The project will follow established national and international best practices for aquaculture and marine wildlife protection.
- Crew members will be trained on wildlife interaction protocols to ensure compliance with all environmental and operational requirements.

This comprehensive approach ensures that wildlife interactions are avoided or minimised through thoughtful design, operational protocols, and ongoing monitoring.

3. Wildlife Management Requirements (continued)

3.2 Cetaceans and Other Whales

Auskelp is committed to implementing rigorous wildlife management practices to ensure the protection of cetaceans (e.g. dolphins, toothed whales) and baleen whales (e.g. humpbacks) within and surrounding the proposed seaweed aquaculture lease. These requirements are based on best practice protocols used in the regulated whale watching industry in both NSW and Queensland, endorsed by the respective Department regulating wildlife interaction in each State.

Recognising the importance of maintaining natural behaviours and minimising disturbance, the following measures will be adhered to during all operational phases:

3.2.1 Operational Principles

Vessel Speed Limits

- Vessel speeds will be limited to a safe threshold when operating within or near the aquaculture lease area to reduce the risk of collisions and underwater noise disturbance.
- During transit to and from the site, vessel operators will adhere to existing maritime protocols for wildlife to minimise impacts on marine mammals.

Daytime and Low-Visibility Protocols

- All operations, including seeding, maintenance, and harvesting, will be conducted during daylight hours wherever possible to maximise visibility and reduce the likelihood of marine mammal interactions.
- If operations are required during low-visibility conditions (e.g. fog, night-time emergencies), navigational sonar and marine mammal observation procedures will be implemented to detect wildlife presence and avoid interactions.

Wildlife Monitoring

- A dedicated observer will be assigned on all vessels during operational activities to monitor for the presence of cetaceans and baleen whales. This observer will alert vessel operators to implement avoidance measures when required.
- Monitoring logs will be maintained to record all wildlife sightings, interactions, and corresponding mitigation actions.

Avoidance and Shutdown Procedures

- Operations, including vessel movements and seaweed rig activities, must cease immediately if a cetacean or baleen whale is observed within 1 km of the lease area.
- Operations may recommence only after the marine mammal has moved beyond 1 km from the site and has not been observed returning for at least 30 minutes.
- All vessels must avoid restricting the path of any marine mammals or altering their natural movement patterns.

Minimising Entanglement Risks

- The design of the seaweed farm structures has been carefully considered to minimise entanglement risks for cetaceans and baleen whales:
 - All lines, ropes, and buoys will be kept taut and appropriately tensioned to reduce the potential for slack lines that could pose entanglement hazards.

3. Wildlife Management Requirements (continued)

- The number of vertical lines in the water column will be minimised by utilising horizontal suspension systems wherever possible.
- A High-visibility floats and markers will be used to enhance the visibility of rig structures for both marine mammals and vessels.

Waste and Noise Management

- No rubbish, plastic, or other materials will be deposited in the marine environment, ensuring the integrity of the surrounding ecosystem.
- Vessel operations will be conducted with minimal engine idling to reduce underwater noise levels. Sudden noises or other actions that could startle marine mammals will be avoided.

3.2.2 Sightings

- If the whale is more than 1 km from the Project site, monitor the whale's whereabouts.
- If the whale is within 1 km of the Project site, monitor the whale's whereabouts and observe the approach distances described below.

3.3 Approach Distances

- Approach distances reduce the risk of disturbing whales or dolphins.
- They apply to all vessels. Approach distances are divided into 'caution zones' and 'no approach zones'.

Whale approach distances

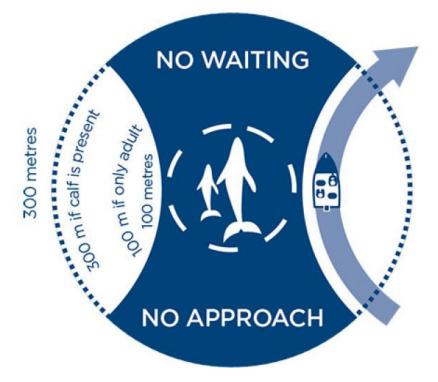


Figure 3.1: Whale approach distances, as detailed by NSW DPI Whale Watching

3. Wildlife Management Requirements (continued)

Vessel operators will follow established maritime protocols, including maintaining minimum approach distances in accordance with NSW Government guidelines.

3.3.1 Minimum approach distances & directions

- 300 metres for whales and dolphin with calves.
- 100 metres for whales and dolphins without calves.
- No approach from the rear.
- No waiting for approaching whales.

Under no circumstances will vessels approach or drive into a pod of marine mammals, cause separation of groups, or interfere with their natural behaviours.



4.1 Whale and Dolphin Identification

The waters off the southern coastline of NSW, including areas near Disaster Bay and Twofold Bay, are frequented by a variety of whale, dolphin, and porpoise species. These species can be identified by distinct physical characteristics, behavioural patterns, and surface appearances. Below is an outline of the key features to look for when identifying whales and dolphins from a vessel.

General Identification Features:

When observing whales and dolphins, key characteristics include:

- Size: Approximate length can help distinguish between smaller dolphins and larger whale species.
- Blow (Spout): The shape, height, and visibility of the water spray when the animal surfaces to breathe.
- Dorsal Fin: Shape, size, and position of the fin on the animal's back.
- Colouration: Body markings, patterns, or spots.
- Tail (Fluke): Shape and movement of the tail when diving.
- Behaviour: Surfacing, breaching, slapping fins, or travelling in pods.

4.2 Common Cetacean Species in Southern NSW

1. Humpback Whale (Megaptera novaeangliae)

- Size: 12–16 metres in length; weigh up to 40 tonnes.
- Blow: Tall, bushy blow that rises 3–5 metres.
- Dorsal Fin: Small, hooked dorsal fin located far down the back.
- Colouration: Dark grey to black with white undersides on the belly and flippers. Long pectoral fins with unique patterns underneath.
- Tail (Fluke): Large, broad tail flukes with distinct black-and-white patterns unique to individuals.
- Behaviour: Known for breaching, pectoral fin slapping, and tail slapping. They undertake annual migrations along the NSW coastline between feeding grounds in Antarctica and breeding grounds in tropical waters.

2. Southern Right Whale (Eubalaena australis)

- Size: 14–18 metres in length; weigh up to 80 tonnes.
- Blow: Distinctive V-shaped blow due to two widely spaced blowholes. Blow reaches 3–5 metres high.
- Dorsal Fin: No dorsal fin-smooth, rounded back.
- Colouration: Dark grey to black with irregular white patches on the belly. Unique callosities (rough, white patches of skin) on their head for individual identification.
- Tail (Fluke): Broad, smooth-edged tail fluke.
- Behaviour: Moves slowly and often surfaces close to shore. Frequently seen "spy-hopping" (raising its head vertically above water) or "logging" (resting near the surface).



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3. Bottlenose Dolphin (Tursiops truncatus)

- Size: 2.5-4 metres; weighs 200-500 kg.
- Blow: Small, subtle blow.
- Dorsal Fin: Prominent, curved dorsal fin.
- Colouration: Grey upper body with lighter or white underside. Smooth, robust body shape.
- Behaviour: Frequently observed in small groups close to shore, often riding waves or interacting with vessels. Moves gracefully, surfacing smoothly.

4.3 Identifying Cetaceans at Sea

- Use Binoculars: Look for surface disturbances such as splashes, dorsal fins, or spouts.
- Watch for Patterns: Track repeated surfacing movements, as whales and dolphins breathe at regular intervals.
- Look for Birds: Large gatherings of seabirds may indicate feeding cetaceans nearby.
- Be Patient: Whales often surface for 2–3 breaths before diving, which allows for better identification.
- By recognising these key characteristics, vessel operators and wildlife observers can identify and monitor the whales and dolphins present in southern NSW waters. This information assists in minimising disturbances and implementing appropriate wildlife management measures during seaweed farming operations.

5. Incident Response

Entanglement and Incident Response

In the event of an entanglement involving marine wildlife, AusKelp will immediately:

- Cease all operations and alert relevant authorities (e.g. NSW National Parks and Wildlife Service or ORRCA). Contact the NSWPWS on 13000PARKS (1300 072 757) or ORRCA on 02 9415 3333.
- Follow best-practice protocols for safe disentanglement of small uninjured fauna where it is safe to do so, as per guidelines set by authorised marine wildlife rescue organisations.

5.1 Deceased Cetaceans

If a deceased cetacean (e.g., whale or dolphin) is found within or nearby the lease area in NSW waters, the following steps are recommended to ensure appropriate management, reporting, and compliance:

1. Safety First

- Ensure the safety of all personnel and vessels operating near the deceased animal.
- Maintain a safe distance from the carcass, as decomposing cetaceans can carry health risks or attract predators (e.g., sharks).

2. Record Key Information

The following details should be noted as accurately as possible:

- Date and time the deceased cetacean was observed.
- Exact location (GPS coordinates or general area description).
- Species identification if possible (e.g., humpback whale, bottlenose dolphin).
- Estimated size and physical condition of the carcass.
- Any obvious signs of injury or entanglement, such as fishing gear, rope, netting, or vessel strike marks.
- Environmental conditions at the time (e.g., weather, tide).
- Photographic evidence: Take clear photos (if safe to do so) of the carcass, including distinguishing features like flippers, dorsal fins, flukes, or visible injuries.

3. Notify Relevant Authorities

Under NSW regulations, the relevant authorities must be notified immediately when a deceased cetacean is found:

NSW National Parks and Wildlife Service (NPWS)

- Contact the local NPWS office or the NPWS Duty Officer for the region.
- For general wildlife incidents, NPWS can also be reached via the Environment Line on 131 555.

The Office of Environment and Heritage (OEH)

• OEH manages cetacean strandings and provides guidance for further assessment or removal of the carcass.

NSW Department of Primary Industries (DPI) - Fisheries Division

• Notify DPI if there are indications of entanglement with aquaculture infrastructure or fishing gear.

Australian Marine Mammal Centre (AMMC)

• AMMC coordinates national cetacean incident responses and may assist with research or post-mortem examination.

4. Avoid Disturbance

- Do not attempt to move, tow, or dispose of the carcass without formal approval from NPWS or other managing authorities.
- Maintain a minimum vessel distance of 100 metres from the deceased animal, where possible, to reduce risks.

5. Follow Up

- Authorities may request assistance in monitoring the carcass (e.g., tracking drift patterns, tidal movements) to prevent navigational hazards or determine the cause of death.
- Document any further sightings or interactions related to the deceased cetacean and provide updates to NPWS or relevant agencies.
- By promptly reporting and documenting deceased cetaceans, operators contribute to:
- Compliance with NSW wildlife regulations.
- Understanding potential causes of mortality (e.g., natural, entanglement, vessel strike).
- Conservation efforts to protect marine mammal populations.

5.2 Injured Wildlife

Other wildlife, such as seabirds, turtles and seals may present with injuries within the Project area, or in very rare circumstances, may be injured by the Project infrastructure. The following procedure highlights the process of handling injured wildlife that may be encountered:

Step 1: Initial Assessment

- Observe the animal from a safe distance to assess the extent of the injury.
- Ensure handling the animal will not place you or others at risk (e.g., avoid sharp beaks, claws, or bites).

Injured Seabirds

- Gently approach the bird to minimise stress or further injury.
- Use a towel or blanket to carefully cover and secure the bird to restrict movement and protect yourself.
- Place the bird in a ventilated box or container. Keep it in a quiet, warm, and dark location.

Injured Turtles

- If the turtle is in the water, gently guide it onto the vessel or a stable platform.
- Support the turtle's body weight evenly, avoiding handling it by its flippers or tail.
- Place the turtle in a shaded, secure, and cool area. Keep it moist using a damp towel or cloth, but do not submerge it in water.

Injured Seals

- Do not approach seals unless it is safe to do so. Injured seals may become aggressive when stressed.
- If safe, observe the seal to determine if it can move on its own. Avoid direct handling unless properly trained.
- Keep the seal away from other animals or human activity while awaiting expert assistance.

Step 2: Notify the Relevant Authorities

Contact the following for advice and assistance with injured wildlife:

NSW National Parks and Wildlife Service (NPWS):

- ♦ Phone: 1300 361 967
- For marine wildlife emergencies, contact the Marine Parks Authority via NPWS.

NSW Department of Primary Industries (Fisheries):

♦ Phone: 1800 043 536

Step 3: Monitor the Animal

- While waiting for professional assistance, monitor the animal's condition without causing additional stress.
- · Avoid feeding or attempting to treat injuries unless instructed by wildlife experts.

Step 4: Record and Report the Incident

- Document the incident, including the species, location, condition, and actions taken.
- Submit the report to relevant authorities to comply with the Marine Fauna Interaction Management Plan and legislative requirements.

This process ensures the injured animal is handled humanely and in compliance with legal and ecological guidelines.

5.3 Necropsy and Disposal of Deceased Fauna

In the event that marine fauna is found deceased as a result of an entanglement or other interaction with the infrastructure, the following steps will be followed:

Necropsy:

• Where feasible and safe, the carcass of deceased fauna will be subject to a necropsy to determine the cause of death. This process will be carried out by a qualified marine mammal or wildlife veterinarian, as organised by relevant authorities (e.g., NPWS or an authorised research institution).

Note: The necropsy will be documented, with all findings recorded.

Disposal:

- The method of disposal will be determined based on the size and condition of the carcass. Small to medium-sized carcasses may be disposed of by burial at an approved site or other appropriate methods as recommended by authorities.
- Larger carcasses may require removal to an approved disposal facility or may be kept for scientific purposes. In some cases, the Australian Museum or other authorised research institutions may request the carcass for further study.

Consultation and Compliance:

- The National Parks and Wildlife Service (NPWS) Wildlife Management Officers will be consulted to ensure all procedures have been correctly followed.
- All disposal activities will comply with local environmental regulations and guidelines to ensure safe and appropriate handling of deceased marine fauna.
- This process ensures the injured animal is handled humanely and in compliance with legal and ecological guidelines.

5.4 Observer protocol

The Observer Protocol aims to minimise adverse interactions between the infrastructure of the Eden 1 marine aquaculture lease and marine fauna through early detection of marine fauna and associated issues. It is a key component of the Marine Fauna Interaction Management Plan.

A nominated observer must be present during all vessel movements and activities associated with the Eden 1 lease to minimise the risk of vessel strikes, navigational hazards, and marine fauna interactions. The observer's role is especially critical during the deployment of longlines and the anchoring of rigs to the seafloor. Service vessels must maintain appropriate distances from marine fauna while in transit to minimise potential impacts.

If deployment activities occur between September and November, the observer must ensure that approach distances specified in **Section 3.2** are adhered to. These include maintaining a minimum distance of 100 metres from all marine mammals, increasing to 300 metres for whales with calves.

All marine fauna interactions observed near the Eden 1 lease or involving service vessels will be recorded using the Marine Fauna Interaction/Cetacean Report Form **(See Attachment 1)**.

Special attention will be given to the behaviour and movements of threatened and migratory species, such as Humpback and Southern Right whales, to prevent vessel strikes, entanglements, predatory interactions, and behavioural changes.

IMPORTANT: No nightworks are proposed during the construction or operational phases of the project, reducing the risk of impacts to light-sensitive species.

All observations will be summarised in the Marine Fauna Interaction Register. Periodic reviews of the observation register and incident reports will be conducted to identify issues of concern and recommend areas requiring additional management focus.



6.1 Lease Inspection Protocol

Regular inspections of the Eden 1 Marine Aquaculture Lease are crucial to ensuring the safety of marine fauna and the structural integrity of the infrastructure. The inspections aim to identify potential hazards, including loose ropes or entanglement risks, and to monitor the condition of the rigging and longlines. The inspections will be conducted at a minimum on a weekly basis, with flexibility for more frequent inspections depending on conditions and operational requirements.

Inspection Methods:

1. Drone Inspections:

Frequency: Weekly, or more frequently if required by operational conditions or following any reported issues.

<u>Details</u>: Drones will be used to conduct visual surveys of the lease area, focusing on longlines, mooring points, anchors, and riggings. The drone will provide high-resolution imagery, enabling the identification of any potential issues such as damage to infrastructure, loose ropes, or visible marine fauna interactions.

<u>Benefits:</u> Drones allow for efficient monitoring of the entire lease area with minimal disruption to marine fauna and operational activities.

2. Physical Inspections:

Frequency: At least once a week, or as required based on drone findings or operational needs.

Details: Service vessels will be used to conduct physical inspections of the infrastructure, including:

- Inspection of all mooring lines, anchors, and riggings for signs of wear, damage, or looseness.
- Visual checks of ropes and buoys to ensure that they are taut and do not pose an entanglement risk.
- · Monitoring for any accidental accumulation of marine debris that could entangle or obstruct marine fauna.

<u>Procedure:</u> The inspections will be documented and any issues found will be recorded, and prompt action will be taken to address identified risks.

Areas to be Inspected:

- Longlines and Mooring Points: Ensure that all longlines are taut, with no loose ropes or frayed areas that could present a hazard to marine fauna.
- Anchors and Buoys: Inspect all anchors and associated mooring equipment for stability and damage. Ensure that buoys are securely fastened and not posing a risk of entanglement.
- Ropes and Chains: Ensure that all ropes and chains are in good condition and do not have any slack or entanglement hazards.
- Infrastructure Integrity: Check the overall structural integrity of all rigs and associated equipment to prevent accidental damage or failure that could lead to interactions with marine fauna.



6.2 Inspection Reporting and Action:

- <u>Documentation</u>: All inspections, whether drone or physical, will be documented. This includes noting the date and time of inspection, the observer(s), and any issues found during the inspection.
- <u>Follow-Up:</u> If any issues or risks are identified during the inspection, immediate corrective actions will be taken. This could include removing loose ropes, repairing infrastructure, or adjusting mooring lines.
- Inspections will be reviewed periodically to assess their effectiveness. If conditions change (e.g., increased risk of marine fauna interactions or infrastructure wear), the inspection frequency or methods may be adjusted to ensure the highest level of safety for marine fauna.

6.3 Marine Fauna Interaction Register

The Marine Fauna Interaction Register **(Appendix A)** is a crucial tool for recording and monitoring all interactions between marine fauna and the Eden 1 marine aquaculture lease infrastructure. The following details must be recorded for each interaction to ensure comprehensive tracking, response, and management.

Required Data to be Collected:

1. Date and Time of Interaction:

• The exact date and time the interaction or observation occurred.

2. Observer Information:

• Name and role of the observer (e.g., crew member).

3. Location of Interaction:

- GPS coordinates (latitude/longitude) of the observed interaction or animal presence.
- Proximity to the infrastructure (e.g., near longlines, within lease area).

4. Species Identified:

- Species name (e.g., Humpback whale, Green sea turtle).
- Any identifiable characteristics (e.g., calf, markings).

5. Number of Individuals Present:

- Total number of individuals involved in the interaction.
- If applicable, number of calves (for cetaceans).

6. Nature of the Interaction:

- Description of how the marine fauna interacted with the infrastructure (e.g., proximity to longlines, physical contact with ropes, entanglement).
- Duration of interaction or presence (e.g., how long the animal stayed in the area).

6. Monitoring (continued)

7. Behaviour of Marine Fauna:

• Specific behaviour observed (e.g., resting, feeding, travelling, milling, socialising).

8. Environmental Conditions:

- Sea state (calm, choppy, rough).
- Wind conditions (light, moderate, strong).
- Cloud cover (clear, overcast, rainy).
- Visibility (good, poor, foggy).
- Water temperature, if applicable.

9. Boat Traffic:

- Any vessels operating in the area during the interaction (e.g., service vessels, recreational boats).
- Distance from the interaction.

10. Photographic or Video Evidence (if available):

- A record of the interaction in the form of photos or videos.
- Attachments of visual documentation to the register when possible.

11. Follow-Up Actions:

• Notes on any follow-up activities or required actions (e.g., reporting to authorities, response plan activation, entanglement intervention).

12. Other Observations:

• Any additional relevant information that may help in understanding the context of the interaction (e.g., health of the animal, any signs of distress, proximity to other wildlife).



APPENDIX A - Marine Fauna Interaction Register [Eden 1]

Date & Time	Observer Name	GPS Location	Species	Number	Interaction	Behaviour	Conditions	Boat Traffic	Mitigation	Evidence	Follow Up	Other observations

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