APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE

by

Coral Futures Corporation Pty Ltd

Dampier Archipelago

November 2022

DEPARTMENT OF PRIMARY INDUSTRIES AND REGIONAL DEVELOPMENT

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File Ref	fA45790
Date of Application	14th February 2022
General Location	Dampier Archipelago
Total Area of Proposed New Sites	219.132 hectares
Species	Various hard & soft corals
Culture Method	Coral propagation
Other Sites (within 5 n mile)	Tennereef Pty Ltd
Further Information	Contact Nicole Watts at the Department of Primary Industries and Regional Development (DPIRD) on (08) 6552 1904 or nicole.watts@dpird.wa.gov.au.

Information provided by the applicant relevant to applications for an aquaculture licence and lease

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Introduction

This document provides the information Coral Futures Corporation Pty Ltd (CFC) has submitted in respect of its applications for an aquaculture licence and lease, for consideration by agencies, stakeholders and community and industry groups.

Proposal

On 14th February 2022, CFC made an application to the Department of Primary Industries and Regional Development (DPIRD) for an aquaculture licence and lease to grow various hard and soft coral species and genera at a site located in the Dampier Archipelago. The site comprises an area of 219.132 hectares. Fifty-three of the 69 proposed species are hard corals.

In its application, CFC seeks to establish an aquaculture operation for the propagation and harvest of the following genera and species of coral:

Acanthastrea spp.	*Cycloseris* spp.	*Hydnophora* spp.	*Pocillopora* spp.
Acropora spp.	*Cyphastrea* spp.	*Leptastrea* spp.	*Polyphyllia* spp.
Alcyonacea spp.	*Dendronephthya* spp	*Leptoseris* spp.	*Porites* spp.
Alcyonium spp.	*Diaseris* spp.	*Lobophyllia* spp.	*Psammocora* spp.
Alveopora spp.	*Duncanopsammia* spp.	*Lobophyton* ssp.	*Sarcophyton* spp
Australomussa rowleyensis	*Echinophyllia* spp.	*Merulina ampliata*	*Scapophyllia cylindrica*
Barbattoia amicorum	*Euphyllia* spp.	*Montastrea* spp.	*Scleractinia* spp.
Blastomussa spp.	*Favia* spp.	*Montipora* spp.	*Scolymia* spp.
Capnella spp.	*Favites* spp.	*Moseleya latistellata*	*Seriatopora spp?*
Catalaphyllia spp.	*Fungea repanda*	*Mycedium elephantotus*	*Sinularia* spp.
Caulastraea spp.	*Fungia* spp.	*Oxypora* spp.	*Stylocoeniella guentheri*
Cladiella spp.	*Galaxea fascicularis*	*Pachyseris speciosa*	*Stylophora* spp.
Corallamorphia spp.	*Goniastrea* spp.	*Palauastrea ramosa*	*Symphyllia* spp.
Corallimorphus spp	*Goniopora* spp.	*Pavona* spp.	*Trachyphyllia* spp.
Coscinaraea columna	*Gorgonians* spp.	*Platygyra* spp.	*Turbinaria* spp.
Coscinaraea spp.	*Heliofungia* spp.	*Plerogyra* spp?	*Zoanthian* spp.
Cycloseris spp.	*Heteropsammia cochlea*	*Plesiastrea versipora*	*Zoanthidae* spp. Undifferentiated
			Zoanthus spp.

CFC aims to reduce harvest of wild coral populations from the commercial fishery. CFC hopes that with the establishment of an artificial reef to culture and harvest coral it can provide a sustainable source of coral stock to the marine aquarium industry.

CFC also proposes that when established the artificial reef could provide an opportunity for eco-tourism within the Dampier Archipelago.

Source of Stock and Methods

To establish the artificial coral reef CFC proposes to source broodstock from authorised Marine Aquarium Fish Managed Fishery licence holders, noting that under current translocation requirements, broodstock must be collected from the same geographical area.

Construction of Artificial Reef Platforms (ARPs) will occur at a land-based facility in Karratha. Platforms will be constructed from recycled glass, bricks, and concrete. The dimensions of the proposed artificial reef platforms (as seen in Figure 1) are: L: 500 mm, b: 300 mm, a: 250 mm, h: 100-150 mm and weight 35-65 kg.

ARPs will be deposited on the ocean floor and placed in an interlocking position on the substrate and will sit 4-8 metres beneath the surface. Divers will then attach coral fragments to the purpose-built ARPs within the proposed lease site for grow-out and harvest.

Diagram

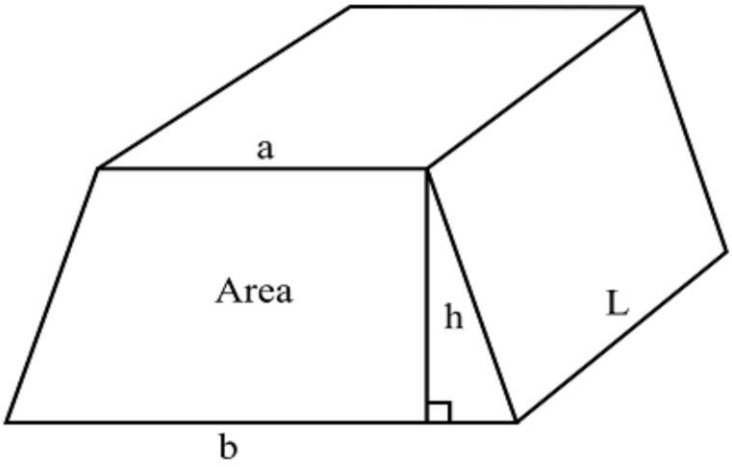

Figure 1:
Proposed artificial reef platform design

Management and Environmental Monitoring

CFC has submitted a Management and Environmental Monitoring Plan (MEMP), which includes environmental management processes, biosecurity protocols and incident and emergency procedures. The biosecurity risk of coral aquaculture at the proposed sites is considered low, due to the species originating from local waters and not requiring supplementary feed.

CFC's MEMP outlines proposed biosecurity and quarantine controls. Boat crew and divers will monitor environmental parameters such as water temperature, turbidity, water flow, video monitoring of benthic habitat and checking for smothering by sediment or algae. Navigational equipment aboard the vessel will measure such parameters and the detection of any marine pests or foreign organisms will be monitored through visual observations.

If CFC suspects that any fish at the site are affected by disease, including any suspicion or detection of a marine pest or noxious species, it will report to DPIRD within 24 hours and follow directions of DPIRDs Diagnostic and Laboratory services.

The substrate within the proposed site is mostly located over sand, with small patches of sponge gardens and coral outcrops. Fish assemblages consist of predominantly small groups of goat fish transiting the sand beds. In the instance where natural coral growth is evident, CFC will avoid operating in these areas. CFC's MEMP contains a management plan regarding impact on protected species that includes monitoring for impact to marine fauna and marine mammals.

Risks

The proposed aquaculture activity poses no significant environmental issues, with no identified risks that cannot be managed within CFC's MEMP.

The proposed species of coral occur naturally in the surrounding environment, therefore the risk of the introduction of disease is low. All coral produced for harvest will be the progeny of endemic broodstock and will be transferred to the proposed lease site upon the grant of the licence, as per licence conditions.

The MEMP contains a management plan regarding impact on protected species that includes monitoring for impact to marine fauna and marine mammals.