



## **Appendix 6**

# **Marine Fauna Interaction Management Plan**

**Prepared By:**  
**2020/07**

Sam Gordon and Anni Conn

# TABLE OF CONTENTS

<b>LIST OF FIGURES</b>	<b>2</b>
<b>LIST OF TABLES</b>	<b>2</b>
<b>1. INTRODUCTION</b>	<b>1</b>
<b>2. MARINE FAUNA INTERACTION COMMITTEE</b>	<b>2</b>
<b>3. OBSERVER PROTOCOL</b>	<b>2</b>
<b>4. MARINE FAUNA INTERACTION PROTOCOL</b>	<b>3</b>
<b>4.1 <i>Cetacean Monitoring</i></b>	<b>6</b>
<b>4.2 <i>Training and Response</i></b>	<b>7</b>
<b>5. SSI-5657 CONSENT CONDITIONS TABLE OF REFERENCE</b>	<b>9</b>
<b>6. DOCUMENT CONTROL REGISTER</b>	<b>17</b>
<b>7. CONSULTATION</b>	<b>18</b>
<b>8. REFERENCES</b>	<b>19</b>
<b>9. ATTACHMENT 1 - MARINE FAUNA INTERACTION / CETACEAN REPORT FORM</b>	<b>20</b>
<b>10. ATTACHMENT 2 - MARINE FAUNA INTERACTION / OBSERVATION REGISTER</b>	<b>23</b>
<b>11. ATTACHMENT 3 - MARINE FAUNA ENTANGLEMENT REPORT FORM</b>	<b>25</b>
<b>12. ATTACHMENT 4 - ENTANGLEMENT ASSESSMENT PROCESS</b>	<b>28</b>

## **LIST OF FIGURES**

Figure 1: Recommended marine mammal approach distance (Source NSW DPIE, 2014)	22
---	----

## **LIST OF TABLES**

Table 1: Listing of entanglement respondent members for South Coast Mariculture	5
Table 2: SSI – 5657 SCMCAL Consent Conditions and Reference Location in EMP and Appended Sub Plans	9

# 1. INTRODUCTION

The Marine Fauna Interaction Management Plan has been developed to identify and mitigate potential impacts on marine fauna through direct and indirect interactions with the South Coast Mariculture. The plan includes a Marine Fauna Interaction Protocol, Marine Fauna Monitoring Program and an Observer Protocol have been prepared as a combined document as the matters are interrelated.

In accordance with consent condition D9 of the State Significant Infrastructure Approval SS1-5657, the Marine Fauna Interaction Protocol component of this document details the following:

- 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.
- Contact details of an Entanglement Committee, which will monitor the implementation and effectiveness of the Marine Fauna Interaction Management Plan, and provide advice to South Coast Mariculture in the event of marine fauna entanglement.
- Response procedures, drills and training that will be carried out to ensure appropriate response to deal with entanglement incidences.

The macrobenthic fauna monitoring has not been included in this plan as it has been incorporated within the Water Quality and Benthic Environment Monitoring Program. The South Coast Mariculture Commercial Shellfish Aquaculture leases (SCMCAL) are located within a Habitat Protection Zone of the Jervis Bay Marine Park. In addition, vessels servicing the SCMCAL may pass through other zones within the marine park. The marine park zones have various specific restrictions that apply to the protection of marine fauna which has been included in this plan.

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 Marine Fauna Interaction Management Plan will be reviewed every 5 years and improvements employed to meet this goal.

## **2. MARINE FAUNA INTERACTION COMMITTEE**

The Marine Fauna Interaction Management Plan has been developed in consultation with the Marine Fauna Interaction Committee which consists of the following personnel:

- Susan Crocetti (Team Leader, Marine Wildlife, Biodiversity and Wildlife Team) National Parks and Wildlife Service, NSW Department of Environment, Energy and Science.
- Andrew Marshall (Project Officer , Marine Wildlife, Biodiversity and Wildlife Team) National Parks and Wildlife Service, NSW Department of Environment, Energy and Science
- Manager, Jervis Bay Marine Park NSW Department of Primary Industries.
- Sam Gordon, (Director) South Coast Mariculture
- Hika Rowntree (Operations Manager), South Coast Mariculture
- Graeme Bowley (Senior Policy Officer, Aquaculture) NSW Department of Primary Industries
- Dr Nick Otway (Senior Research Scientist (sharks)), NSW Department of Primary Industries.

See Table 1 for the contact details of the Marine Fauna Interaction Committee and additional entanglement respondent members. Other personnel with relevant expertise may join the committee as required to investigate specific matters.

## **3. OBSERVER PROTOCOL**

The Observer Protocol aims to minimise adverse interactions between the South Coast Mariculture, marine fauna and other waterway users by early detection of marine fauna and associated issues. The Observer Protocol is a key component of the Marine Fauna Interaction Management Plan.

A nominated observer must be present during all vessel movements and South Coast Mariculture activities to minimise the risk of vessel strikes and navigational issues, as well as monitor marine fauna interactions. An observer will be particularly important during the deployment of the mussel lines and construction works. Appropriate distances from marine fauna where practicable will be maintained by service vessels when in transit.

If deployment activities are to be undertaken between the months of August to November the observer must be approved by NSW Environment, Energy and Science (NSW EES). Where safe to do so and following discussion with the vessel master, the directions of the NSW EES approved observer must be complied with to mitigate any potential impacts on cetacean species particularly female whales with calves.

Observations of marine fauna interactions with the SCMCAL and service vessels or in close proximity to the SCMCAL will be recorded on a separate Marine Fauna Interaction/Cetacean Report Form (See Attachment 1).

Particular attention will be given to dolphins and the movements of threatened and protected species, migratory species (e.g. Humpback and Southern Right whales) and light sensitive species (when conducting night work), as well as any vessel strike events, behavioural changes, entanglements and predatory interactions.

All observations will be summarised on the Marine Fauna Interaction/Observation Register (See Attachment 2) and these entries and any incident reports will be periodically reviewed by the Marine Fauna Interaction Committee to identify any issues of concern and areas that need further management attention.

All records of marine fauna that are observed during the construction and operation stages will be provided to the (i) NSW BioNet Atlas database, and (ii) to the Jervis Bay Marine Park office, for their records and the DPI Fisheries online Threatened Species Sightings form.

#### **4. MARINE FAUNA INTERACTION PROTOCOL**

The Marine Fauna Interaction Protocol was developed in consultation with the NSW Environment, Energy and Science and has been successfully used on other marine based aquaculture farms in NSW. This protocol aims to minimise the potential for entanglement of marine fauna in mussel farm infrastructure, as well as implement prompt and appropriate management responses if an event occurs in order to maximise successful releases, as well as minimise injuries and stress to marine fauna.

If marine fauna become entangled the main priority is to assess their condition and for appropriately trained personnel, usually EES and/or NSW DPI staff, to determine the most appropriate and safe release method. It is also important to discern whether

the animal needs to recuperate and be provided with further treatment under veterinary supervision. In the event of deceased animals, the carcasses of dead marine fauna will where possible be necropsied and then be disposed of appropriately following consultation with the Marine Fauna Interaction Committee. The method of disposal will be determined largely by the size of the carcass. Some carcasses may be kept for scientific purposes (e.g. Australian Museum or other authorised research institutions). National Parks and Wildlife Service (NPWS) – Wildlife Management Officers, will be consulted to ensure all relevant procedures have been carried out e.g. the incident has been recorded in Marine Fauna “Elements” Database.

All marine fauna interaction events will be recorded in the Marine Fauna Interaction/Observation Register (See Attachment 2). In the event of an entanglement, an incident report detailing the time, location, species and the entanglement circumstances, will be prepared and provided to members of the Marine Fauna Interaction Committee and any other relevant authorities. For further details refer to Attachment 3 – Marine Fauna Entanglement Report Form and Attachment 4 – Entanglement Assessment Process.

A risk assessment will be completed for all incidents which will form part of the post action report. The protocol and any incident reports will be reviewed annually to assess the effectiveness of this protocol and identify any issues of concern. The review will also enable modifications to be made based on recommendations from post action reports, field experience and professional advice.

In the event of a marine fauna entanglement, dependant on the species of marine fauna, the respective personnel listed in Table 1 should be contacted to ensure the appropriate fauna rescue/response team can be activated, e.g. cetacean – NPWS; sharks – NSW DPI.

<b>Representative</b>	<b>Position</b>	<b>Name</b>	<b>Contact details</b>
<b>NPWS</b>	NPWS 24/7 contact		1300 0 PARKS (1300 0 72757)
<b>NPWS</b>	Marine Wildlife Team Leader	Susan Crocetti	6650 7114 0403125807 Susan.crocetti@environment.nsw.gov.au

<b>NSW DPI - Jervis Bay Marine Park</b>	Manager	TBA	T: 02 4428 3000 M: TBA E: Jervis.bay@dpi.nsw.gov.au
<b>NSW DPI - Jervis Bay Marine Park</b>	Ranger	Marty Hing	T: 02 4428 3003 M: 0436 327915 E: marty.hing@dpi.nsw.gov.au
<b>NSW DPI - Fisheries</b>	JBMP Fisheries Officers	DFO Mark Fackerell  FO Eddie Douglas	M: 0408 674 686 E: Mark.fackerell@dpi.nsw.gov.au  M: 0447 537 355 E: Eddie.douglas@dpi.nsw.gov.au
<b>NSW DPI - Fisheries</b>	Senior Research Scientist (sharks)	Nick Otway	T: 02 49163805 M: 0417273567 Nick.otway@dpi.nsw.gov.au
<b>NSW DPI - Fisheries</b>	Snr Policy Officer	Graeme Bowley	T: 02 4916 3845 M: 0438 264 039 E: Graeme.bowley@dpi.nsw.gov.au
<b>NSW Roads &amp; Maritime</b>	Boating Safety Officer Jervis Bay	Mick Musson	M: 0427 751 857
<b>ORRCA (marine mammals)</b>			02 9415 3333
<b>Australian Seabird Rescue</b>			02 6686 2852 office 0428 862 852 rescue

*Table 1: Listing of entanglement respondent members for South Coast Mariculture*

There are a series of requirements that the South Coast Mariculture must adhere to in order to comply with the Marine Fauna Interaction Protocol including:

- Consultation with the Marine Fauna Interaction Committee prior to the construction and deployment of the longline infrastructure to ensure it incorporates the latest best practice for mitigating marine fauna interactions. For example, large diameter should be used for mooring/anchor lines where

practical to assist in making the infrastructure more visible to marine fauna and mitigate interactions;

- Ensure all reasonable action to remedy, alleviate and reduce the incidence of adverse marine fauna interactions are undertaken;
- Conduct regular inspections of anchors, chains, ropes and buoys to ensure compliance with the 'taut rope policy' to minimise the chance of entanglement. These inspections should be conducted daily where practicable. Regular inspections also promote early detection of entanglements which increases the chance of successful release of marine fauna and minimises the chance of infrastructure damage;
- Ensure that there are no loose ropes or other aquaculture gear on any component of the longline infrastructure;
- Notify immediately relevant government agencies, including the NPWS and JBMP, if an entanglement incident occurs, including events where the entangled animal may have been released (assisted or self-released);
- Develop a response plan to deal with entanglement incidents in consultation with NSW EES and other relevant departments and organisations;
- Ensure that a number of staff members receive regular training on wildlife rescue techniques, as well as conduct response plan drills, to ensure appropriate responses to potential entanglement incidents. Drills should be conducted with the members of the rescue team;
- Maintain a copy of the protocol and the contact details of members of the Marine Fauna Interaction Committee on all service vessels. In the event of an entanglement, the aquaculture permit holder must provide assistance to the committee if required, including the rescue team;
- Document any incidence of death or injury to marine fauna associated with the infrastructure and activities of the South Coast Mariculture including a statement of how the incident occurred and any action taken; and
- Implement the control measures listed in Attachment 5 and 6 for potential marine fauna interactions.

#### **4.1 Cetacean Monitoring**

It is considered unlikely that dolphins or other cetaceans will represent a significant predatory concern to the South Coast Mariculture

A Cetacean Interaction Register has been developed (See Attachment 1) which will record the following details:

- Time and date of any cetacean interactions;
- Observer duration on the lease and purpose of observer visit (e.g. maintenance);
- Sea conditions (e.g. sea state, wind, cloud cover) and boat traffic (on and adjacent to the lease);
- Number of individuals present including the number of calves;
- Species
- The nature of the interaction (i.e. duration of the cetacean visit, proximity to the longlines, direction of travel);
- Description of cetacean behaviour (i.e. resting, milling, feeding, socialising, travelling);
- Degree of development of the lease site (i.e. number of longlines, stocking density); and;
- A photo record of the visit if possible.

South Coast Mariculture will record all observations of cetacean interactions with the lease area, including longlines and vessels. These records will be included in the Annual Report and distributed to the NPWS, the MPA and the NSW EES offices in Jervis Bay. The Annual Report will be made available on the South Coast Mariculture website – [www.southcoastmariculture.com.au](http://www.southcoastmariculture.com.au)

#### **4.2 Training and Response**

In accordance with consent condition D9 of the State Significant Infrastructure Approval SS1-5657, the Marine Fauna Interaction Protocol South Coast Mariculture in consultation with NSW EES, will develop a training package for the staff working on the SCMCAL during the operation stage. Due to COVID, at the time of writing the NSW EES and NSW DPI are still to finalise response measures to marine fauna interactions. South Coast Mariculture will maintain a watching brief on available training packages and events. Once COVID restrictions permit, NSW DPI will be organising a visit to the Jervis Bay leases to provide EES staff with a better understanding of the aquaculture activity and discussions will be held on the Marine Fauna Interaction Plan and what training and / or assistance South Coast Mariculture needs in relation to marine fauna interactions. Once developed, the training package requirements will be reviewed by the Marine Fauna Interaction Committee.

In addition, South Coast Mariculture in consultation with NSW EES, will develop a program to assist NSW EES in responding to local marine fauna entanglements and/or in undertaking NSW EES simulation training events.

## 5. SSI-5657 CONSENT CONDITIONS TABLE OF REFERENCE

The table below lists the SSI – 5657 Jervis Bay Shellfish Aquaculture Lease consent conditions and references the location in the EMP and Appended Sub Plans that the condition has been addressed.

Table 2: SSI – 5657 SCMCAL Consent Conditions and Reference Location in EMP and Appended Sub Plans

Condition	Location of Reference
<p><b>Condition E1 – Environmental Management Plan</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>(a) the strategic framework for environmental management of the development;</li> <li>(b) the statutory requirements that apply to the development;</li> <li>(c) the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development;</li> <li>(d) the management measures that would be implemented to address environmental issues;</li> <li>(e) how the environmental performance of the development would be monitored and managed;</li> <li>(f) the procedures that would be implemented to respond to any non-compliances and emergencies including a contact number to report emergency events; and</li> <li>(g) include copies of the various strategies and plans that are</li> </ul>	<p><b>The South Coast Mariculture Environmental Management Plan (EMP) plus Sub Plans – Appendices 1 to 7.</b></p> <ul style="list-style-type: none"> <li>a) Strategic framework is set out in Section 2.1.</li> <li>b) Statutory framework is set out in Section 2.2</li> <li>c) Roles and responsibility of key personnel are set out in Section 2.1.</li> <li>d) Management measures are set out in the individual management plans provided as appendices to the EMP, and briefly outlined in the EMP</li> <li>e) Environmental performance of the development would be managed through annual reporting and independent environmental audits, as set out in Section 2.3, monitoring of water quality &amp; the benthic environment is outlined in section 4.1.3, 4.3</li> <li>f) Procedures for non-compliances / incidences are set out in Section 2.3 and 2.6 and in the Emergency Protocol in Appendix 4. An emergency contact list is provided at Attachment 7. It is noted that the Planning Secretary must be notified of all incidents/emergencies in accordance with condition E8 and E9 of the approval.</li> </ul>

required under the development.	g) Copies of all plans have been provided as appendices to the EMP.
<b>Condition</b>	<b>Location of Reference</b>
<p><b>Condition E2 – Management Plan Requirements</b></p> <p>The Proponent shall ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria; and</li> <li>• 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;</li> </ul> <p>(c) a description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>• impacts and environmental performance of the development; and</li> <li>• effectiveness of any management measures (see € above);</li> </ul>	<p><b>The South Coast Mariculture EMP and attachments covers this requirement.</b></p>

<p>(e) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(f) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>• incidents;</li> <li>• complaints;</li> <li>• non-compliances with statutory requirements; and</li> <li>• exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> <p>(g) a protocol for periodic review of the plan.</p>	
<b>Condition</b>	<b>Location of Reference</b>
<p><b>Condition C1 – Deployment of Lease Infrastructure</b></p> <p>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:</p> <p>(a) be approved by the Secretary at least one month prior to deployment;</p> <p>(b) include details of the species to be farmed;</p> <p>(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;</p> <p>(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);</p> <p>(e) detail the location of the land-based site(s) (if any) for the</p>	<p><b>Appendix 1 - Construction Deployment and Traffic Management Plan.</b></p> <p>a) The plan has been submitted to the Secretary for approval.</p> <p>b) Species to be farmed are outlined in Section 2. These align with the approved list of species in the approval.</p> <p>c) Detailed plans of infrastructure to be used are provided in Section 6.</p> <p>d) A qualitative commentary around measures to be implemented to minimise visual impacts is provided in Section 8.</p> <p>e) Details of land-based sites are provided at Section 3. Timetable for deployment is provided at Section 4.</p> <p>f) Details on traffic, noise and waste management are provided at Section 5.</p>

<p>construction or storage of Lease Infrastructure and indicative timeframe for all deployment activities;</p> <p>(f) include if necessary, details on traffic, noise and waste management;</p> <p>(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 describe the procedures to decommission any construction site including removal of all construction facilities and restoration of the site to its original state.</p>	<p>g) A Community Stakeholder Communication Management Plan (<b>Appendix 2</b>) has been prepared to provide the mechanisms for disseminating information during operation. An outline of communication tools is provided in Section 10. Details of complaints management is at Section 12.</p> <p>h) Decommissioning is outlined in Section 13.</p>
Condition	Location of Reference
<p><b>Condition C11 – Structural Integrity and Stability Monitoring Program</b></p> <p>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:</p> <p>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</p> <p>b) details of servicing requirements of anchors, ropes, chains and connectors. Servicing must be undertaken at least annually;</p> <p>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.</p>	<p><b>A Structural Integrity and Stability Monitoring Program is provided in Attachment 8 of the South Coast Mariculture EMP</b></p> <p>a) A monitoring schedule is provided at Table A of Attachment 8.</p> <p>b) Details of servicing requirements are provided in Table A.</p> <p>c) Actions to rectify structural integrity issues are outlined in Table B.</p>

Condition	Location of Reference
<p><b>Condition D5 – Disease, Parasite and Pest Management Plan</b></p> <ul style="list-style-type: none"> <li>a) 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.</li> <li>b) 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.</li> </ul>	<p><b>Appendix 7 – Disease, Parasite and Pest Management Plan</b></p> <ul style="list-style-type: none"> <li>a) Details on the monitoring of the health of cultured stock are provided at Section 4 Hatchery.</li> <li>b) Details on the inspection of longline infrastructure to identify any disease or parasite issues are provided at Section 5 including details of the removal and harvest of diseased and dead stock is provided at Section 6.</li> </ul>
Condition	Location of Reference

<p><b>Condition D9 – Marine Fauna Interaction Management Plan</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>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;</li> <li>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</li> <li>c) response procedures, drills and training that would be carried out to ensure appropriate responses to deal with entanglement incidences.</li> </ul>	<p><b>Appendix 6 - Marine Fauna Interaction Management Plan</b></p> <ul style="list-style-type: none"> <li>a) Procedures for the recording of all observations of marine fauna interactions are outlined in the Observer Protocol in Section 3.</li> <li>b) Contact details for the Entanglement Committee are provided at Table 1 in Section 4.</li> <li>c) Training and response are outlined in Section 4.2.</li> </ul>
<b>Condition</b>	<b>Location of Reference</b>
<p><b>Condition D12 – Benthic Monitoring Program</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>a) representative background monitoring to establish baseline conditions for the Leases, including benthic fauna and TOC</li> </ul>	<p><b>Appendix 3 - Water Quality and Benthic Environment Monitoring Program</b></p> <ul style="list-style-type: none"> <li>a) Representative background monitoring for benthic fauna and TOC conditions is described in Section 3. Baseline sampling will be carried out before stocking and then annually for a minimum of 3 years.</li> <li>b) South Coast Mariculture uses a BACI (Before After Control Impact) approach to monitoring. Six control sites have been identified. A sampling</li> </ul>

<p>parameters, for a suitable time period;</p> <p>b) the use of multiple control sites and identification of the frequency of sampling to ensure the monitoring program is spatially and statistically meaningful;</p> <p>c) collecting data at least annually after the Leases are approved, irrespective of whether the Leases are stocked with shellfish;</p> <p>d) a minimum monitoring period of at least three years from the commencement of operation;</p> <p>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;</p> <p>f) identify triggers that would decrease monitoring efforts; and</p> <p>g) reporting of the monitoring results to the Secretary and EES annually within the Annual Report, including commentary on any effects of the Leases compared to relevant guidelines, pre-lease sampling or control sites.</p>	<p>design is outlined in Table 1.</p> <p>c) Section 3.1.4 confirms the sampling will occur prior to installation of the leases and at least annually after the lease is granted, irrespective of whether the lease is stocked with shellfish.</p> <p>d) Baseline sampling will be carried out before stocking and then sampling will be carried out annually for a minimum of 3 years</p> <p>e) Section 3.1.6 and Section 3.2.6 note that if any 'significant changes' to the marine benthic environment are identified, then appropriate management regimes will be employed to ameliorate these impacts (e.g. destocking or fallowing). ROV survey and footage is proposed to be used.</p> <p>f) Section 3.2.6 states that monitoring efforts would be decreased if no significant long-term impacts have been identified.</p> <p>g) Commitment to report monitoring results in the Annual Report is detailed in Section 2.5</p>
<b>Condition</b>	<b>Location of Reference</b>
<p><b>Condition D14 – Waste Management Plan</b></p> <p>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:</p> <p>(a) all waste including biofouling is appropriately stored, handled and disposed of in a timely manner;</p> <p>(b) waste generated by the project is minimised;</p>	<p><b>Appendix 5 - Waste Management Plan</b></p> <p>a) Measures to ensure waste is appropriately stored, handled and disposed of are detailed in Section 3.</p> <p>b) Minimisation of waste generated is outlined in Section 4.</p> <p>c) Section 3 outlines how waste will be collected and disposed.</p>

<p>(c) details of where all waste would be stored; and</p> <p>(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.</p>	<p>d) Wastes have been classified and disposal destinations identified for each waste type in Table 1 in Section 2.</p>
Condition	Location of Reference
<p><b>Condition E5 – Community Stakeholder Plan</b></p> <p>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:</p> <p>(a) identification of all relevant community and other stakeholders;</p> <p>(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;</p> <p>(c) processes to receive and manage feedback and complaints; and</p> <p>(d) phone, email and mail contact details for the development, including a 24-hour contact number.</p>	<p><b>Appendix 2 - Community and Stakeholder Communications Management Plan</b></p> <p>a) A list of community and other stakeholders is provided at Section 2.</p> <p>b) Details of procedures to inform the community are outlined in Section 3.</p> <p>c) Feedback and complaints processes are outlined in Section 4.</p> <p>d) Contact details are provided in Section 5 and Section 6, including a 24-hour contact number.</p>

## 6. DOCUMENT CONTROL REGISTER

Appendix 6 – Marine Fauna Interaction Plan						
Version Number	Date Issued	Date Submitted to Department	Date Reviewed by Department	Revisions Requested by Department or other stakeholders	Comments	Version Approved by Department
1	October 2020	22 June 2021	June / July 2021	Yes	Assessed by NSW EES and NSW Fisheries	Revisions required
2	July 2021	29 July 2021	August 2021	Yes	Assessed by NSW EES, NSW Fisheries and NSW Marine Parks	Revisions required
3	August 2021	03 September 2021	September 2021			

## **7. CONSULTATION**

In the preparation of the Marine Fauna Interaction Management Plan the following personnel were consulted.

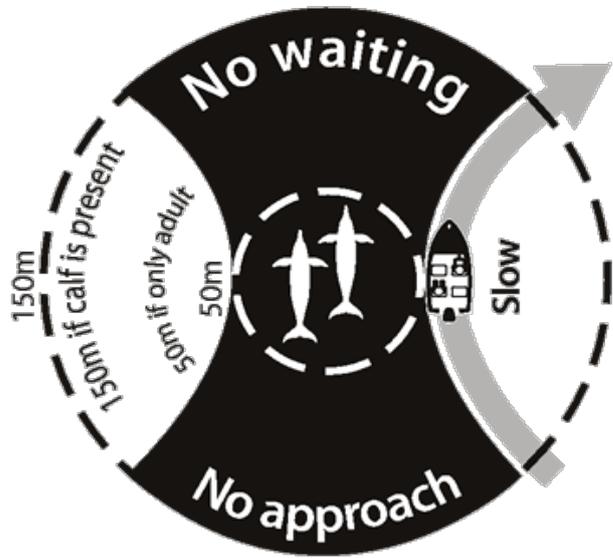
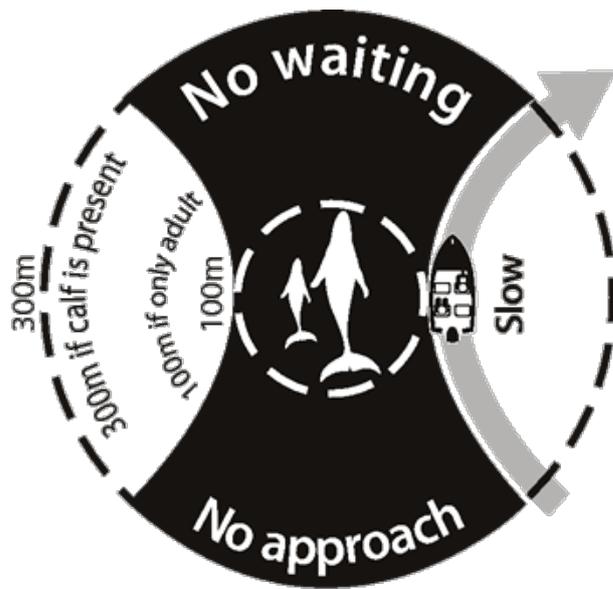
- National Parks and Wildlife Service, NSW Department of Environment, Energy and Science including Susan Crocetti, Andrew Marshall and Adam Gietzelt.
- Graeme Bowley (Snr Policy Officer, Aquaculture) NSW Department of Primary Industries.

## 8. REFERENCES

No references cited.

## 9. ATTACHMENT 1 - MARINE FAUNA INTERACTION / CETACEAN REPORT FORM

	<b>Date:</b>	<b>Time:</b>
<b>Name of observer/s</b>	<i>Location:</i> _____ _____ <i>Latitude:</i> _____ _____ <i>Longitude:</i> _____ _____ GPS <i>ref:</i> _____	<i>Description of location:</i>
<b>Species (e.g. whale/dolphin / turtle /fish/bird/seal)</b>	<i>Description of all animals present and numbers (including whether adults or calves)</i>	<i>Photo or video taken (attach if taken)</i> Yes    No
<b>Behaviour of animals</b>	<i>Description of behaviour (e.g. resting, milling, feeding, socialising, travelling). Any signs of distress e.g. sudden or erratic changes in behaviour (e.g. quick dives, aggressive, irregular changes in swimming speed and/or direction)?</i>	<i>Animal alive?</i> Yes    No
<b>Duration of observation</b>	<i>Time on lease</i> _____ <i>Time adjacent to lease</i> _____ <i>Proximity to longlines</i> _____ <i>Direction of travel</i> _____	<i>Observer activity (e.g. maintenance)</i>
<b>Weather and sea conditions</b>	<i>Weather (e.g. wind, direction, rainy, cloud cover)</i>	<i>Sea state (e.g. swell/wave height, currents)</i>
<b>Boat traffic and lease operation stage</b>	<i>Is boat traffic present on or adjacent to the lease?</i>	<i>What is the stage of operation? How many longlines? What is stocking density?</i>



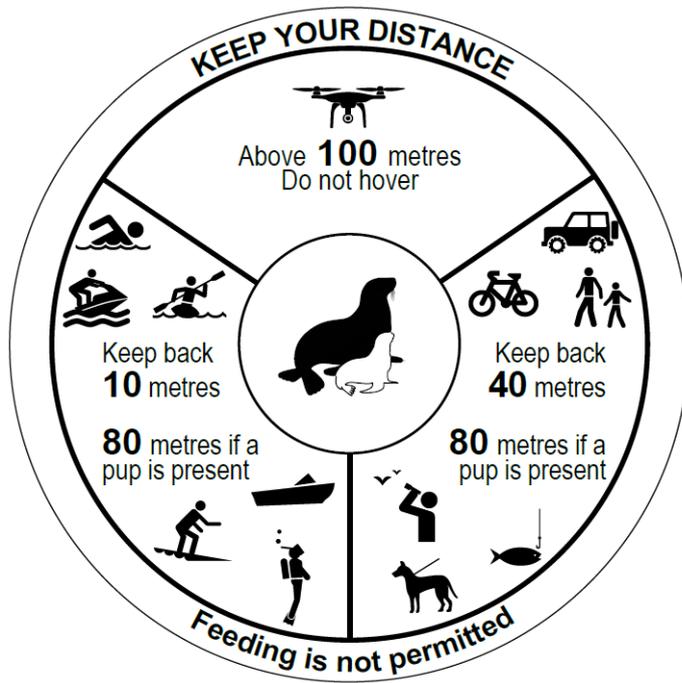


Figure 1: Recommended marine mammal approach distance (Source NSW DPIE, 2014)





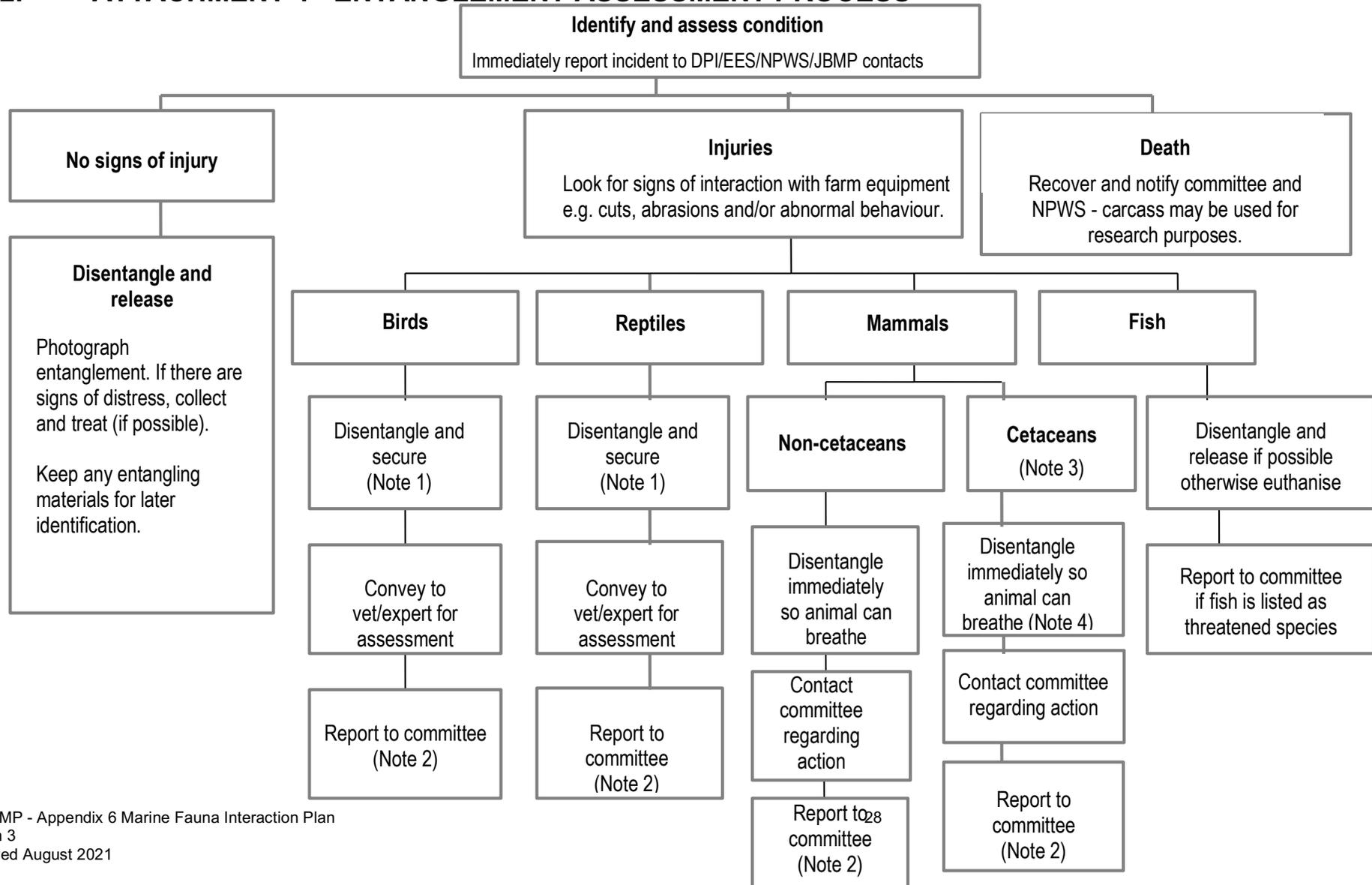
**11. ATTACHMENT 3 - MARINE FAUNA  
ENTANGLEMENT REPORT FORM**

	<b>Date:</b>	<b>Time:</b>
<b>Name of observer/s</b>	<i>Location:</i> <i>Latitude:</i> <i>Longitude:</i> <i>GPS ref:</i>	<i>Description of location:</i>
<b>Type of species</b> (e.g. whale/dolphin/turtle/fish/bird/seal)	<i>Description of all animals and numbers</i>	<i>Photo or video taken (attach if taken)</i> Yes No
<b>Behaviour of animals</b>	<i>Description of behaviour and any signs of distress e.g. sudden or erratic changes in behaviour - quick dives, aggressive and irregular changes in swimming speed and/or direction.</i>	<i>Animal alive?</i> Yes No
<b>Duration of observation</b>	<i>Time on lease _____</i> <i>Time adjacent to lease _____</i>	<i>Observer activity (e.g. maintenance)</i>

<p>Drawing showing distinct characteristics, injuries and entangling gear.</p>	<p>Describe the animal as you have seen it: colour, shape, size, marks, scars etc.</p> <p>Overall size: _____</p> <p>Head: _____</p> <p>Back (fin?): _____</p> <p>Tail: _____</p> <p>Flippers/fins: _____</p> <p>Other: _____</p>	
<p><b>If animal left site, when was it last seen?</b></p>	<p><i>Describe the entangling gear: (e.g. ope, buoy, colour and trailing line).</i></p>	<p><i>Visible injuries?</i> Yes No <i>Scars?</i> Yes No</p>
<p><b>If the animal dives, how long? How often?</b></p>		<p><i>Fresh blood?</i> Yes No <i>Where?</i></p>
<p><b>If moving, what speed and direction?</b></p>	<p><i>Where/how on the body? (head, tail, flippers, mouth)</i></p>	<p><i>Is the animal thin or emaciated?</i></p>

<b>Authority Contacted (NSW EES or NSW DPI):</b>  <b>Location:</b>	<i>Date:</i>	<i>Time:</i>
<p><b>NOTE:</b> Please attach photos with all reports that show entanglement as clearly as possible.</p>		

## 12. ATTACHMENT 4 - ENTANGLEMENT ASSESSMENT PROCESS



**Note 1:** Secure means hold animal in a dark warm container such as a pet pack. For reptiles, a large plastic tub with additional padding on the inside is required.

**Note 2:** Report means prepare an incident report as detailed as possible stating all circumstances relating to the entanglement event including (if available) a veterinary report. The report will be submitted to the committee and relevant authorities.

**Note 3:** Cetaceans that are injured will have lacerations, irregular buoyancy and irregular swimming behaviour.

**Note 4:** Disentangling cetaceans must only be undertaken by appropriately trained and authorised personnel.