

APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE

by

Nathan Boothman

Abrolhos Islands WA

April 2018

**DEPARTMENT OF PRIMARY INDUSTRIES AND
REGIONAL DEVELOPMENT (DPIRD)
APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE**

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File Ref	L37/18
Date of Application	19 February 2018
General Location	Easter Group, Abrolhos Islands, WA
Area of Proposed Site	6.849 or 8.794 hectares
Species	various coral species
Culture Method	grow-out
Other Sites (within 5 n mile)	Radar Holdings Pty Ltd, Grange Court Pty Ltd, Abrolhos Aquaculture Australia Pty Ltd
Further Information	Contact Clara Alvarez at DPIRD Aquaculture Branch on (08) 6551 4346 or clara.alvarez@dpird.wa.gov.au .

Information provided by the applicant relevant to an application for grant of an aquaculture licence

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Introduction

This document outlines the information for consideration by agencies, stakeholders and community and industry groups regarding a proposal submitted by Nathan Boothman (Boothman) for an aquaculture licence and lease.

Background

Boothman has made an application to the Department of Primary Industries and Regional Development for an aquaculture licence and an aquaculture lease within the Easter Island Group of the Arolhos Islands.

Proposal

Boothman is seeking to establish a coral and live rock aquaculture operation within the Eastern Group to provide cultured live rock and coral for the aquarium trade.

The applicant is proposing two potential sites for the purpose of consultation and the initial assessment; however, only one site will be selected and authorised under the licence, subject to approval. Attachment 1 provides a site plan of the proposed areas.

Boothman proposes to culture the following coral species:

Small polyp	Large polyp
<i>Acropora</i>	<i>Cycloseris</i>
<i>Montipora</i>	<i>Polyphyllia</i>
<i>Porites</i>	<i>Scolymia</i>
<i>Pocillopora</i>	<i>Lobophyllia</i>
<i>Stylophora</i>	<i>Favia</i>
<i>Seriatopora</i>	<i>Favites</i>
<i>Goniopora</i>	<i>Fungia</i>
<i>Alveopora</i>	<i>Heliofungia</i>
<i>Pavona</i>	<i>Goniastrea</i>
Coralomorphs	<i>Platygyra</i>
<i>Dicosoma</i>	<i>Trachyphyllia</i>
<i>Ricordia</i>	<i>Euphyllia</i>
	<i>Catalaphyllia</i>
	<i>Plerogyra</i>
	<i>Diaseris</i>
Soft Corals/coral anemones	
<i>Cladiella</i>	<i>Clavularia</i>
<i>Lobophyton</i>	<i>Sarcophyton</i>
<i>Sinularia</i>	<i>Stolonifera</i>
Zoanthids	
<i>Zoanthus</i>	<i>Protopalpythoa</i>

Boothman is also seeking to apply for an exemption to enable him to collect broodstock of the proposed coral species.

Source of Stock and Methods

Boothman proposes to mount coral fragments and live rock on racks anchored to the seabed.

Coral fragments will be cut from broodstock using bone shears, scissors or a scalpel and glued onto substrate. The applicant proposes to use two types of substrates, frag disks and live rock, which are mounted on frag racks (Figure 2) or racks secured with stainless steel, polyethylene or PVC coated wire mesh and held in place by live rock ballast or anchor.

For the culture of live rock, Boothman proposes to create rock using limestone, sand, shell grit and cement mix. The substrate will be purged in flowing seawater and then dried prior to placement in the proposed aquaculture site. The manufactured rock will be suspended on racks or plastic cray pots or stacked on the seabed.

With regard to broodstock, Boothman proposes to collect endemic coral from within the Arolhos Islands. The exact area of collection will be defined under the Exemption.

Diagram



Figure 1:
Proposed farm layout - Black lines indicate approximate positions of intermittent rack locations running adjacent to current lines. Red line indicates the approximate location of racks for storage of broodstock.



Figure 2:
Example of Frag Racks

Management and Environmental Monitoring

The biosecurity risk of this project is considered low due to the proposed species originating from local waters, being stocked at low densities and not requiring additional or supplementary feeding.

Boothman has submitted a Management and Environmental Monitoring Plan (MEMP), which includes biosecurity controls such as quarantine protocols in the event of a disease outbreak. The risk of disease through coral and live rock is therefore considered low.

The collection of all broodstock will be subject to exemption conditions that deal with biosecurity and environmental risks.

Environmental monitoring will be conducted at a regular basis by conducting water quality and sediment testing as well as video transects of benthic habitats along racks and mooring lines of the aquaculture gear.
