



**ATTACHMENT 6 –  
MWADZ Draft Marine Fauna Interaction Plan**



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# DRAFT Mid West Aquaculture Development Zone Marine Fauna Interaction Management Plan

Prepared by Huon Aquaculture

## Review history


Version	Date of review	Notes
DRAFT	March 2020	Prepared in line with MWADZ Marine Fauna Interaction Plan by Department of Fisheries, WA (Version 1, Feb 2017)



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## 1. Introduction


### 1.1. Purpose

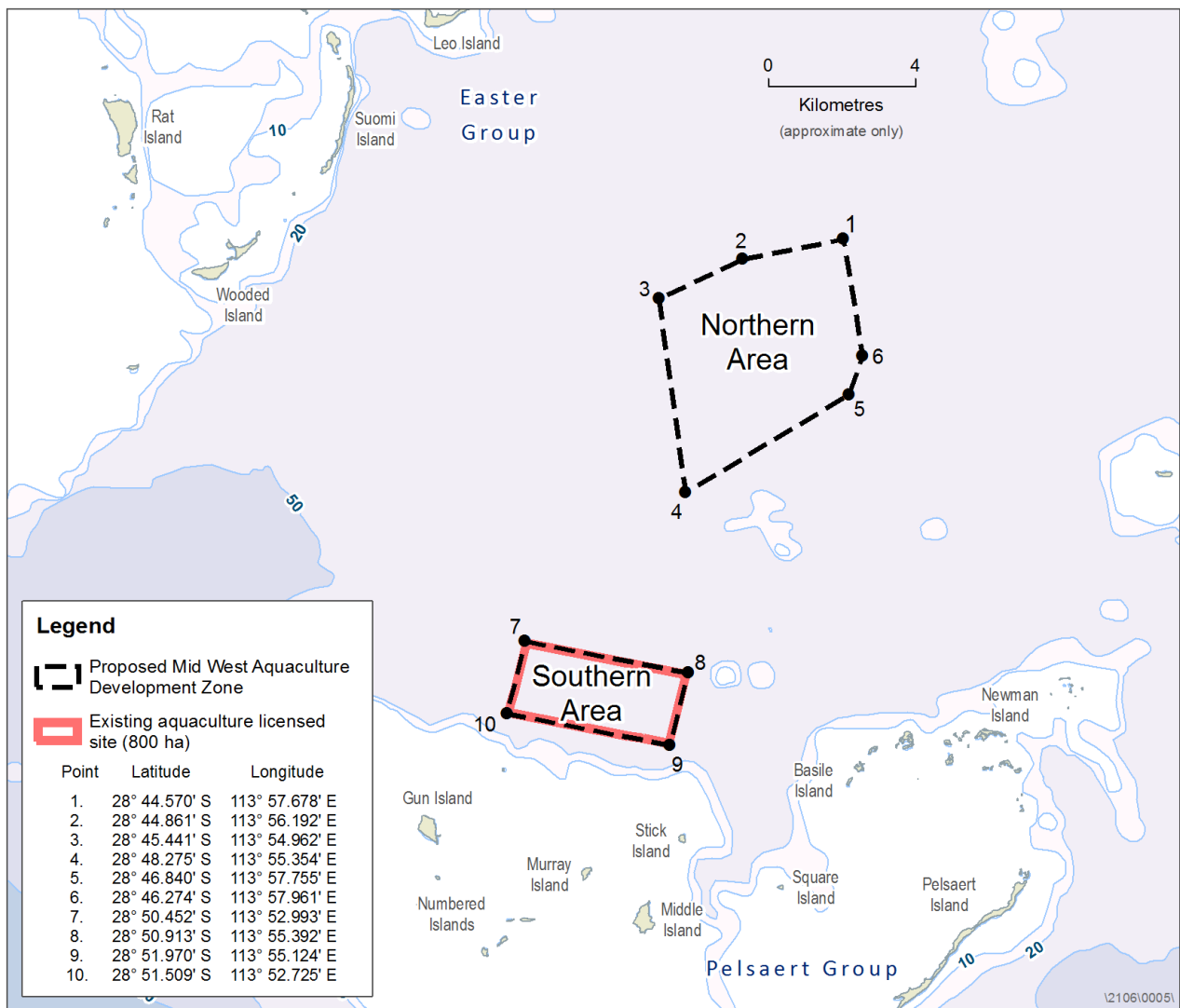
This Marine Fauna Interaction Management Plan (MFIMP) has been developed to identify and mitigate Huon Aquaculture’s (Huon’s) potential impacts on marine fauna through direct and indirect interactions in the Mid West Aquaculture Development Zone (MWADZ) Northern Area as shown in **Figure 1**.

The MFIMP is an outcome-based plan that seeks to minimise potential impacts to marine mammals (particularly Australian sea lions), marine reptiles, seabirds and endangered, threatened and protected (ETP) finfish that occur in the Abrolhos Islands and the MWADZ. The MFIMP is an interim plan for the first five years of operation. If required, the MFIMP will be amended to ensure its Objectives are being met.

Under the MFIMP, routine monitoring is restricted to ETP marine fauna, and divided into reportable and non-reportable monitoring. Sightings are non-reportable, while interactions are a reportable occurrence defined as *any physical contact an individual (person), boat or gear has with a protected species that causes, or may cause death, injury or stress for the animal. This includes all catching (hooked, netted, entangled) and collisions as well as interactions that occur off the boats with an individual or individuals of these species.* This definition is consistent with the current Australian Fisheries Management Authority (AFMA) definition for protected species interactions under the *Environment Protection and Biodiversity Conservation Act 1999*.

Key to this MFIMP is the inclusion of an Adaptive Management Strategy (AMS), with two AMS feedback loops, one for marine mammals (including ASLs) and one for avifauna and ETP finfish. This allows for the evolution of the management arrangements in the event marine fauna interactions are found to be unacceptably high based on an agreed set of thresholds (with ASL set most conservatively at one mortality, three entanglements, see Section 5).


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**Figure 1 - Location of the Mid West Aquaculture Development Zone Northern Area**

## 1.2. Code of Practice

This MFIMP should be read in conjunction with the *Environmental Code of Practice for the sustainable Management of Western Australia’s Marine Finfish Aquaculture Industry (Code)* (DoF/ACWA 2013). The Code outlines a series of voluntary best practice measures through a documented environmental management system (EMS) and recommends continual improvement through periodic review of operations. The Code allows operators to demonstrate they are operating within the principles of Ecologically Sustainable Development. Operators can demonstrate conformity with this Code by undertaking an Internal Audit (using the ACWA Audit Checklist, which is available on the ACWA website: [www.aquaculturecouncilwa.com](http://www.aquaculturecouncilwa.com)) followed by a self-declaration by the Licensee.

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### 1.3. Objective

The objective of this MFIMP is to ensure that Huon’s operations at the MWADZ:


- a) meets the EPA’s Environmental Principles by adhering to best practice standards and demonstrating continuous improvement;
- b) does not put at risk the EPA’s objective for Marine Fauna “to maintain the diversity, geographic distribution and viability of fauna at the species and population levels”; and
- c) meets the project specific objective that “the MWADZ will have no adverse impact on the viability and persistence of the Abrolhos Islands populations of Australian sea lions or threatened sea birds”;
- d) Meets the requirements of Ministerial Statement 1058 for the MWADZ (EPA 2017).

## 2. Potential Impacts

The potential for adverse interactions between marine fauna and the proposed MWADZ was reviewed in the Environmental Impact Assessment (BMT Oceanica 2015). A number of risk factors were identified including the physical presence of the aquaculture gear, vessel movements, artificial light, noise and vibration and fish farming activities. Mitigation and management measures will be applied in order to minimise the identified risk factors (Section 3).

The following section provides an overview of the potential environmental stressors that may have an impact on marine fauna within the MWADZ. The information is based on a literature review of the best available scientific data, as well as documented information on the adverse interactions of marine fauna with marine aquaculture. The environmental stressors that were identified to potentially have an impact on marine fauna are:

- physical presence of aquaculture gear;
- vessel movements;
- artificial light;
- noise and vibration; and
- fish farming activities (e.g. feeding).

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A detailed assessment of the potential impacts to marine fauna is provided in sections 9 and 10 of the Public Environmental Review/Environmental Impact Statement (PER/EIS) (DoF 2016).

### **2.1. Physical Presence of Aquaculture Gear**

The physical presence of aquaculture farms has the potential to create barriers to fauna movement if it restricts migratory or transit routes of marine mammals, marine reptiles and seabirds. The presence of aquaculture gear could also attract larger marine predators including sharks, sea lions and dolphins due to the aquaculture gear acting as a Fish Aggregation Device (FAD). Sea-based aquaculture gear and equipment known to potentially impact marine fauna include:


- sea pens;
- mooring and anchoring systems;
- feeding barges; and
- vessels (service and accommodation).

Potential impacts to marine fauna related to the physical presence of aquaculture gear during the installation process and operational activities include:

- changes in natural feeding behaviour of marine fauna as a result of higher fish density from FAD effects;
- serious injury or mortality of marine fauna due to entanglement or entrapment in anti-predator nets;
- habitat changes due to placement of aquaculture gear and degradation of marine water and sediment quality; and
- changes to marine fauna distribution and migration patterns due to avoidance or attraction cues.

### **2.2. Vessel Movements**

Vessels will operate throughout the MWADZ during the installation of the aquaculture gear and for ongoing operational activities. A range of vessel types, including service vessels,

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supply vessels and feeding barges, may be active within the area. The potential impacts to marine fauna related to the physical presence of vessels during the installation process and operational activities include:

- injury or death of mobile marine fauna from vessel strikes;
- disturbance to marine fauna behaviour from vessel movements; and
- habitat degradation (e.g. through anchoring and moorings).

### **2.3. Artificial Light**

Artificial light spill and glow generated during the installation and operation of aquaculture farms within the MWADZ may have potential impacts on marine fauna. Sources of light emissions from activities within the area that may affect marine fauna include:

- routine lighting on aquaculture gear;
- navigation marker lighting; and
- vessel lighting.

Light spill can have the following potential impacts to marine fauna:


- attraction and disorientation of marine turtle hatchlings;
- injury or death of juvenile seabirds attracted to lighting and flying into aquaculture gear; and
- modification of fauna foraging behaviour around aquaculture gear due to light spill on the water.

### **2.4. Noise and Vibration**

Noise and vibrations generated during the installation of aquaculture gear and during operational activities within the MWADZ may have potential impacts on marine fauna. The primary sources of potential noise and vibration generation include:

- vessel movements in the area;
- machinery used to install the sea pens, moorings and anchoring systems; and



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- machinery used in operations (e.g. capstans, mobile cranes, hand tools, small power tools, blowers and winches).

Anthropogenic marine noise has the potential to impact marine fauna that rely on acoustic cues for feeding, communications, orientation and navigation. The extent of impacts depends on a number of variables, including the frequency range and intensity of the emitting noise, the receiving environment (e.g. salinity, water depth, and sea bed type), metocean conditions, characteristics and sensitivity of the animal and its distance from the source. Marine fauna considered sensitive to underwater noise and vibration include cetaceans, marine turtles, seabirds and fish.

Underwater noise and vibration can have the following impacts on marine fauna:

- behavioural changes;
- temporary or permanent injury and (in extreme cases) mortality;
- stress response;
- complete avoidance of the immediate area (habitat displacement);
- attraction to the noise source; and
- disruption to underwater acoustic cues for navigation, foraging and communication.

The assessment provided in the PER/EIS (DoF 2016) concluded that noise and vibration from construction and operational activities within the MWADZ did not pose a significant risk to marine fauna in the area. The majority of noise and vibration is likely to be generated by machinery potentially used to anchor aquaculture gear to the seabed. This is an installation activity and as such, is neither sustained nor ongoing.

There will be no high-energy impulsive noise sources generated within the aquaculture zone, however, ongoing noise and vibrations are likely to be generated by vessel movements). Therefore, the MFIMP provides management and mitigation measures designed to reduce the impact of noise generated by activities in the MWADZ.

## **2.5. Fish Farming Activities**

Fish farming activities within the MWADZ have the potential to have adverse impacts on marine fauna in the area. The presence of cultured stock, dead or moribund stock, harvesting

activities and the provision of feed into the sea pens, may attract or deter marine fauna to or from the area. An increase in food availability within the area has the potential to cause an:

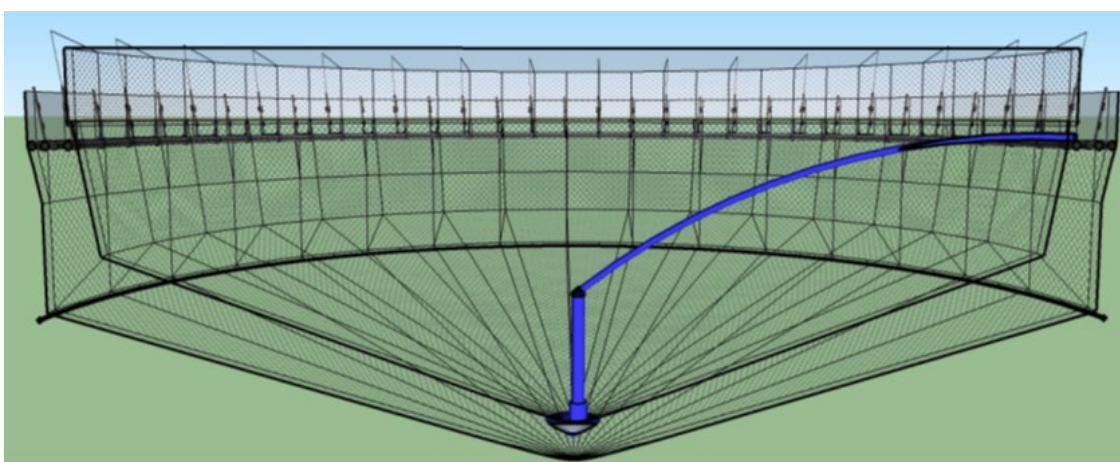
- increase in visitation rates of marine fauna species (e.g. Australian sea lions);
- increase in the duration of visits of marine fauna species (e.g. sharks);
- alteration in the natural feeding behaviour/regimes of marine fauna species; and
- increase in the abundance of opportunistic marine fauna (e.g. silver gulls).

### 3. Mitigation and Management Measures

#### 3.1. Pen Design

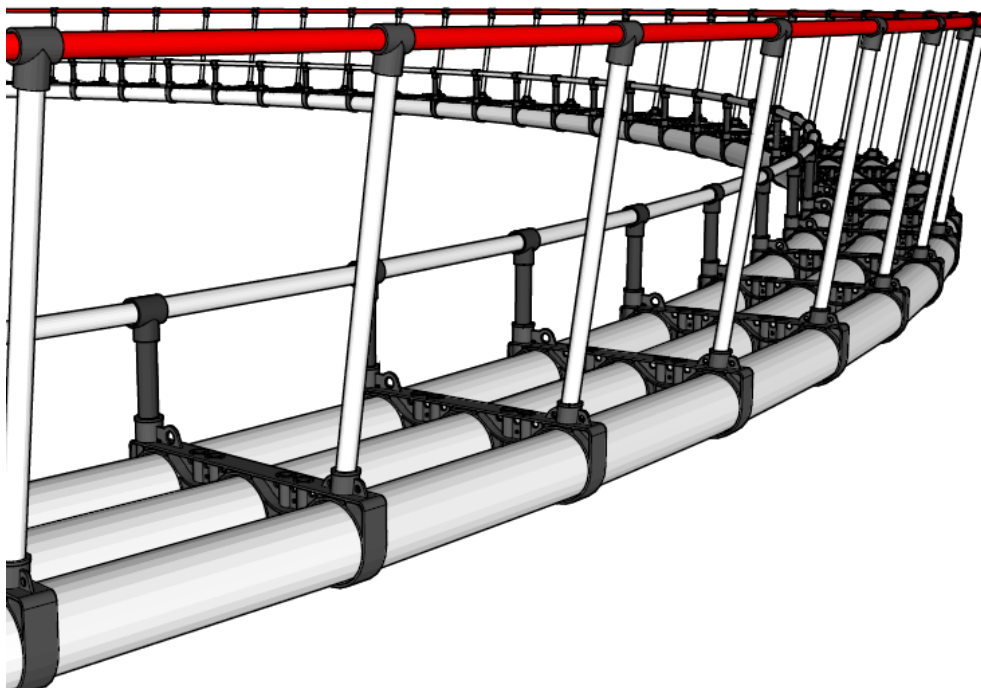
Huon will utilise its unique ‘Fortress Pen’ design for its MWADZ operations. Fortress Pen design will be modelled using computer programs (e.g. AQUASIM) to ensure all pens are able to meet environmental conditions of the site, maintain integrity and prevent interactions with marine fauna.

Huon’s ‘Fortress Pen’ design is characterised by a lighter-weight inner net to contain the fish, set within a heavier outer net to keep predators away from the fish (refer to schematics in **Figure 2**). A light-weight bird net set on a top rail, also attaches to the inner fish net, keeping birds away from the fish and the fish feed.




**Figure 2 - Huon’s new Fortress Pen system showing the outer predator net, inner net and bird net with a lift-up mort collector located within the inner net**

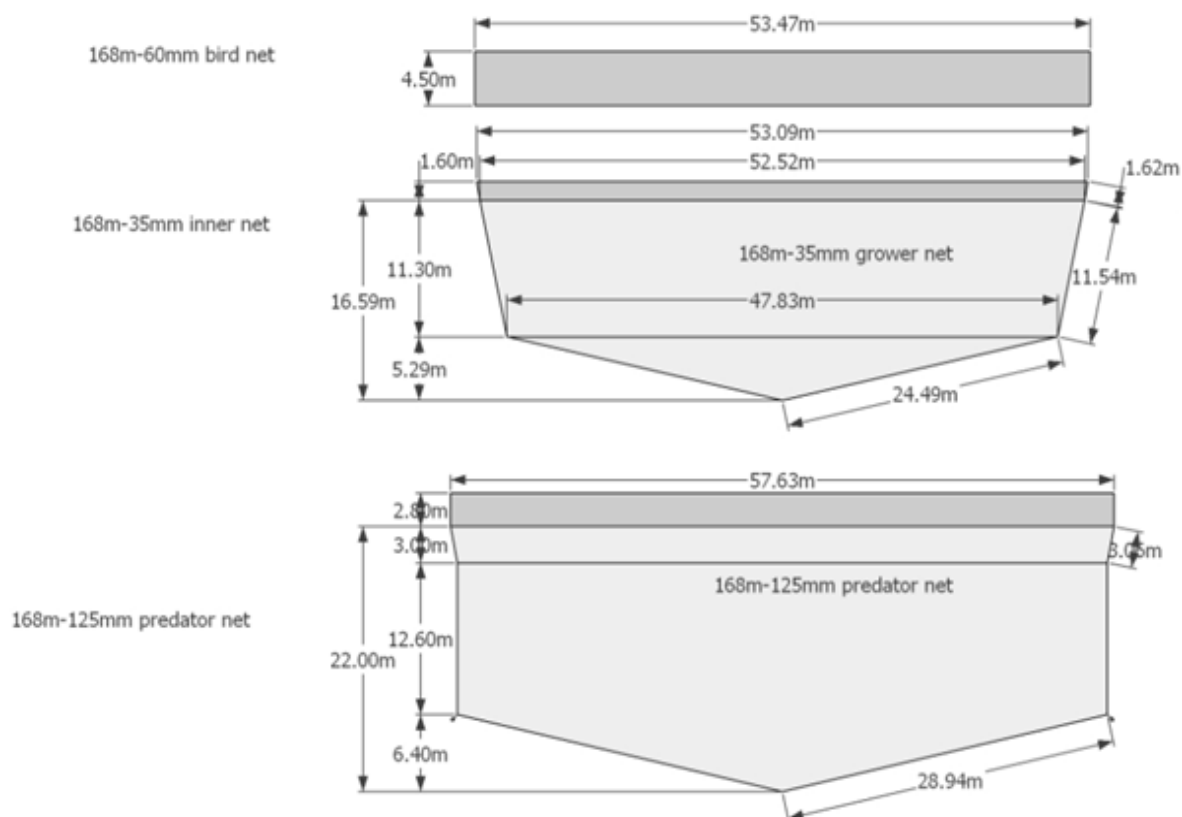
A major design feature of the Fortress Pen is the inclusion of a top rail, constructed out of 140mm HDPE pipe that connects to the top of the seal poles using Huon’s moulded T joiners (refer to **Figure 3**). This will improve the structural integrity of the pens and serve to keep the bird net tighter. The top rail also keeps the predator net high and taut, preventing sea lions from climbing over the top.



**Figure 3 – The new top rail design fitted to the F168m pens at Storm Bay**

The bird net will comprise 60mm mesh with a break load of 70kg and will be held up in the centre of the pen using an 59m circumference and 5m high bird net stand. The inner culture net is 168m in circumference at the water-line. It extends to a depth of 24.49m when fully weighted and has a volume of 27,116m<sup>3</sup>. The outer predator net will have a circumference of 181.43m at the water-line. It will extend to a depth of 28.94m when fully weighted and will have a volume of 44,391m<sup>3</sup>. The specifications of the F168m nets is shown in **Figure 4**.

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**Figure 4 - Specifications for the F168m inner and predator nets**

All nets are constructed using an Ultra-High Density polymer that produces a very light-weight net for its strength. The inner net will comprise of either a 15mm, 25mm or 35mm mesh depending on the size of the stocked fish. This net will be tensioned to the outer predator net. The outer predator net, designed to keep seals out, will comprise of 125mm double-knotted mesh with a break load of 1200kg. This net will be tensioned with a sinker tube and weighted in the base. The predator net will at all times maintain a separation distance of >2m between itself and the inner net.

The net-pen design presented above will be the primary anti-predation measure for all of Huon’s marine farming leases. Huon no longer uses anti-fouling paint on the nets to reduce biofouling, but instead deploys *in situ* net cleaners to clean the nets on a regular basis. The outer predator net has been designed to set very tight and requires no additional coating to provide seal protection

Huon’s Fortress Pen design complies with the *Environmental Code of Practice for the sustainable Management of Western Australia’s Marine Finfish Aquaculture Industry (Code)*


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(DoF/ACWA 2013) and is in accordance with the floating sea cage provisions outlined in Schedule 2, Table 1 of Ministerial Statement 1058 (EPA 2017).

### **3.2. Physical Presence of Aquaculture Gear**

To meet a) the EPA objective for marine fauna 'to maintain the diversity, geographic distribution and viability of fauna at the species and population levels; and b) the proposal specific objective that the MWADZ will have no adverse impact on the viability and persistence of the Abrolhos Islands populations of Australian sea lions or threatened sea birds, Huon will implement the following measures:

- Predator exclusions on all Fortress Pens, which includes:
  - Durable fish nets (heavy duty) to exclude predators and to avoid predation on farmed stock by sea lions, sharks and dolphins.
  - Sea lion jump fences of an appropriate height;
  - Appropriate bird exclusion mechanisms for example taut overhead bird netting to prevent access to stock and feed;
- Sea pen netting to be inspected regularly (weather permitting) to ensure its integrity is intact, free from debris and maintained to a standard that will minimise entanglement. This will be conducted by either divers, Remotely Operated Vehicles (ROVs), or in pen cameras;
- Rigorous maintenance programs for all aquaculture infrastructure, particularly nets, ropes and pens, to be implemented to ensure there is limited capacity for entanglement of wildlife;
- Nets, ropes and pens maintained in proper working order; being taut, without fouling where possible, and without holes that may cause entanglement of wildlife;
- All practicable measures taken to prevent marine mammals, turtles and seabirds from gaining access to, or reward from the aquaculture operation;
- Feeding protocols to be observed to minimise the amount of uneaten feed entering the surrounding water;

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- To discourage or predation by marine fauna, dead or moribund fish are to be removed regularly (weather permitting) and disposed of at silage, landfill or recycling plant location.


### 3.3. *Vessel Movements*

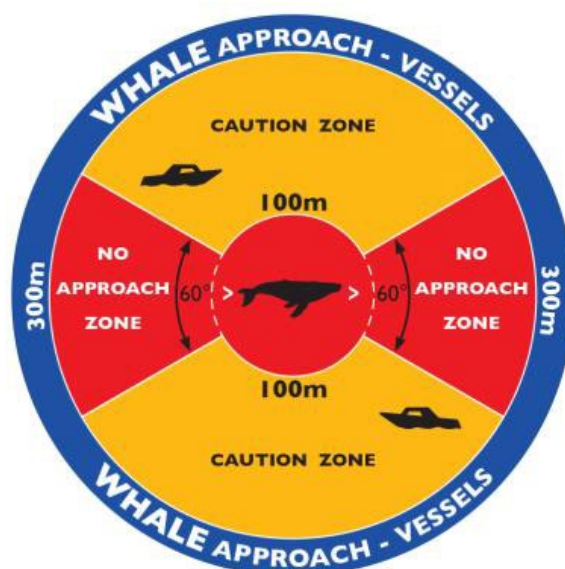
To minimise potential interactions or vessel strikes with marine fauna, all staff operating on-board vessels in the MWADZ are required to:

- abide by the Australian National Guidelines for Whale and Dolphin Watching (i.e. not permitted to approach within 100 metres of a whale and within 50 metres for dolphins and turtles - refer to **Figure 5**);
- implement observer protocols (i.e. routinely keep a watch for marine fauna (notably marine mammals and turtles) when travelling between sea pens and the accommodation barge); and
- restrict construction and operational activities to daylight hours (emergency situations excepted).

Upon observing marine fauna, it is recommended that skippers operating vessels in the MWADZ:

- avoid making sudden or repeated changes in direction, or generating excessive noise, near marine fauna in the area;
- operate vessels within the proposed MWADZ at reduced speed limits (i.e. less than 8 knots); and
- avoid the use of vessels at night wherever practicable.

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**Figure 5– Approach distance for marine fauna (whale = 100 metres, dolphins and turtles = 50 metres)**

### **3.4. Artificial Light**

The mitigation strategies for the management of artificial light are as follows:

- minimise light intensity on vessels to as low as reasonably practicable when conducting activities at night;
- avoid the use of bright white lights (e.g. mercury vapour, metal halide, halogen and fluorescent light) on aquaculture gear (orange lights, red lights and low-pressure sodium lights are to be used where practicable);
- reduce light spill by shielding lights, pointing lights directly at the work area (directional alignment), reducing the amount of light shining directly onto water and covering windows with tinting or drapes to reduce light emissions from service vessels;
- reduce horizon glow through the use of downward-facing luminaries, attention to reflecting surfaces (adjusting lights so they don't shine onto reflective surfaces) and reducing the intensity of indoor lighting used in accommodation and feed barges, without compromising worker safety; and
- restrict lighting on moored vessels at night to the minimum required for safe operations.



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### **3.5. Noise and Vibration**

Noise and vibration emissions generated from the aquaculture activities within the MWADZ will be managed through measures including:

- routinely maintaining and inspecting noise generating equipment (e.g. vessel engines, feed blowers, generators, etc.) to reduce unnecessary noise from the equipment;
- fitting of sound suppression devices (e.g. mufflers, lagging) on noise-emitting equipment (if applicable);
- vessel activity should be limited to essential business activities at all times to avoid excessive noise and vibration; and
- preferred routes to various utility points must be documented and adhered to.


### **3.6. Fish Farming Activities**

#### **3.5.1 Feeding Practices**

The mitigation strategies for managing feeding activities are as follows:

- development and application of feeding protocols to minimise the amount of uneaten feed entering the surrounding water;
- contemporary feeding technologies and practices will be used in order to minimise feed wastage to the surrounding environment;
- wherever practicable minimise feed wastage through use of high quality and sinking pelletised feeds;
- all pelletised feeds used must be Department of Agriculture and Water Resources (formerly AQIS) approved or produced by a manufacturer that complies with AS/NZS ISO 9001:2008 standards (or equivalent);
- pellet food will primarily be stored on site in bulk feed hoppers and any loose bags of feed will be stored in either the below-deck compartment of the supply boat or on-deck covered by heavy duty PVC tarpaulin or similar;
- staff will be adequately trained in the use of feed systems to ensure minimal or no spillage and no distribution of feed outside the Fortress Pens; and



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- aquaculture staff and visitors will be prevented from feeding, touching or swimming with marine fauna within the MWADZ.

### **3.5.2 Farm Fish Mortalities**

The mitigation strategies for the management of fish farm mortalities are as follows:

- dead and moribund stock will be removed from the sea pens at least weekly, or more frequently in the event of sustained or chronic mortalities, and disposed of appropriately;
- all dead fish removed will be stored in enclosed containers until disposed of appropriately.

## **4. Monitoring and Incident Reporting**

### **4.1. Monitoring**


Routine Monitoring will be focused on Australian sea lions, other marine mammals, ETP finfish (sharks and rays), protected turtles and avifauna (listed under the WC Act). For the first two years, Huon will keep marine fauna logs. At this time, the routine monitoring requirement may be reviewed based on those logs. Farm staff will be required to record interactions with wildlife, such as aggression, access of wildlife to sea pens, mortality, collision, long-term roosting, entrapment, or entanglement of wildlife in the aquaculture gear. Logs will also report:

- the type and frequency of interaction;
- location and likely cause of the interaction; and
- species involved.

Results of the individual monitoring programs will be reported annually in the Annual Compliance Report submitted by Huon.

### **4.2. Incident Reporting and Immediate Response Requirements**

Interactions (as defined in the Adaptive Management Strategy below) will be reported and addressed initially in the following manner:


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#### 4.2.1 Marine Mammals, Turtles and Other Marine Reptiles

- All collision or entanglement incidents will be reported to the Parks and Wildlife Service (PaWS) Wildcare Hotline on (08) 9474 9055 and the Geraldton PaWS office within 24 hours of the incident occurring and the details of the incident, including the actions taken, documented;
- Any reportable incident shown in the AMS loop will require an appropriate management response determined in consultation with PaWS, the OEPA and DoF, to the satisfaction of the CEO of the OEPA;
- If marine fauna is discovered distressed due to entanglement or entrapment in aquaculture gear, then reasonable efforts will be made by staff to free the animal if safe to do so; and
- A list of emergency contact numbers will be displayed on-board service vessels and work platforms used to service the farms.

#### 4.2.2 Marine Avifauna

- Upon discovery of a distressed seabird (entangled or entrapped) in aquaculture gear, efforts will be made by staff to release the bird. Entanglements or entrapments of seabirds in aquaculture gear will be reported to PaWS on (08) 9474 9055 within 24 hours.
- In the event of a collision between a seabird and aquaculture gear, the following procedures will be followed:
  - Pick up the bird with a towel, keeping it lightly wrapped and the wings contained (folded in natural position against side of bird's body). Be aware of the sharp bill. Wear gloves and eye protection.
  - Place the bird in a well-ventilated cardboard box and place the box in a covered, quiet location.
  - Record and report the species, number, location found, likely cause of collision and any injuries.
  - Do not forcefully administer food or water via the bird's mouth.

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- If the bird has no obvious signs of injury, the bird may be released. The recommended approach is to take the bird to a quiet area at dawn and release the bird in an area free from obstructions (masts, railings, wires, etc.) so that it may take off directly into the wind.

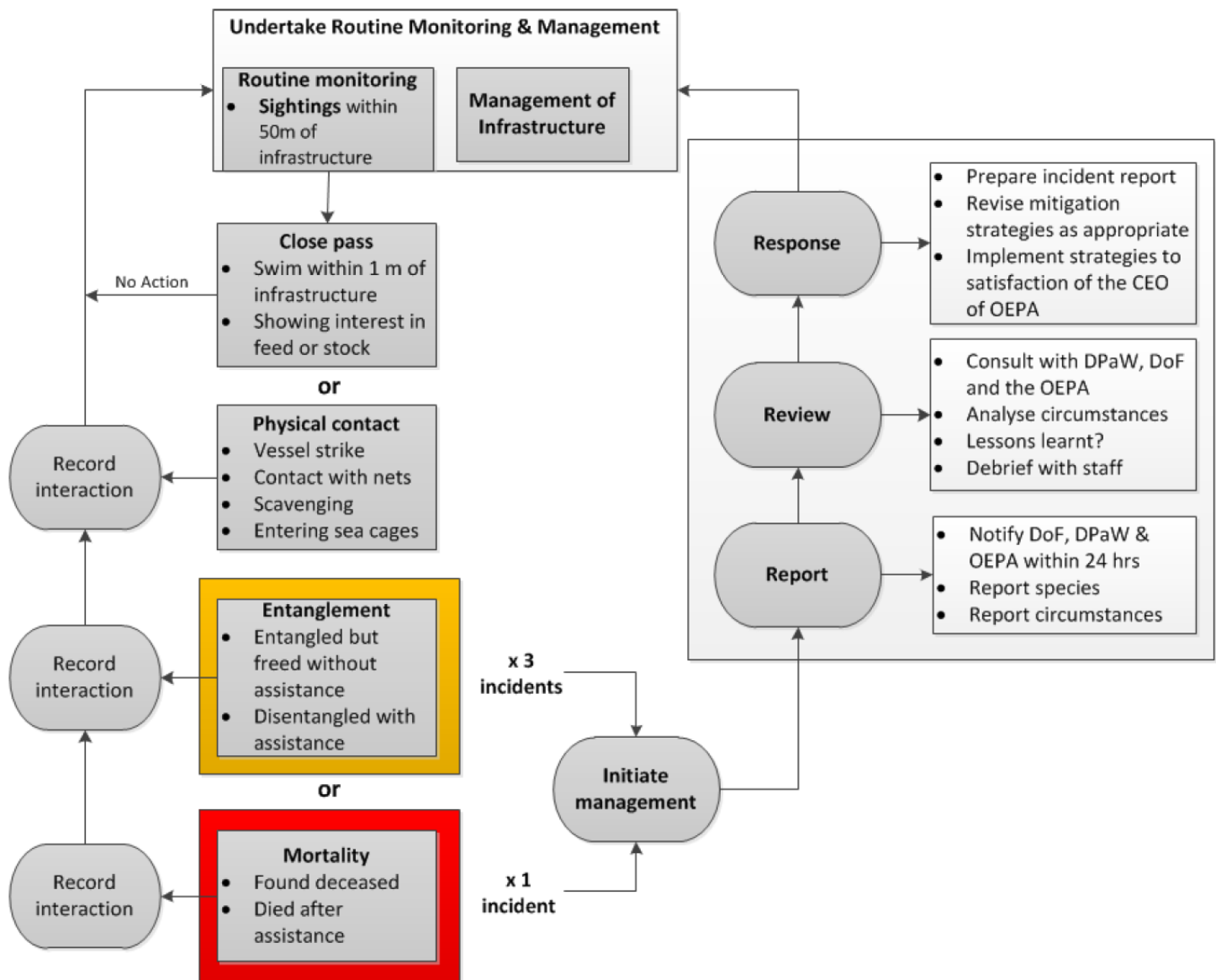
#### 4.2.3 Sharks and Rays

- If a shark enters the sea pens, makes contact with, or becomes entangled in any aquaculture gear, operators should notify the regional Department of Fisheries (DoF) office in Geraldton (08) 9920 8400 as soon as reasonably practicable. If the shark is an ETP species, operators should also advise PaWS through the Wildcare Hotline (08) 9474 9055.
- DoF will advise on a case by case basis how best to respond, noting that human safety is a first order priority. DoF will also, where necessary, assist with relevant approvals to allow the appropriate actions to be undertaken;
- Upon establishing contact with DoF (and PaWS as appropriate), all reasonable efforts will be made by fish farm staff to release or disentangle the shark alive.

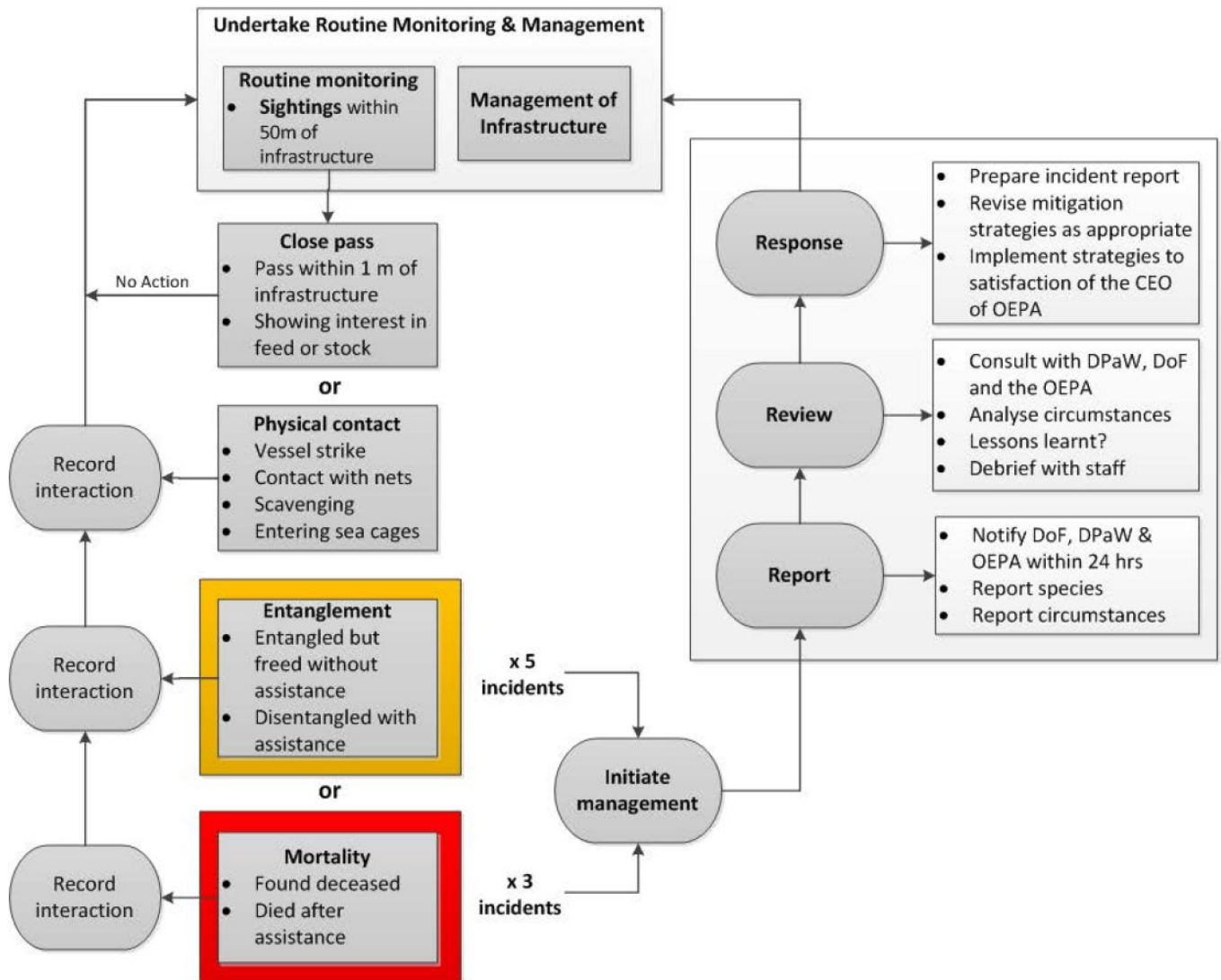
## 5. Adaptive Management Strategy

The MFIMP comprises two separate AMS feedback loops to account for the different species groups; consequently, the feedback loops differ in terms of triggers or thresholds (Figures 6 & 7). The most rigorous of the feedback loops is for marine mammals with trigger thresholds of one mortality or three entanglements.

An interaction means any physical contact an individual (person), boat or gear has with a protected species that causes, or may cause death, injury or stress for the animal. This includes all catching (hooked, netted, entangled) and collisions as well as interactions that occur off the boats with an individual or individuals of these species. The categories of interaction are further defined below.




**Figure 6 - Marine Mammals: Restricted to marine mammals including ASLs (listed under WC Act); Management intervention after 3 entanglements or 1 mortality**



**Figure 7 - Marine Avifauna and Finfish; Restricted to ETP avifauna and finfish (listed under WC Act); Management intervention after 5 entanglements or 3 mortalities.**

The AMS also contains a reportable/non-reportable caveat. Reportable interactions must be reported within 24 hours as defined below. Non-reportable interactions are recorded and included in the Annual Compliance Report.

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## **5.1. Interactions categories**

### **5.3.1 Sighting**


Under the AMS sightings refer only to ETPs noted within 50 metres of aquaculture gear. In particular, the purpose of recording sightings is to demonstrate the presence or absence of ETPs within the vicinity of the MWADZ over the initial period of operation (most notably to determine the behaviour of ASLs). This will inform management arrangements into the future and be reviewed after a period of two years. Sightings, which are non-reportable under the AMS, will be documented and provided to DoF as a component of the Annual Compliance Report.

### **5.3.2 Close pass**

Close passes are when an animal comes within one metre of the aquaculture gear without making contact. This includes fauna that show an interest in the aquaculture gear, the stock contained within it, or the opportunity to consume waste feeds. Close passes are recordable but not reportable under the AMS. Where no physical contact is recorded, close passes will be documented and provided to DoF as a component of the Annual Compliance Report.

### **5.3.3 Physical contact**

Physical contact occurs when an animal comes into contact with aquaculture gear either inadvertently (as in a vessel strike) or deliberately while attempting to prey upon aquaculture stock. Physical contact would typically be short-lived, but could be repeated (such as repeated attempts to break into a sea pen). Physical contact does not include instances where the animal becomes entangled, but does include breaches of the aquaculture gear including where an animal becomes trapped in a sea pen. Physical contact is non-reportable, with the exception of vessel strike which should be reported to relevant authorities whether or not a mortality results.

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### 5.3.4 Entanglement

Entanglement results when an animal initially makes physical contact, then subsequently becomes entangled in the netting, lines or other components of the aquaculture gear. Entanglements are differentiated from physical contact by the duration: a contact greater than 30 seconds constitutes an entanglement. Management response is required after three entanglement incidents.

### 5.3.5 Mortality

Mortality refers to the death of an animal as a direct result of aquaculture operations, either by vessel strike, stress or prolonged entanglement. This may include the death of an animal trapped within the aquaculture gear, the death of animal while entangled, or the death of an animal that was freed from entanglement, but subsequently died. Management response is required after one mortality incident.

## 5.2. Management responses


### 5.4.1 Report

Upon a reportable incident, operators are required to notify DoF, PaWs and the OEPA within 24 hours. Operators should provide as many details as possible about the incident, including:

- Species;
- Size and gender (where possible to determine);
- Behaviour prior to the incident; and
- Present demeanour (i.e. agitated, lethargic).

### 5.4.2 Review

The review component of the AMS requires proponents to investigate the circumstances behind a reportable incident. Managers should interview and debrief all staff, including discussion on prevention of future incidents. The results of the review should be submitted to DoF, PaWS and the OEPA within seven days of the reportable incident occurring. The


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outcomes of this investigation must be of a standard that will assist the preparation of an incident report for the Response component of the AMS.

### 5.4.3 Response

On completion of an incident report, DoF, PaWS and the OEPA will consider the circumstances surrounding the reportable incident. Depending on the outcomes of the review, proponents may be required to implement strategies to prevent similar occurrences in the future. The revision of mitigation and management strategies is on an as-appropriate basis and the outcome must be to the satisfaction of the CEO of the OEPA. Examples of response mechanisms are re-tensioning netting; increasing seal jump fence height or reviewing feed or maintenance regimes.



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## 6. Implementation

### 6.1. Reporting and auditing


Huon will submit an Annual Compliance Report summarising the outcomes of the MFIMP to the OEPA and DoF by 1 June annually in accordance with the conditions of approval.

Annual Compliance Reports should include as a minimum:

- An executive summary summarising the results of the program;
- A description of the results, including the appropriate use of Tables and Figures;
- The number of interactions recorded in the reporting period, including physical contacts, entanglements and mortalities (if any); and
- Appropriate appendices, providing raw data and results of any reviews or responses, including the performance of new mitigation methods.


### 6.2. Review and revision

The Plan is an interim plan designed to monitor and manage marine fauna interactions in the first five years of operation. The Plan will be reviewed and revised at the end of the five-year period, or when production reaches 7 200 tonnes per annum, whichever occurs first. The intent of the review is to ensure the program is commensurate with the level of risk.

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## 7. References

- Aquaculture Council of Western Australia (AQWA) (2013) Environmental Code of Practice for the sustainable management of Western Australia’s Marine Finfish Aquaculture Industry. Aquaculture Council of Western Australia. Department of Fisheries.
- BMT Oceanica (2015) Mid- West Aquaculture Development Zone Environmental Monitoring and Management Plan. BMT Oceanica Pty Ltd. Perth Western Australia.
- DoF (2016) Mid West Aquaculture Development Zone Public Environmental Review. Prepared by the Department of Fisheries. Fisheries Occasional Publication No. 130, July 2016.
- EPA (2017) Statement that a Future Proposal(s) identified in a Strategic Proposal may be Implemented – Mid West Aquaculture Development Zone. Prepared by the Environmental Protection Authority Statement No. 1058, July 2017.

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## 8. Attachments

TBC