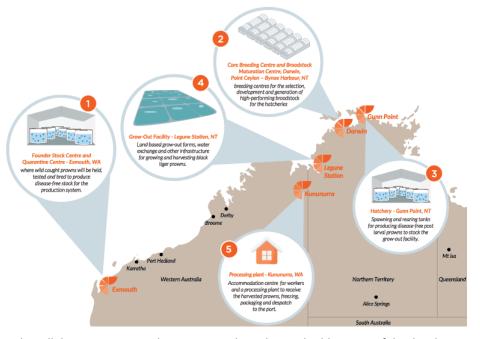


# PROJECT SEA DRAGON - EXPRESSION OF INTEREST (EOI)

# **Package Title** Farm 1 - Seawater Lift Pumps and GOP Discharge Pumps **Reference Number** P004 **Project Overview** The proposed Project Sea Dragon (PSD) is a large-scale, integrated, land-based aquaculture project in northern Australia that will deliver premium-quality, year-round reliable volumes of prawns for domestic and export markets. PSD will be a staged development of up to 10,000 hectares of production ponds as well as a series of facilities across northern Australia including: Founder Stock Centre and Quarantine Centre at Exmouth, WA; Bynoe Breeding Facility, that includes a Core Breeding Centre and a Broodstock Maturation Centre, at Bynoe Harbour, near Darwin, NT; Hatchery to be built at Gunn Point, near Darwin, NT; Grow-out Facility to be built at Legune Station, NT, approximately 110 km from the town of Kununurra, WA; and Processing facility to be built approximately 15 km north of Kununurra, WA.



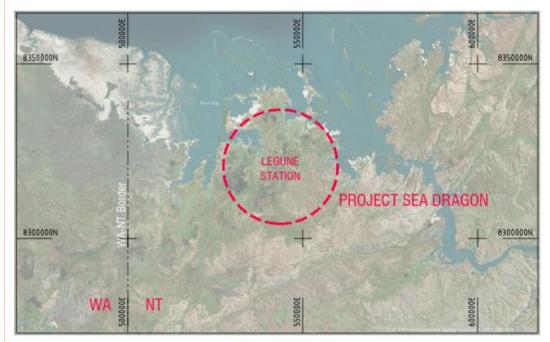
Seafarms has all the necessary regulatory approvals in place to build Stage 1 of the development that consists of approximately 1,120 Ha of ponds and the associated upstream and downstream facilities. Seafarms proposes to develop Stage 1 in several steps with Stage 1a (S1a) being one farm at Legune of approximately 400 Ha, and the upstream and downstream facilities at Legune and other sites. Subject to further funding, the balance of Stage 1 is targeted to be complete within 3 years of commissioning S1a and that subsequent stages 2 and beyond to the full scale of approximately 10,000 hectares would continue to be delivered in line with overall schedule of work.

Stage 1a of Project Sea Dragon has a total construction budget of approximately \$281M excluding cost contingency and escalation. Organisations interested in responding to this request for expression of interest are encouraged to review Seafarms (ASX – SFG) <u>Annual Report Presentation</u> released on the ASX site 1st September 2021 and later announcements.

The shortlisted respondents may be required to sign a Non-Disclosure Agreement (NDA) prior to receiving the Tender Documents.

## Package Description

The location of these works is Legune Station, NT which is located approximately 110 km north-east of Kununurra, Western Australia, and approximately 40km inside the NT border.



LOCALITY PLAN

This package of work is for the design, supply, installation monitoring, commissioning, and performance testing of the Seawater Lift Pumps (1 location) and Farm 1 GOP Discharge Pumps (3 locations) at the main Grow-out Facility. The site must operate as an n+1 configuration (i.e. minimum 1 redundancy for all pump sizes.)

The pumps shall be axial or mixed flow propeller type with the preferred pump configuration being a floating pump equipped with an electric motor. Other pump configurations will also be considered such as a vertical shaft stationary pump.

The pump controls will be located on the adjacent hardstand. The size and exact location of the control panel and shelter will be determined during the final design phase.

The successful tenderer will supply the pumps, motor control centres, other required controls, connecting piping and or fittings, as well as any required technical support. The equipment will be installed by others; however the successful tenderer will be required to monitor the installation to ensure it is installed in accordance with their requirements. The successful tenderer will also be required to commission and performance test their system. PSD will provide onsite accommodation, messing, and office space.

Specific parameters for the pumps are subject to final design however the respondents must use the following data in providing a response.

# Seawater Lift Pumps:

- The intent of the Seawater Lift Pumps is to move settled seawater from the Sedimentation Pond to the Farm Supply Channel.
- Volume of water required is a maximum of 900 ML/d over a 12-hour period (20.83 m<sup>3</sup>/s);
- The pumps shall be configured on an n+1 arrangement (i.e. minimum 1 redundancy);
- There is one Pump Station (location) to achieve the required flow;
- The water is saline and is expected to contain low levels of turbidity and potentially some floating debris trapped in the basin;

- The minimum water level in the Sedimentation Pond (supply side) is 6.0 m AHD, with a maximum of 6.4 m AHD. The average will be 6.2 m AHD. The invert level of the supply side embankment pipe is 4.0 m AHD.
- The average water level in the Farm Supply Channel (discharge side) is 8.0 m AHD. The invert level of the discharge side embankment pipe is 5.53 m AHD.
- The top of the embankment is 8.3 m AHD;
- The required maximum flow of 900 ML/d (20.83 m³/s) shall be achieved at the average water level conditions in the Sedimentation Pond and the Farm Supply Channel. The pumps shall operate satisfactorily at all water level combinations.
- Under normal operating conditions the discharge pipe will be submerged below the surface water level of the Farm Supply Channel.
- Each pump shall be connected to an individual 12m discharge pipe via a flexible coupling. This pipe will allow for movement due to the changing water levels and to also connect to the embankment piping (by others.) Pipe connections shall allow the quick disconnection and removal of the pump in the case of failure.
- The Supplier shall also select and supply all non-return valves, siphon braking valves, pipe sections and air valves required for the correct and efficient functioning of the system.

### Farm 1 GOP Discharge Pumps

- The intent of the Farm 1 GOP Discharge Pumps is to move water from the Grow Out Ponds Discharge Channels to the Farm Discharge Channel.
- There are 3 Pump Stations; PDC1, PDC2 and PDC3. PDC1 and PDC2 will manage 40% of the total flow each; with the remaining 20% being managed by PDC3.
- The site pumps shall be configured on an n+1 arrangement on a site-wide basis (ie. minimum 1 redundancy for all pump sizes);
- Volume of water required is a maximum 900 ML/d over a 12-hour period (20.83 m<sup>3</sup>/s);
- Pumping medium will be sea water slightly contaminated with organics being discharged from the Grow Out Ponds.
- The water is saline and is expected to contain low levels of turbidity and potentially some floating debris trapped in ponds and channels;
- The required maximum flow of 900 ML/d (20.83 m<sup>3</sup>/s) shall be achieved at the average water level conditions in the Pond Discharge Channels and the Farm Discharge Channel. Pumps shall operate satisfactorily at all water level combinations.
- Under normal operating conditions the discharge pipe will be submerged below the surface water level of the Farm Discharge Channel.
- Each pump shall be connected to an individual 12m discharge pipe via a flexible coupling. This pipe will allow for movement due to the change in water levels and to also connect to the embankment piping (by others.) Pipe connections shall allow the quick disconnection and removal of the pump in the case of failure.
- The Supplier shall also select and supply all non-return valves, siphon braking valves, pipe sections and air valves required for correct and efficient functioning of the pumping system;
- The water levels are as follows:

Description	PDC1 Pump Station	PDC2 Pump Station	PDC3 Pump Station
Embankment Pipe Invert level (supply)	3.60 m AHD	3.60 m AHD	3.60 m AHD
Embankment Pipe Invert level (discharge)	5.74 m AHD	5.53 m AHD	5.49 m AHD
Operational Water level	7.24 m AHD	7.00 m AHD	7.00 m AHD
Top of embankment level	7.60 m AHD	7.60 m AHD	7.60 m AHD

Package Title: Farm 1 - Seawater Lift Pumps and GOP Discharge Pumps

Road access to the site may be restricted, and or closed due to conditions associated with the northern Australian wet season.

In accordance with PSD's commitments to building local and Indigenous capacity in the region, the EOI evaluation will include a weighting for utilising local and regional businesses in the Northern Territory and the Kimberly region of Western Australia.

Respondents to the EOI will be assessed and short listed, with short listed respondents to be invited to tender.

PSD reserve the right to combine this package and or parts of this package with any other project package.

## Key Information to be provided with the Respondent's EOI

#### Safety

The shortlisted respondents will be required to include a Covid-19 Management Plan within their tender submission that will form part of the tenderer's WHS Management Plan.

#### **Accreditations**

The respondent shall have, or be able to attain prior to contract award, all required accreditations, as well as registrations needed to successfully deliver this work package.

The respondent shall provide a copy of their Quality Management system and records of previous project performance to support their capability to delivery this work package.

#### **Reference Projects**

Provide project data sheets for 3 reference projects. The reference projects should be of similar size, complexity, and location.

The data sheets shall include:

- Project Name;
- General Project Description;
- Client Name and Reference Contact;
- Approximate Project Value;
- Actual Start Date;
- Actual Finish Date and any variations to the schedule and reasons for variations; and
- WHS Notifiable Incident(s)? If yes, then explain in detail as to the incident, investigation and recommendations.

The respondent should highlight the following:

- Experience working on remote construction projects; and
- Experience in delivering similar projects during Northern Australia's wet season, including access issues to/from and within the project site.

The above should be evidenced by providing references from past clients with their current contact details.

Each project data sheet shall be no more than two A4 pages (including photos).

# Reference Documents

The following documents are attached herein for EOI purposes:

- Seawater Lift Pump Station (Indicative) Plan View
- GOP Discharge Pumps Pump Station 2 (Indicative) Plan View

#### **Key Milestones**

Target date for issuing Invitations to Tender (ITT) is **3 November 2021**;

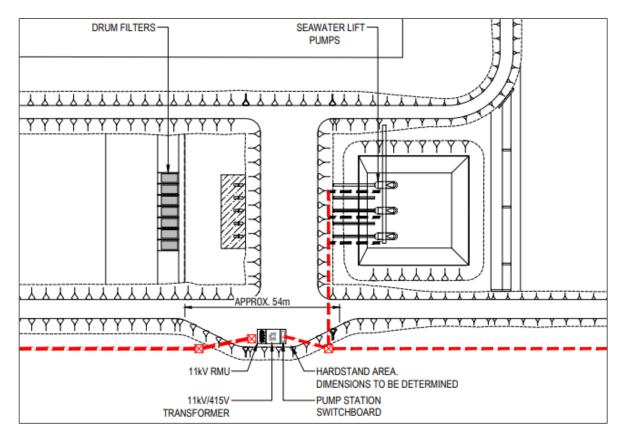
Target Contract Award Date is 15 December 2021;

Target Pump Delivery Completed Date is 22 September 2022; and

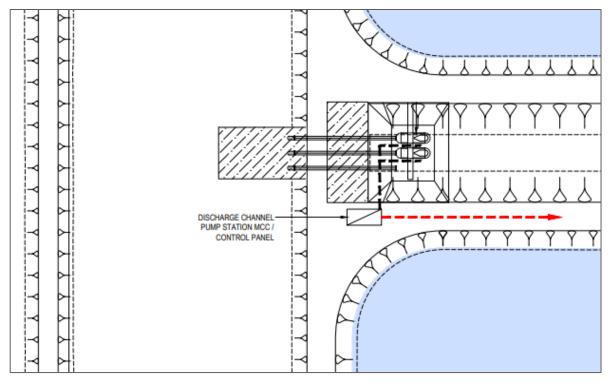
Target Date for Practical Completion is **30 March 2023**.

Project Sea Dragon – Expression of Interest Reference Number: P004 Package Title: Farm 1 - Seawater Lift Pumps and GOP Discharge Pumps

Expression of Interest	Interested parties with the requisite experience are invited to express an interest in this work package by registering and lodging their expression of interest (EOI), complete with all key information stipulated in this document, for this work package on the NT ICN Gateway online platform prior to the closing date stated below.  projectseadragon.icn.org.au Please ensure your ICN company profile is up to date before registering your expression of interest.
EOI Closing Date	5:00 pm (1700h) on <b>20 October 2021</b> Darwin time (ACST)
Contact	ICN NT Resources Team +61 8 8922 9422 resources@icnnt.org.au
Project URL's	www.seafarms.com.au
Disclaimer	This package description and target award date is indicative only and subject to change. It is intended to provide only a brief outline of certain works that may be required for the proposed Project Sea Dragon and should be read in conjunction with Project Sea Dragon project description on ICN Gateway.



Seawater Lift Pumps (Indicative) - Plan View



GOP Discharge Pumps - Pump Station 2 (Indicative) - Plan View