

SCARBOROUGH STATE WATERS GEOPHYSICAL AND GEOTECHNICAL SURVEY ENVIRONMENT PLAN CARNARVON BASIN, NORTH-WEST AUSTRALIA

Key Information

- + Woodside is proposing to undertake a shallow water geophysical and geotechnical survey in State and Commonwealth waters commencing between Q4 2018 and Q1 2019.
- + The proposed survey will acquire data to support the front-end engineering and design phase of the proposed Scarborough Development.
- + Woodside is proposing to submit an Environment Plan in support of geophysical and geotechnical survey activities in State (coastal) waters, in accordance with the *Petroleum (Submerged Lands) Act 1982* and the *Petroleum (Submerged Lands) (Environment) Regulations 2012*.
- + Under the proposed Environment Plan, Woodside is seeking stakeholder feedback on the proposed initial survey in State waters.

About the consultation

Background

Woodside holds a 75% interest in WA-1-R (which contains the majority of the Scarborough gas field) and a 50% interest in WA-61-R, WA-62-R and WA-63-R. These retention leases cover the Scarborough, Thebe and Jupiter gas fields.

The Scarborough field is located offshore approximately 375 km west-north-west of the Burrup Peninsula in Western Australia. Woodside is proposing to develop the Scarborough gas field with up to 12 subsea, high-rate gas wells tied back to a semi-submersible platform moored in 900 m of water. The proposed -20,000-25,000 t topsides will have processing facilities for gas dehydration and compression to enable the export of gas to shore. Woodside's preference is to export the gas via an ~430 km pipeline to the Pluto LNG onshore facility, where additional LNG processing capacity will be installed.

Woodside, as operator of the Scarborough Joint Venture, is proposing to complete a number of geophysical and geotechnical surveys to acquire data required to support the front-end engineering and design (FEED) phase of the proposed development.

Woodside applies a consistent approach to stakeholder engagement. Woodside is committed to ongoing consultation and engagement as the proposed Scarborough Development progresses.

Survey details

Woodside is proposing to conduct a shallow water geophysical and geotechnical survey in Commonwealth and State Waters.

Woodside is proposing to submit an Environment Plan for this survey and future geophysical and geotechnical survey activities in State (coastal) waters (refer to operational area in *Figure 1*).

Under the scope of the proposed Environment Plan, Woodside is seeking stakeholder feedback on the first geophysical and geotechnical survey in State waters.

A number of surveys may be undertaken during the five-year term of the Environment Plan. Woodside will consult stakeholders on each future planned survey activity in State waters under the proposed Environment Plan within a reasonable timeframe prior to the proposed activity commencing.

Affected marine users will be notified and provided with further details closer to commencement of the activity.

Further details are outlined in *Table 1*.

Initial survey activities include:

Shallow water geophysical survey

The geophysical survey is to acquire high-resolution multi beam echo sounder bathymetry, side scan sonar data, sub-bottom profile data and refraction data.

Shallow water geotechnical survey

The geotechnical survey will collect further data for the proposed pipeline route. Testing and sampling of the seabed will include piezocone penetrometer testing (PCPT) and the acquisition of piston core, vibro core and box core samples.

Vessels

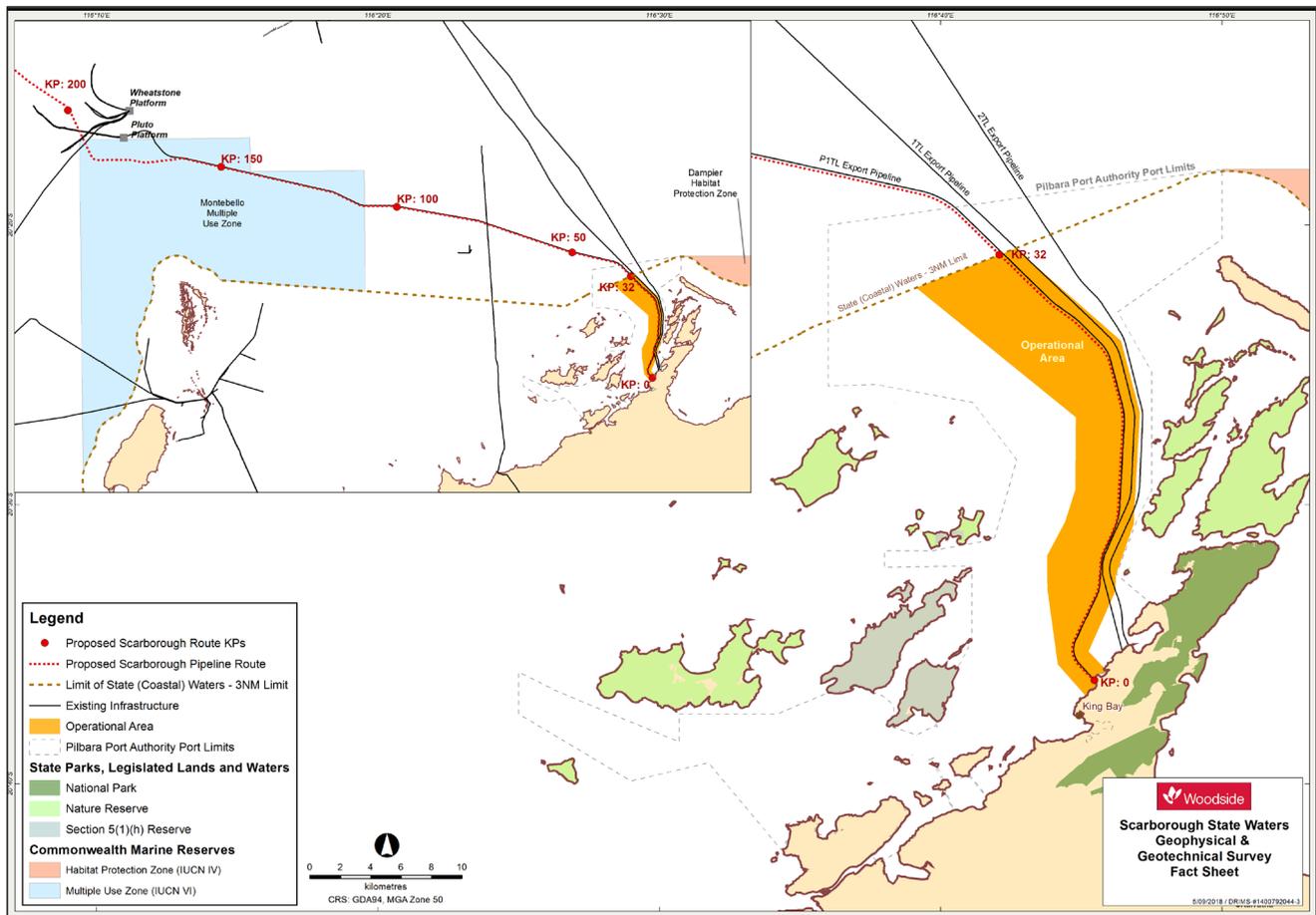
Vessels have not been confirmed at the time of publication. If affected stakeholders would like further information on the survey vessels (once confirmed), please advise Woodside via the contact details outlined on the last page.

Survey details

Table 1: Summary of the proposed initial geophysical and geotechnical survey

Location	<p>The proposed initial survey will take place in the shallow water area adjacent to the existing Pluto pipeline from the shore line to the edge of the continental shelf. The total length of the survey (in State and Commonwealth waters) is ~200 km.</p> <p>The limit of the State waters component of the survey is approximately 32 km. Refer to <i>Figure 1</i> for further details.</p>								
Timing	<p>The initial geophysical and geotechnical survey is planned to take place between Q4 2018 and Q1 2019. The State waters component of the survey is expected to take approximately 6 to 8 days, subject to delays such as weather conditions.</p>								
Key activities	<p>Shallow water geophysical and geotechnical survey (refer to survey details above).</p>								
Water depth	<p>Approximately 5 m - 35 m (State waters).</p>								
Coordinates (Datum: GDA94)	<p>The State waters component of the proposed initial survey will take place adjacent to the existing Pluto pipeline between:</p> <table border="0"> <tr> <td>KP0 (Kilometre Post 0)</td> <td>Lat: 20° 36' 17.92" S</td> <td>Long: 116° 45' 28.27" E</td> </tr> <tr> <td>KP32</td> <td>Lat: 20° 21' 03.53" S</td> <td>Long: 116° 42' 05.61" E</td> </tr> </table>			KP0 (Kilometre Post 0)	Lat: 20° 36' 17.92" S	Long: 116° 45' 28.27" E	KP32	Lat: 20° 21' 03.53" S	Long: 116° 42' 05.61" E
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Figure 1: Proposed Operational Area for the Scarborough State waters geophysical and geotechnical survey activities under the Environment Plan



Environmental management

Woodside has a long history of successfully conducting geophysical and geotechnical surveys offshore Western Australia.

Woodside has undertaken rigorous environmental risk assessment and planning for the proposed survey, considering timing, duration, location and potential environmental impacts and risks. As a result, management measures will be implemented during the proposed activities to reduce the impacts and risks to as low as reasonably practicable and to an acceptable level.

Table 2 provides a summary of potential key risks and associated management measures identified for survey activities. All potential risks or impacts will be managed to meet legal requirements.

Table 2: Summary of potential key risks and associated management measures

Potential risk and/or impact	Management measures
Physical presence of vessels	<ul style="list-style-type: none"> Stakeholder engagement. Usage of navigational aids and practices as required by Maritime Regulations.
Routine marine discharges	<ul style="list-style-type: none"> All routine marine discharges (drainage water, produced water, cooling water and sewage/ grey water) will be managed according to legislative requirements and Woodside's Environmental Performance Standards where applicable.
Waste generation	<ul style="list-style-type: none"> Waste generated on the vessels will be managed in accordance with legislative requirements and the Waste Management Plan. Wastes will be managed and disposed of in a safe and environmentally responsible manner that prevents accidental loss to the environment. Wastes transported onshore will be sent to appropriate recycling or disposal facilities by a licensed waste contractor.
Noise emissions	<ul style="list-style-type: none"> Procedures will be in place to minimise disturbance (behavioural and physiological) to marine fauna when acquiring data during the survey.
Seabed disturbance	<ul style="list-style-type: none"> Survey activities within State waters will be limited to within the operational area depicted in Figure 1.
Emissions from fuel combustion	<ul style="list-style-type: none"> Potential impacts on air quality will be minimised through adherence with The International Convention for the Prevention of Pollution from Ships (MARPOL).
Uncontrolled hydrocarbon release	<ul style="list-style-type: none"> Procedures to reduce the potential for uncontrolled hydrocarbon releases will be followed. Appropriate fuel transfer procedures and equipment will be used to prevent spills to the marine environment. Appropriate spill response plans, equipment and materials will be in place and maintained to manage any potential spills to the environment. No vessel refuelling at sea is planned.
Chemical use	<ul style="list-style-type: none"> Chemical use will be managed in accordance with the Contractor's Chemical Selection and Approval Procedure.
Marine fauna interactions	<ul style="list-style-type: none"> Procedures will be in place to protect marine fauna from vessel activities.
Introduction of invasive marine species	<ul style="list-style-type: none"> All vessels will be assessed and managed as appropriate to minimise the risk of introduction of invasive marine species.

Environmental approvals

Woodside is proposing to submit the Scarborough State Waters Geophysical and Geotechnical Survey Environment Plan to the Department of Mines, Industry Regulation and Safety, as required under the *Petroleum (Submerged Lands) Act 1982* and the *Petroleum (Submerged Lands) (Environment) Regulations 2012*.

Woodside will consult stakeholders on each future planned survey activity under the proposed Environment Plan within a reasonable timeframe prior to the proposed activity commencing.

State environmental approval processes are managed by the Department of Mines, Industry Regulation and Safety. Commonwealth environmental approval processes are managed by the National Offshore Petroleum Safety and Environmental Management Authority.

The proposed Scarborough Development will be the subject of a separate environment plan addressing the relevant activities and does not form part of the scope of this Environment Plan.

Providing Feedback

If you would like to comment on the proposed activities outlined in this fact sheet, or would like additional information, please contact Woodside before 5 October 2018.

Erin Chen-Wilson
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Toll free: 1800 442 977

Please note that stakeholder feedback will be communicated to Department of Mines, Industry Regulation and Safety as required under legislation. Woodside will communicate any material changes to the proposed activity to affected stakeholders as they arise.

All information is current as at September 2018. Proposed timing for the activity may be subject to change.