

Commercial Fishers Information Sheet

Keraudren Phase 3 Marine Seismic Survey Environment Plan



Activity Overview

Santos is planning to conduct a three-dimensional marine seismic survey (the survey) in Commonwealth waters, within petroleum titles WA-437-P, WA-438-P and surrounding waters.

Location

The survey location is in the Bedout Basin, approximately 130 km north-east of Port Hedland, and 64 km north of Cartamina Point on the West Australian coastline at the closest point. (see **Figure 2.** activity location).

Timing

The activity is scheduled to occur between 1 January and 30 June 2028, (and a contingency of 1 January and 30 June 2029), subject to obtaining all regulatory and business approvals.

Duration

The expected duration of the survey is approximately 20-40 days, with operations to be undertaken on a 24-hour basis. The expected duration is a forecast and is subject to change based on vessel availability, adverse weather conditions, standby periods, or technical/equipment issues that may arise during operations.

Operational Area (OA)

The OA defines the area within which the seismic survey vessel will operate during the normal conduct of the Petroleum Activity. It includes the Active Source Area (ASA) and a working buffer beyond the ASA.

Active Source Area (ASA)

The ASA defines the area within which the seismic source will be operated to acquire the seismic data and achieve the geophysical objectives of the survey.

Consultation and feedback

All petroleum activities in Commonwealth waters must have an environment plan (EP) accepted

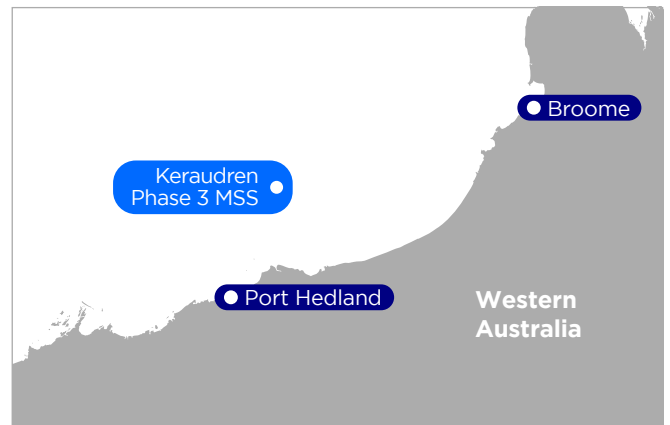


Figure 1. Bedout Basin, North West Shelf.

by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) before any activities can take place.

Under Commonwealth environment regulations, Santos is required to consult with relevant persons about proposed activities in the course of preparing an EP. Santos consults to further ascertain, understand and assess potential environmental impacts and risks of a proposed activity and what, if any measures should be implemented to reduce these to 'as low as reasonably practicable' and to an acceptable level.

A relevant person includes Commonwealth and State agencies and authorities to which the proposed activity may be relevant, and persons or organisations whose functions, interests or activities may be affected by the proposed activity.

Please contact us as soon as possible if you consider you may be a relevant person, to initiate consultation with you and so you can tell us how you would like to be consulted throughout the consultation process or if you need additional information.

The consultation period for this EP closes **30 March 2026**. More details on consultation and providing feedback can be found in the consultation section of this Information Sheet.

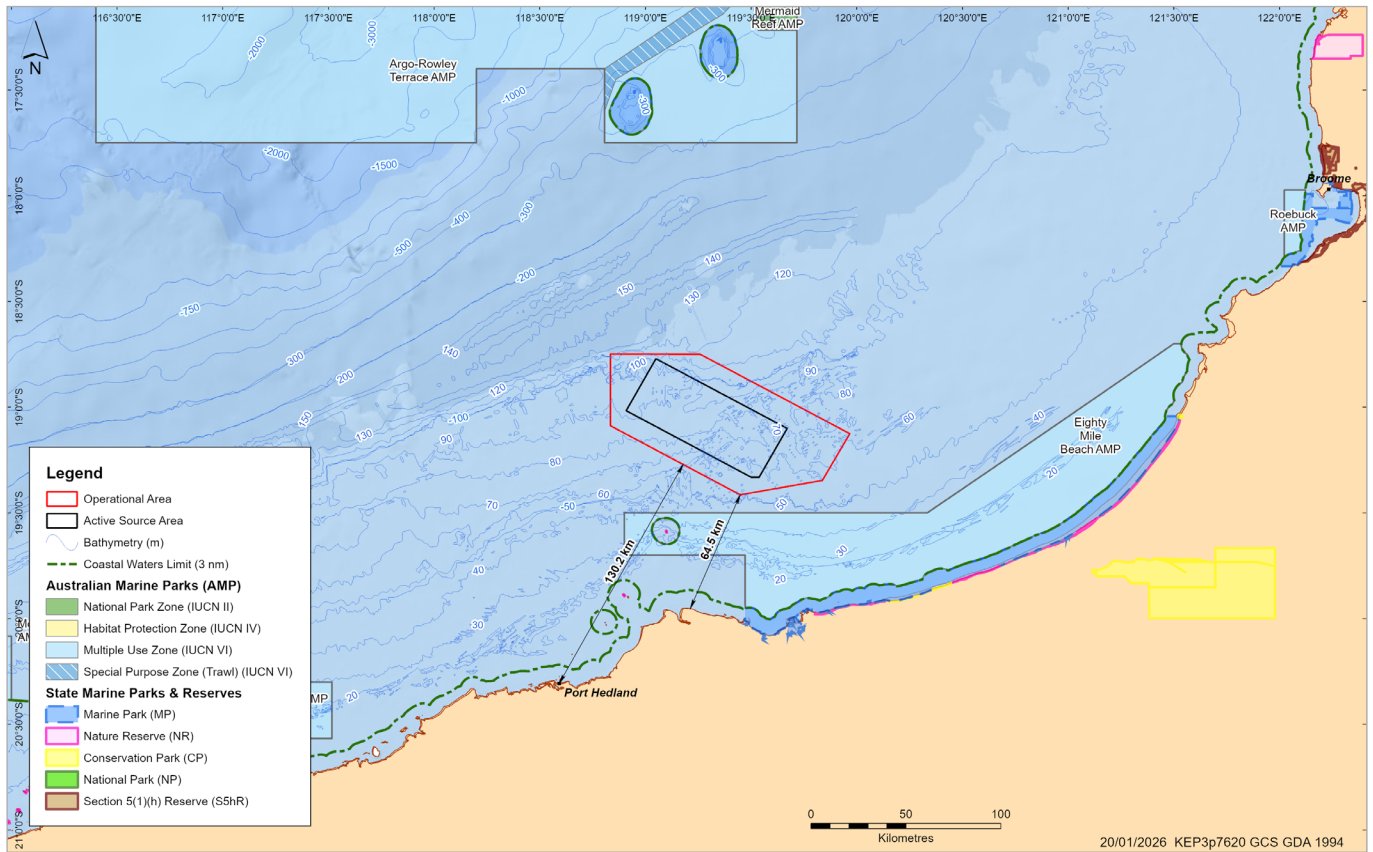


Figure 2. Activity Location

Table 1. Activity description

Activity Details	
Activity	<ul style="list-style-type: none"> The survey, including supporting activities within the OA.
Operational Area	<ul style="list-style-type: none"> The OA defines the area within which the seismic survey vessel will operate and includes the ASA and a working buffer beyond the ASA. Activities to be conducted within the OA include line changes and equipment maintenance. The seismic source or individual source elements within the array will only be discharged in the ASA.
Vessels, aircraft and other equipment	<ul style="list-style-type: none"> One survey vessel which will tow the seismic source arrays and a series of cables (known as streamers or acoustic receivers) which contain microphones (known as hydrophones). Up to two dedicated support vessels (one being a chase vessel) will accompany the seismic survey vessel to provide logistical, safety and equipment management duties. A minimum of one support vessel will be in the OA when the survey vessel is acquiring data. Helicopters may be used for crew changes, equipment supply, surveillance and emergency response uses.
Exclusion and cautionary zones	<ul style="list-style-type: none"> A 3 nm (5.6 km) exclusion (safety) zone will be in place around the seismic vessel and trailing streamers for the duration of the activity.

Table 2. Activity coordinates

The Survey will occur the within petroleum titles WA-437-P and WA-438-P, and surrounding waters.

	Total area	Water depth	Latitude	Longitude
Operational Area (OA)	~5,631 km ²	~50-135 m	19° 0' 54.699" S	118° 41' 54.401" E
			18° 40' 22.954" S	118° 54' 10.086" E
			19° 12' 57.212" S	119° 54' 51.410" E
			19° 20' 48.243" S	119° 50' 13.533" E
			19° 24' 52.891" S	119° 26' 53.029" E
Active Source Area (ASA)	~2,315 km ²	~55-95 m	18° 51' 2.966" S	119° 2' 22.387" E
			19° 9' 12.320" S	119° 36' 10.653" E
			19° 18' 58.423" S	119° 30' 23.392" E
			19° 1' 0.290" S	118° 56' 37.002" E

Table 3. Survey acquisition parameters

Parameter	Approximate Parameters
Volume of seismic source	Mas 3,500 cubic inches
Operating pressure	2,000 psi
Seismic source depth	7 m
Vessel speed	4.2 knots (7.75km/hr)
Source interval	12.5 m
Streamer length	9,000 m
Total spread width	900 -1,400 m
Streamer depth	15-25 m
Sail line spacing	450-600 m
Sail azimuth (line orientation)	South-east to north-west
Time to traverse a single sail line	6 hours
Sail line turn time	4 hrs 30 mins

Commercial Fishery Implications

Santos has undertaken an assessment to define the environmental, social, economic and cultural features that may be affected by proposed activities.

To do this we have considered the totality of the area where activity impacts and risks may occur. The widest extent of this area is called the Environment that May Be Affected (EMBA), which for this activity is the outer boundary of a worst-case marine diesel spill resulting from the unlikely event of a vessel collision.

As part of the assessment process, Santos has identified commercial fisheries that have been active in the Operational Area acknowledging seismic surveys can potentially result in:

- Behaviour changes of target species in response to underwater noise emissions and the physical presence of the seismic vessel and trailing equipment.
- Disruption or temporary physical displacement of fishing operations from preferred fishing grounds and/ or damage to fishing gear due to interaction with the survey vessel and trailing equipment.

We have also identified those fisheries that are entitled to fish in the broader Environment that May Be Affected (EMBA).

Commercial Fisheries

Table 4 provides an overview of fisheries that have a spatial overlap with the OA and EMBA. Note the fisheries shaded blue are those that have recent fishing effort in the OA based on Government fisheries data.

Operational Area Access

Commercial fishers and other marine users can access the Operational Area but are requested to avoid the 3 nm (5.6 km) exclusion (safety) zone around the seismic vessel and trailing streamers during the survey to ensure the safety of the seismic vessel and third-party vessels.

Santos has proposed the below control measures where seismic and commercial fishing activities occur concurrently:

- Santos will not restrict commercial fishing access to the OA where safe to do so and concurrent operational planning will be undertaken with commercial fishers.

- Santos will develop communication protocols including direct radio contact for both parties at sea and provide operational survey plans, commencement and cessation notifications, and daily operational reports if requested.

At a minimum the daily operational reports will include:

- Current seismic survey vessel position
- Look ahead seismic survey activities and vessel positions
- Support vessel activities and positions
- Vessel contact details
- Santos WA management contact details

Table 4. Commercial fisheries identified





Commercial fishing	OA	EMBA
Commonwealth		
North West Slope Trawl Fishery	Yes	Yes
Southern Bluefin Tuna Fishery	Yes	Yes
Western Skipjack Tuna Fishery	Yes	Yes
Western Tuna and Billfish Fishery	Yes	Yes
Western Australia		
Mackerel Managed Fishery (Area 2 - Pilbara)	Yes	Yes
Marine Aquarium Fish Managed Fishery	Yes	Yes
Northern Demersal Scalefish Managed Fishery	No	Yes
Nickol Bay Prawn Managed Fishery	Yes	Yes
Pearl Oyster Fishery	Yes	Yes
Pilbara Crab Managed Fishery	Yes	Yes
Pilbara Fish Trawl Interim Managed Fishery	Yes	Yes
Pilbara Line Fishery	Yes	Yes
Pilbara Trap Managed Fishery	Yes	Yes
Sea Cucumber Fishery	Yes	Yes
South-West Coast Salmon Fishery	Yes	Yes
Specimen Shell Managed Fishery	Yes	Yes
West Coast Deep Sea Crab Managed Fishery	Yes	Yes

Commercial Key Indicator Fish Species Spawning

The EP will include an assessment of potential temporal overlap between spawning periods for commercial key indicator fish species and acquisition of the survey. A summary is provided in **Table 1**.

Categories Receptors (critical life cycle stages)	J	F	M	A	M	J	J	A	S	O	N	D
Commercial fish and prawn species	Activity timing											
Goldband snapper peak spawning												
Pink snapper peak spawning												
Rankin cod peak spawning												
Red emperor peak spawning												
Spanish mackerel peak spawning												
Pearl oyster spawning												
Banana prawn spawning												
Juvenile banana prawn migration												
Western king prawn spawning												
Brown tiger prawn spawning												
Bluespotted emperor												
Dusky whaler pupping	May occur throughout the year											
Whiskery shark pupping												
Blacktip shark (Australian) pupping												
Sandbar shark pupping												
Gummy shark pupping	Peak pupping periods unknown											
Fish - other species	Timing of spawning activity varies between species											

Key

	Peak activity, presence reliable and predictable		Activity not occurring
	Lower level of abundance/activity/presence		Activity can occur throughout year
Note 1: Rare within North Coast Bioregion and overlap with OA			

Commercial Fishers Claim Protocol

The survey will potentially impact commercial fishers whose fishing operations overlap with the OA of the seismic survey.

Santos has a process to enable commercial fishers to lodge evidence-based claims for temporary loss of fish catch, displacement costs and equipment damage or loss directly caused by the seismic survey. Santos will also

assess requests for administrative support to help fishers collate historical fishing data required for an evidence-based claim.

The control measures identified within the draft Environment Plan, to outline how the potentially competing demands of commercial fishing operators and Santos' seismic survey may be managed, are consistent with those adopted for other Santos marine seismic surveys.

Consultation

Consultation is an important part of EP development as it allows Santos to receive feedback from relevant persons (agencies/ authorities, persons and organisations) whose functions, interests or activities may be affected by proposed petroleum activities.

This feedback may help Santos to refine or change the management measures we are proposing to address activity impacts and risks.

Santos will assess the merits of any objection or claim about the adverse impact of the activities proposed provided through the consultation process, with any responses summarised and included in the EP submitted to the Regulator for assessment.

Under government environment regulations Santos is required to provide relevant persons with:

- **sufficient information** to allow them to make an informed assessment of the possible consequences of the activity on their functions, interests or activities, and
- a **reasonable period** for the consultation

More information

More information about how community members can participate in environmental approvals for activities proposed in Commonwealth waters has been published in a [brochure](#) by NOPSEMA.

Contact us

Engaging with this consultation will help Santos better understand the values and sensitivities of the environment and inform evaluation of the potential impacts and risks associated with the activity, and how to manage them properly.

To engage with our consultation or request for further information, please contact Santos on details provided below.

You may request that particular information you provide during consultation not be published. If you choose to do so, Santos will ensure that it is included in a separate report which is not published on NOPSEMA's website. Please refer to below links on privacy.

[Santos' Privacy Statement](#)

[NOPSEMA Privacy Policy](#)

Consultation dates for proposed activities are published on Santos' Consultation Hub website.

Consultation on this EP closes **30 March 2026**.

Our contact and Hub details are

E: offshore.consultation@santos.com

T: 1800 267 600

W: [santos.com/offshoreconsultation](https://www.santos.com/offshoreconsultation)

