

SCARBOROUGH WELLHEADS ENVIRONMENT PLAN

EXMOUTH PLATEAU, NORTH-WEST AUSTRALIA

Woodside is planning to decommission four subsea wellheads located in permits WA-63-R, WA-61-R and WA-520-P, subject to Commonwealth Government approval.

Woodside's preferred decommissioning option is to leave the wellheads in situ. This option was selected following preliminary consultation with relevant stakeholders, and undertaking a comparative assessment comparing this option with other permanent management options such as complete removal, which is the base case.

No further field activities will be required if the Environment Plan for leaving the wellheads in situ is accepted by National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) as all wells are permanently plugged.

The four wellheads are located in permits supporting Woodside's proposed development of the Greater Scarborough gas fields, comprising the Scarborough, North Scarborough, Thebe and Jupiter gas fields. Woodside is Operator of the titles, with percentage interest shown in Table 1.

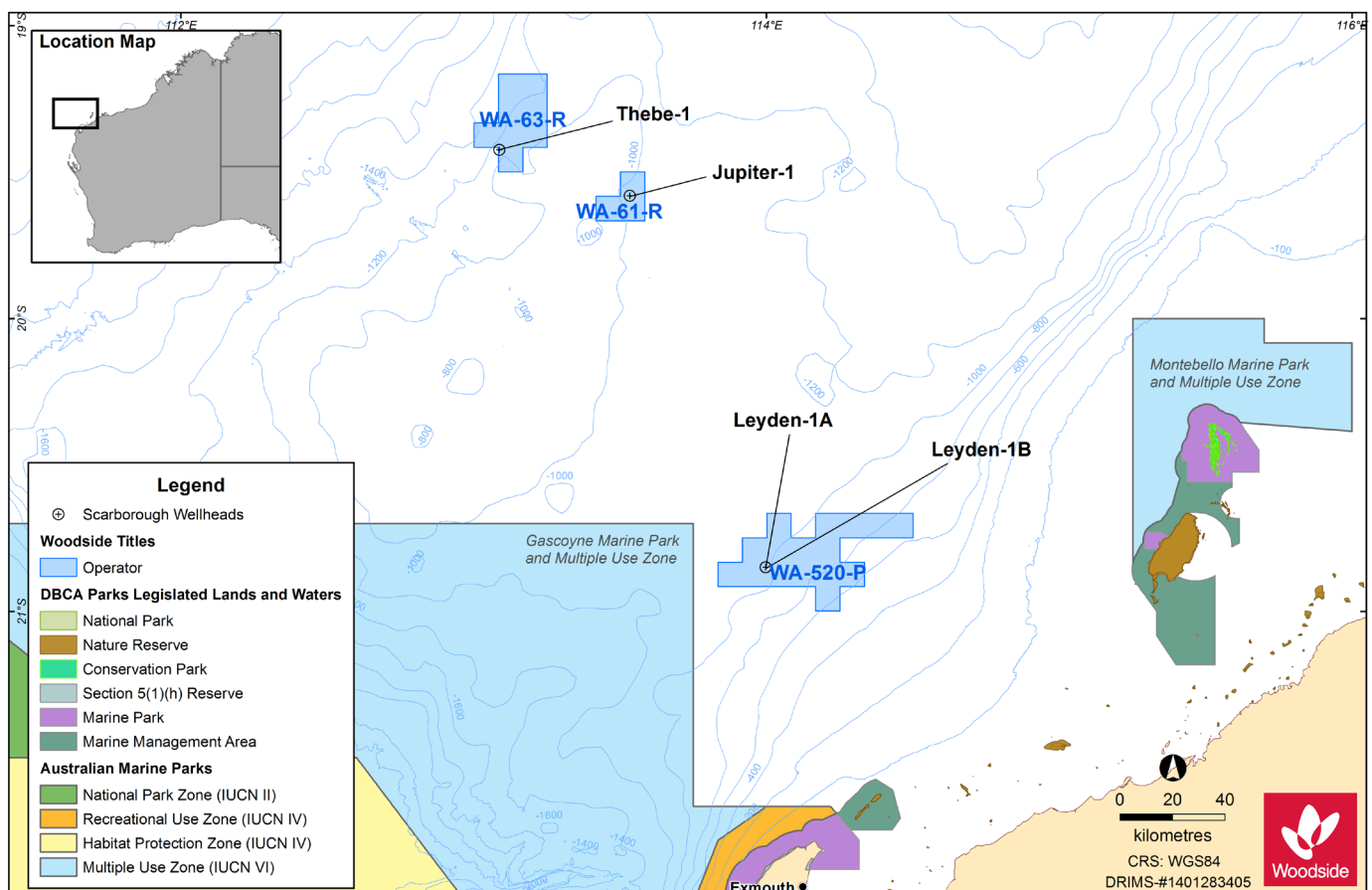


Figure 1. Petroleum Activity Program Operational Areas

Table 1. Titleholder equity participants

Participant Title	WA-63-R	WA-61-R	WA-520-P
Woodside Energy Ltd	50%	50%	90%
BHP Billiton Petroleum Pty Ltd	50%	50%	-
Finder No. 10 Pty Ltd	-	-	10%

Table 2. Activity summary

Echo Yodel Decommissioning Activities	
Water depth	+ 960 m to 1168 m
Infrastructure	+ Four wellheads
Distance to nearest town	+ Leyden-1A well - 125 km north of Exmouth + Leyden-1B well - 125 km north of Exmouth + Jupiter-1 well - 270 km north of Exmouth + Thebe-1 well - 300 km north of Exmouth
Distance to nearest marine park	+ Leyden-1A and Leyden-1B wells are 25 km east of the Gascoyne Marine Park (Cwlth) + Jupiter-1 well is 124 km north of the Gascoyne Marine Park (Cwlth) + Thebe-1 well is 141 km north of the Gascoyne Marine Park (Cwlth)
Vessels	+ None

Table 3. Approximate locations

Structure	Water Depth (m)	Latitude	Longitude	Permit Area
Thebe-1 well	1168	19° 25' 24.49" S	113° 5' 19.44" E	WA-63-R
Jupiter-1 well	960	19° 34' 48.64" S	113° 32' 3.07" E	WA-61-R
Leyden-1A well	1025	20° 50' 57.20" S	113° 59' 52.53" E	WA-520-P
Leyden-1B well	1025	20° 50' 56.00" S	113° 59' 53.93" E	WA-520-P

Scarborough wellheads decommissioning planning

In October 2019 Woodside commenced preliminary consultation with stakeholders on the decommissioning of the wellheads, seeking stakeholder views on the leave in-situ decommissioning option and any long-term implications of this option.

Woodside also undertook a comparative assessment of decommissioning options including complete removal, partial removal and leave in-situ, with criteria for the assessment including socio-economic, environmental, health and safety, technical feasibility and economic factors.

Comparative assessments are used globally as a recognised tool for multi-criteria decision-making, taking account of

stakeholder views and the respective positive and negative impacts of decision options on the interests of those stakeholders.

The comparative assessment demonstrated that leaving the wellheads permanently in-situ will provide an equal or better environmental and safety outcome than complete removal.

Key factors in selecting this option include:

- + The wellheads will continue to provide habitat and support to marine fauna.
- + The wellheads are outside of maritime shipping channels and do not pose a hazard to commercial shipping.
- + The wellheads are in depths not currently trawled by licence holders in State or

Commonwealth managed fisheries or by recreational fishers.

- + Previous efforts to remove the wellheads have been unsuccessful and pose a technical feasibility risk for future removal.

A temporary Operational Area (cautionary zone for marine users) of 500 m radius around each wellhead has been defined for the purpose of assessing environmental impacts and risks for the Environment Plan. The Operational Area will be removed once the Environment Plan is accepted by NOPSEMA. There are no petroleum safety zones (exclusion zones) associated with the wellheads. The location of the wellheads will remain marked on navigation charts.

Implications for Stakeholders

Woodside will consult relevant stakeholders whose interests, functions, and activities may be affected by the proposed activities. We will also keep other stakeholders who have identified an interest in the activities informed about our planned activities.

Woodside has undertaken an assessment to identify potential risks and impacts to the marine environment and relevant stakeholders. Mitigation and management measures implemented for decommissioning in situ are summarised in Table 4. Further details will be provided in the Environment Plan.

Table 4. Summary of key risks and/or impacts and management measures for decommissioning wellheads in situ

Potential Risk and/or Impact	Mitigation and/or Management Measure
Planned	
Physical presence of infrastructure on seafloor causing interference or displacement	<ul style="list-style-type: none"> + Wellhead location marked on marine charts. + Stakeholder engagement activities as part of the Environment Plan.
Interests of relevant stakeholders including: <ul style="list-style-type: none"> + Commercial fishing activities + Petroleum activities + Shipping activities 	<ul style="list-style-type: none"> + Consultation with relevant marine users, including petroleum titleholders, commercial fishers and their representative organisations, and government departments and agencies to inform decision making for the proposed activity and development of the Environment Plan. + Advice to the Australian Hydrographic Office following acceptance of the Environment Plan to ensure location of the wellheads remain marked on navigation charts.

Providing feedback

Our intent is to minimise environmental and social impacts associated with the proposed activities, and we are seeking any interest or comments you may have to inform our decision making.

If you would like to comment on the proposed activities outlined in this information sheet, or would like additional information, please contact Woodside before **10 February 2020**.

Please note that your feedback and our response will be included in our Environment Plan for the proposed activity, which will be submitted to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for acceptance in accordance with the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth).

Please let us know if your feedback for this activity is sensitive and we will make this known to NOPSEMA upon submission of the Environment Plan in order for this information to remain confidential to NOPSEMA.

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Please note that stakeholder feedback will be communicated to NOPSEMA as required under legislation. Woodside will communicate any material changes to the proposed activity to affected stakeholders as they arise.