

SUMMARY OF PILOT LEASE APPLICATION

LA00275 – AQ00236

LEASE OUTSIDE A ZONE (PILOT) APPLICATION FOR MARINE AQUACULTURE (Pursuant to Division 2 of the Aquaculture Act 2001)

Company Name: Swim with the Tuna Pty Ltd
Trading Name: Swim with the Tuna
Australian Business Number 80 1414 81183

INTRODUCTION

The purpose of this document is to provide a brief summary of the information provided to PIRSA Aquaculture on the pilot lease application LA00275 and corresponding licence application AQ00236.

All information contained in this summary has been provided by the applicant and will be reviewed by PIRSA Aquaculture as part of the standard pilot lease assessment process.

Note that the information contained in this Summary document is subject to change as a result of the PIRSA Aquaculture assessment process.

NATURE OF THE PROPOSAL

This application is for a tourism operation based in the waters of Nepean Bay, near Kingscote on Kangaroo Island.

The tourism operation will allow people/customers the opportunity to swim with southern bluefin tuna within the safe confines of a tuna pontoon. For those customers not wanting to swim with tuna, there be the option of being able to view aquatic animals on the surface by looking down on the water from the vessel or viewing platform, or underwater by descending into the underwater section of the viewing platform to view both southern bluefin tuna and fish species that are naturally occurring to the area through glass windows.

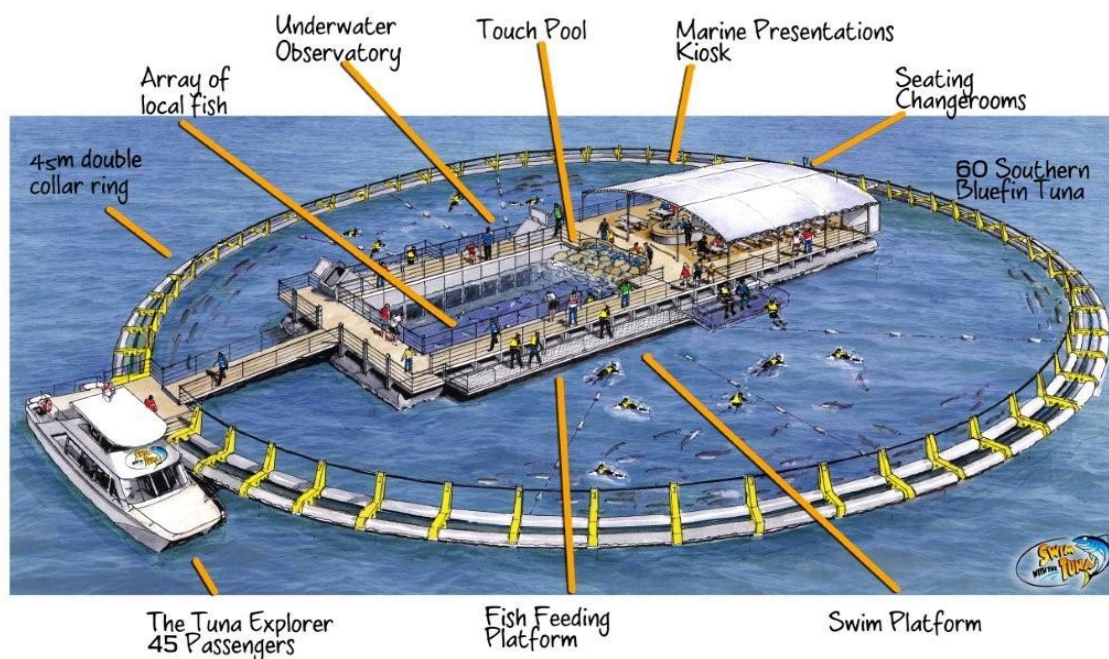


Figure 1. Proposed tourism operation in Nepean Bay, Kangaroo Island

REGIONAL, SOCIAL AND ECONOMIC BENEFITS OF THE PROPOSAL

This proposal will complement the existing tourism operations on Kangaroo Island. The proposal will attract more people to Kangaroo Island and result in greater economic turnover for the hospitality and trade sector. This will then create a multiplier effect throughout the community with reinvestment through service industries. There will be a requirement for the company to purchase supplies from local traders. There will be the opportunity for employment in the future after the initial start up is completed.

LOCATION OF THE PROPOSED OPERATION

Coordinates GDA94 (WGS 84) for each corner of the site:

750429.184 Metres East	6044592.343 Metres North
751179.465 Metres East	6044592.343 Metres North
751179.465 Metres East	6044342.249 Metres North
750429.184 Metres East	6044342.249 Metres North

Area of site applied for (in Hectares): 18.75 ha

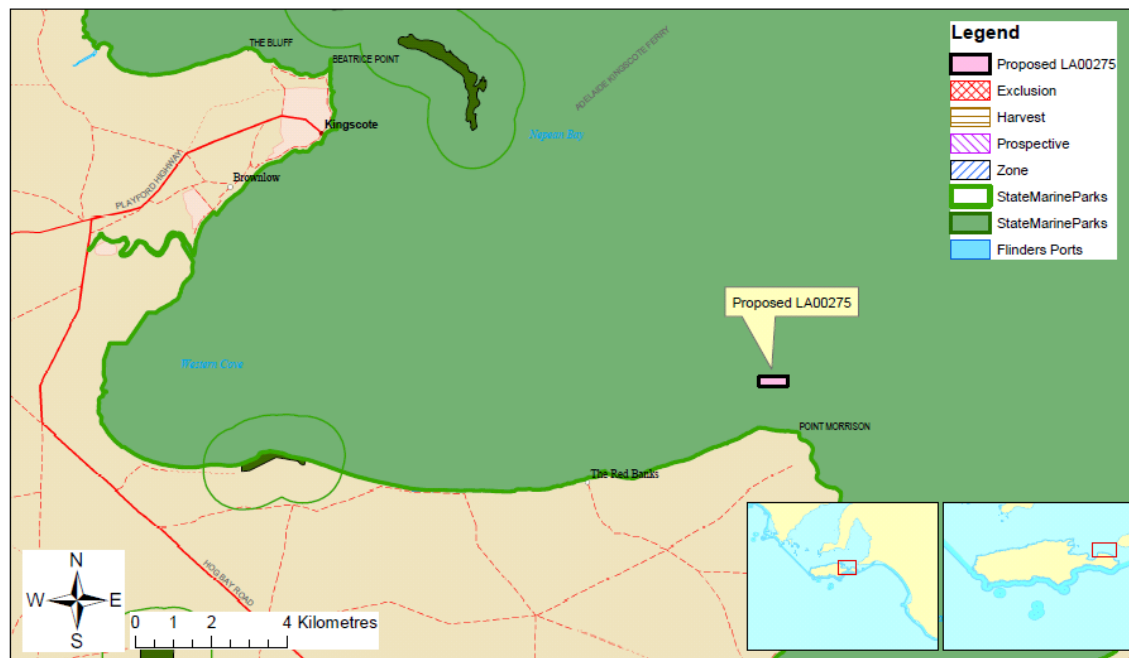


Figure 2. Location of proposed aquaculture pilot lease.

DETAILS OF SPECIES APPLIED FOR

The aquatic species listed will be obtained from the following sources:

1. Quota allocation
2. Hatchery
3. Caught from the wild using a commercial fishing licence.

Species List

COMMON NAME	SPECIES
Nannygai	<i>Centroberyx lineatus & affinis</i>
Blue devil	<i>Paraplesiops meleagris</i>
Boarfish	<i>Pentaceropsis recurvirostris</i>
Bream	<i>Acanthopagrus butcheri</i>
Dusky morwong	<i>Psilocranium nigricans</i>
Blue Groper	<i>Achoerodus gouldii</i>
Harlequin fish	<i>Othos dentex</i>
Yellowtail Kingfish	<i>Seriola lalandi</i>

Moonfish
 Blue Morwong, (Queen Snapper)
 Mulloway
 Old wife
 Salmon (Australian)
 Samson Fish
 Southern Bluefin Tuna
 Sergeant Baker
 Snapper
 Swallowtail
 Sweep
 Trevally
 Silver Trevally
 Port Jackson shark

Vinculum sexfasciatum
Nemadactylus valenciennesi
Argyrosomus japonicus
Enoplosus armatus
Arripis truttaceus
Seriola hippos
Thunnus maccoyii
Latropiscus purpurissatus
Pagrus auratus
Trachichthodes lineatus
Scorpius species
Usacaranx georgianus
Pseudocaranx dentex
Heterodontus portusjacksoni

AQUACULTURE DEVELOPMENT LAYOUT & CONSTRUCTION

The configuration of all structures located within the site boundaries (e.g. racks, cages, floats, docks, anchors, posts, breakwaters, buildings and processing plant, tanks, raceways) as they will appear at the pilot scale, and when the aquaculture venture reaches full operation

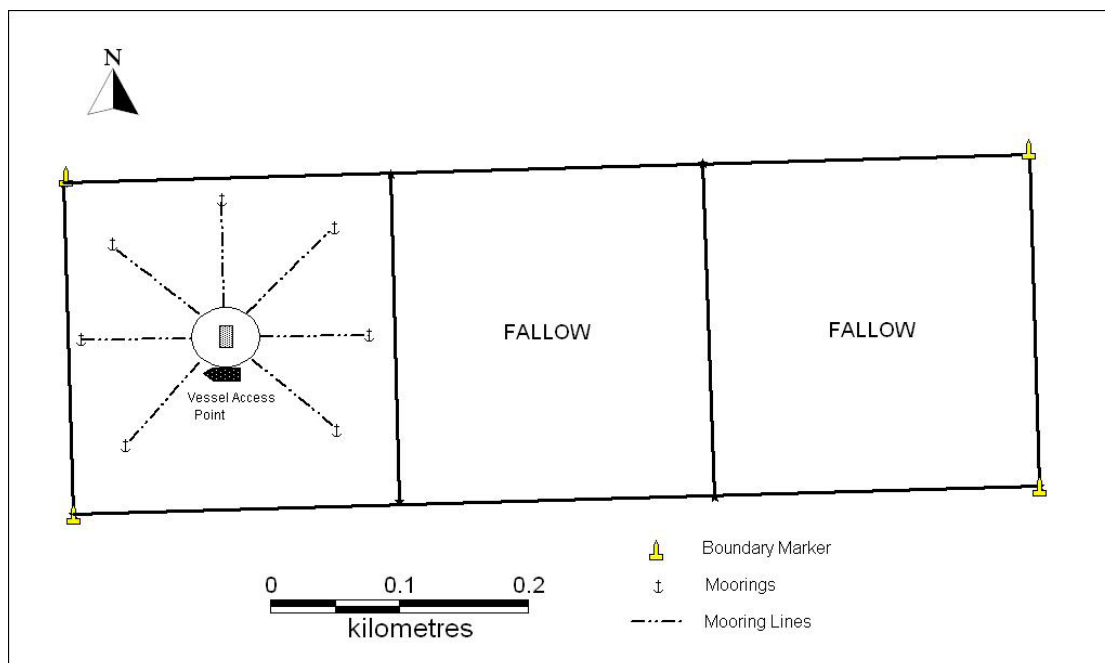


Figure 3. Site layout and following regime.

FARMING INFRASTRUCTURE

Brief description of the farming infrastructure to be used on the site:

Double Collar Ring (Figure 1)

- Inside Collar: 45m Diameter (Circumference 141.39m)
- Outside Collar: 46.9m Diameter (Circumference 147.36m)
- Anchors: 7 x 1T cast iron anchors with 15m of 30mm stud link chain.
- Mooring Anchors 1: 500Kg cast iron anchors with 50m of 8 strand, 40mm diameter super dan rope with soft eye.
- Mooring Anchor 2: 250Kg Admiral Anchor with 50m of 24mm super dan rope.

Double Collar Net:

- Circumference – 140.8m
- Diameter - 45m
- Depth of walls – 7m
- Depth at centre – 9m
- Meshing - 6 inch meshing
- Jump Fence – 2.5m (Refer to Diagram)

Viewing Platform (Internal net enclosure for non-tuna species)

- Netting - This net is made from the same material and netting as the double collar net. Same mesh size, breaking strain and brand as the double collar net.
- Depth at walls – 4.8m
- Depth at centre of floor - Approximately 6 metres.

Vessel

- Operation Class – 1C Restricted offshore waters to 20nm.
- Boat Make – Wildcat Marine Catamaran
- Model – Cougar Catamaran
- Built – 1995
- Length – 14.6m
- Freshwater Capacity – 400L
- Blackwater Capacity – 200L
- Toilets – Male and Female

FEEDING

It is important to emphasise that this is a tourism operation and not a production system.

Fish will be fed a range of baitfish commonly used in the ranched southern bluefin tuna industry (Ellis & Rough 2005). SBT will be fed a minimum of 5% body weight per day (when weather permits) to meet metabolic demands. There will be an extra 1-2% supplied to meet growth requirements. The remaining fish have a lower feed requirement to meet metabolic demand and growth and this will be assessed during the initial phases of the project.

As part of the experience, Swim with the tuna will provide baitfish to customers to feed the fish by hand. When customers aren't feeding the fish it will be performed by company employees who will also feed by hand.

Feeding frequency will depend on the amount of charters that will operate on a given day with up to 3 charters expected during peak tourism periods. When charters are not operating the site will be visited once a day to inspect the integrity of equipment, inspect the stock and to feed the fish.

ONGOING FARMING OPERATIONS

Divers will inspect the stock daily and remove any mortalities should they occur. The company has access to consultants and a veterinarian that will prepare feeding regimes based on the nutritional information of baitfish and will be available in the event there are any health issues with the stock.

The percentage of the area of the licence which will be fallow at any time - 66% of the proposed lease site will be fallow at any one time (figure 3).

No fish processing or feed preparation will be performed on site.

RESEARCH

The main focus of this application is for tourism. However there may be the opportunity to work with research providers in the future to undertake research in the areas of fish behaviour, physiology and metabolism using innovative technology.

TECHNICAL AND ENVIRONMENTAL MANAGEMENT CAPACITY

Swim with the tuna has employed people with the necessary regulatory skills including a Master 4 & 5, Marine Engine driver and Commercial divers. These people have extensive experience with aquaculture operations including management, capture, towing, transfer, feeding, maintenance, environmental monitoring, record keeping and safety.

The company has extensive experience in managing wildlife tourism operations which include the original Dangerous Reef Explorer, the development of the current swim with tuna tourism operation in Port Lincoln, and the Calypso Shark Diving Charters.

BIOGEOGRAPHICAL / ENVIRONMENTAL CHARACTERISTICS OF THE SITE

The video footage showed a relatively flat sandy bottom with light coverage of macroalgae and sponges and the occasional small stand of seagrass. Transect depth at the beginning was 13.8m and 13.7m at completion (Figure 4).

Sediment Characteristics

Sediment consisted of fine grains that were neutral in colour and easily re-suspended as evidenced in the video footage when the sled first landed on the seafloor and at the completion of the transect. Bioturbation was medium.

Community Description

The benthic environment consisted of low macro algal coverage and the occasional sponge. Epiphytes were evident on macroalgae. There were the occasional holothurians and razor fish. One aspect of the video survey was the appearance of mats that are possibly algal or cyanobacteria.

The remainder of the video footage was consistent with the results for the first 150m with areas of high natural organic detritus

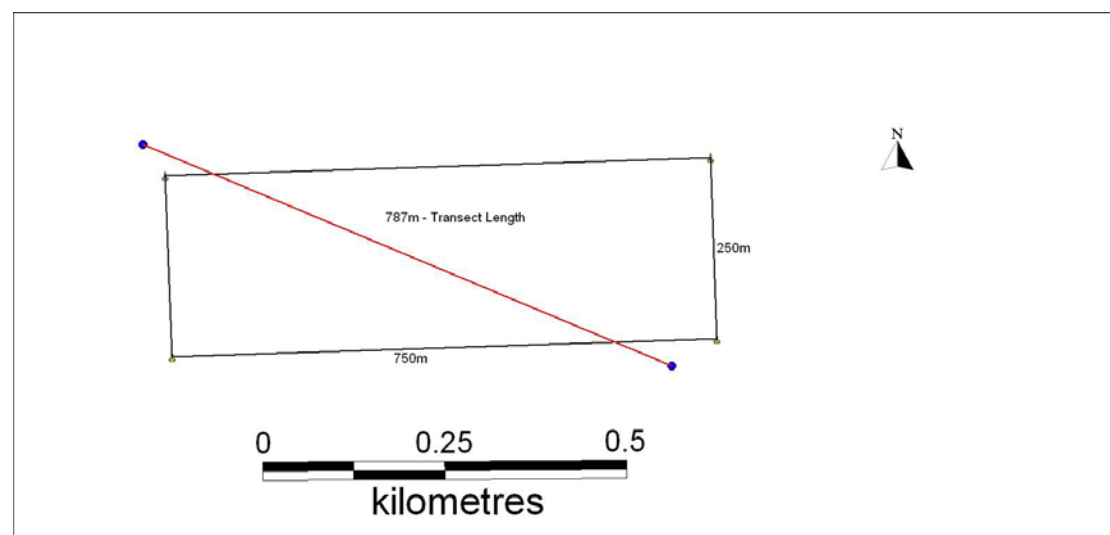


Figure 4. Biogeographic (benthic) video transect location.

PHYSICAL CHARACTERISTICS OF SITE

The site's physical characteristics are summarised below in Table1.

Table 1. Summary of the physical characteristics of the site from the original application.

Characteristic	Description	
Maximum Fetch	180 km	
Average Annual wave height	1.5-2 m	
Water Depth	Refer below	
Minimum Water Depth between the bottom of development and the	3 m	
Anticipated Salinity range	32 - 34 ‰	
Maximum Tidal Range	2.4 m	
Average water flow rate	10 cm/s ⁻¹	
Average Temperature	Summer	22 °C
	Winter	11 °C

The depth at the proposed corners of the lease site are as follows (Figure 5):

750429.184 Meters East	6044592.343	14.4 Metres North
751179.465 Meters East	6044592.343	12.4 Metres North
751179.465 Meters East	6044342.249	13.5 Metres North
750429.184 Metres East	6044342.249	13.7 Metres North

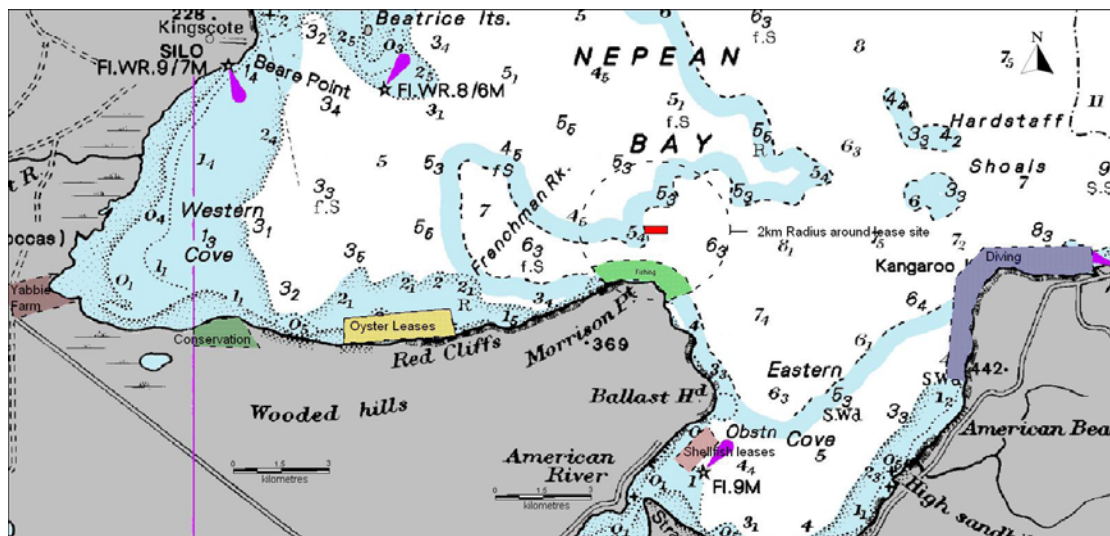


Figure 5. Cadastral Chart showing a 2 km radius around the proposed tourism site (Note Depth in Fathoms).