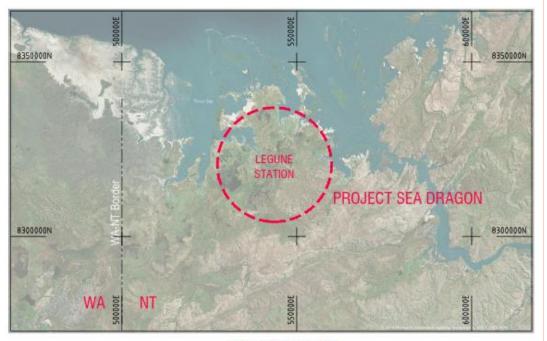


## PROJECT SEA DRAGON – EXPRESSION OF INTEREST (EOI)

Package Title	Farm 1 – Penstocks
Reference Number	P003
Project Overview	The proposed Project Sea Dragon (PSD) is a large-scale, integrated, land-based aquaculture project in northern Australia that will deliver year-round reliable volumes of premium quality 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; Core Breeding Centre and Broodstock Maturation Centre, near Darwin, NT;
	<ul> <li>Hatchery to be built at Gunn Point, near Darwin, NT;</li> <li>Grow-Out Facility to be built at Legune Pastoral Lease, NT, approximately 110 km from the town of Kununurra, WA; and</li> <li>Processing facility to be built approximately 15km north of Kununurra, WA.</li> </ul>
	<figure></figure>
	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 forecast capital cost estimate of A\$370 million to A\$410 million
	(including escalation and contingency). Organisations interested in responding to this request fo expression of interest are encouraged to review Seafarms (ASX – SFG) Annual Report Presentation 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 northeast of Kununurra, Western Australia, and approximately 40km inside the NT border.



## LOCALITY PLAN

This package of works is for the design, supply, and technical support for manual penstocks which will be installed at the Farm 1 Grow-Out Facility. The assembly will consist of a vertical gate operated by a manual handle on a spigot, which has the capability of being fitted with an actuator at a later date.

The successful tenderer will supply the vertical penstocks, installation manual, and any other required equipment for the correct operation of the gate system. The equipment will be installed by others; however, the successful tenderer must provide sufficient documentation and technical support to ensure it is installed in accordance with their requirements.

As a component of the tender, the tenderer must provide a proposal for an actuator that can be attached to an in-service penstock gate. This actuator will enable the remote adjustment of the vertical gate position via SCADA and a local control panel. The quantity of actuators and the exact location of the control panel will be determined during the final design phase. The successful tenderer will also be required to commission, and performance test their actuator system. PSD will provide onsite accommodation, messing, and office space.

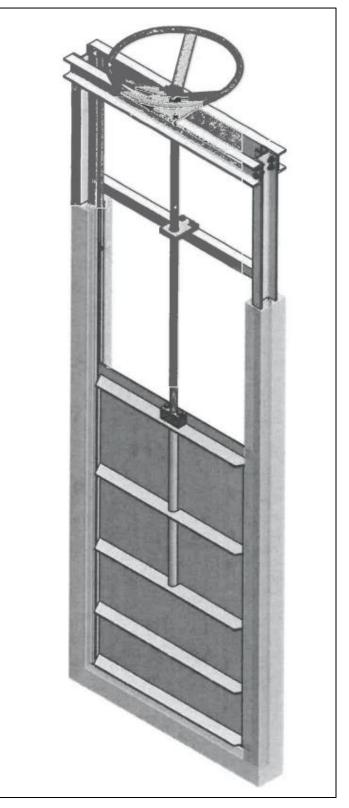
Specific parameters for the penstocks (water gates) and actuators are subject to final design, however the respondents must use the following guidance in providing a response.

## Penstocks:

- There are 72 Grow-Out Pond penstock locations, and 72 Nursery Pond penstock locations.
- The tenderer is to propose a suitable number of operational spares.
- The gates structural components are to be constructed from either Marine Grade aluminium or 316 SS. If used together the materials will be separated to avoid corrosion.
- The gates shall be situated into vertical rebates within a concrete channel structure.
- The gates shall seal with a low friction, long lasting material.
- Wedges will be used to hold the gate against the back side of the rebate to help create a sufficient seal.
- The precast rebate of the Grow-Out Ponds is 1600mm wide and 50mm in length. The gate must be able to open a minimum of 1.2 m in height while submerged under a maximum of 2.2 m of water on one side.

	The precast rebate of the Nursery Ponds is 1000mm wide and 50mm in length. The gate
	must be able to open a minimum of 0.6 m in height while submerged under a maximum
	<ul> <li>1.8 m of water on one side.</li> <li>Sufficient clearance must be allowed for in the rebate to allow the easy removal of the</li> </ul>
	gate (ie. not interference fit.)
	Pumping medium will be sea water slightly contaminated with organics. Water solicity ranges from 10 ppt - 42 ppt
	<ul> <li>Water salinity ranges from 10ppt – 42ppt.</li> <li>Water temperature ranges from 22 degrees to 36 degrees Celsius.</li> </ul>
	Actuators:
	<ul> <li>The power supply is a 415V 3-phase 50Hz mains power from a local kiosk.</li> <li>The actuator should allow the gate to stop at any point through its full vertical motion to</li> </ul>
	control water flow more accurately.
	The actuator shall have minimum IP65 ingress protection.
	<ul> <li>The actuators will fail in position (last) and have manual override.</li> <li>Equipment is to have a remote monitoring system that allows for integration into a site-</li> </ul>
	wide SCADA system including remote alarm notification and monitoring of system
	operating parameters.
	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	Safety
be provided with the Respondent's EOI	The shortlisted respondents will be required to include a Covid-19 Management Plan within their
	tender submission that will form part of the Contractor'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;
	<ul> <li>Client Name and Reference Contact;</li> <li>Approximate Project Value:</li> </ul>
	<ul> <li>Approximate Project Value;</li> <li>Actual Start Date;</li> </ul>
	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.
	and recommendations.

	The respondent should highlight the following:
	<ul> <li>Experience working on remote construction projects; and</li> <li>Experience in delivering similar projects during Northern Australia's wet season</li> </ul>
	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 indicative sketches are attached herein for EOI purposes:
	Penstock with Actuator Omitted (Indicative) – Isometric View
Key Milestones	Target date for issuing Invitations to Tender (ITT) is <b>10 January 2022</b>
	Target Contract Award Date is 3 March 2022
	Target Gate Delivery Completed Date is 17 July 2022
	Target Date for Practical Completion is 20 March 2023
Expression of Interest (EOI)	Interested parties with the requisite experience are invited to express an interest in this work package by registering and lodging their expression of interest, 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>17 December 2021</b> Darwin time (ACST)
Contact	ICN NT Resources Team +61 8 8922 9422 resources@icnnt.org.au
Project website	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.



Penstock with Actuator Omitted (Indicative) – Isometric View