

# Compliance Report EPBC 2017/8133

Trieste Seismic Survey

3 December 2019 to 3 December 2020

## Review record

Revision	Date	Reason for issue	Reviewer/s	Consolidator	Approver
A	17/12/2020	Internal review	Z. Bowen	P Catford	
0	23/12/2020	Approved for submission			T. Flowers

### THE THREE WHATS

**What** can go wrong?

**What** could cause it to go wrong?

**What** can I do to prevent it?

# Compliance Report EPBC 2017/8133

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## Declaration of Accuracy

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In making this declaration, I am aware that sections 490 and 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

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Signed



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Full Name (Please Print)

Timothy Flowers

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Position (Please Print)

Head of Environment

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Organisation (please print including ABN/CAN if applicable)

Beach Energy Resources (Perth Basin) Pty Limited (previously Lattice Energy Resources (Perth Basin) Pty Ltd)  
ACN 007845338

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Date

23 December 2020

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## 1 Introduction

Beach Energy Resources (Perth Basin) Pty Limited (Beach, previously Lattice Energy Resources (Perth Basin) Pty Ltd) (ACN 007845338), recently undertook the onshore Trieste 3D seismic survey, near Eneabba, Western Australia (EPBC 2017 / 8133). The approved action was to undertake an onshore three-dimensional (3D) seismic survey near Eneabba in the North Perth Basin, mapping geological formations to assist in the search for conventional gas reserves. The survey took place in Exploration Permit 320 (EP 320) of the northern Perth Basin, approximately 13 km north of the town of Eneabba and 40 km southeast of the town of Dongara, with an acquisition area of 217 square kilometres (km<sup>2</sup>).

The survey was conducted from December 2019 to February 2020. This Annual Compliance Report covers the period of 3 December 2019 to 3 December 2020 (the reporting period).

### 1.1 Approval under the Environmental Protection and Biodiversity Conservation Act 1999

Approval for the Trieste 3D Seismic Survey under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was granted on 11 October 2019 (EPBC Reference 2017-8133) by the Department of the Environment and Energy (DoEE, now the Department of Agriculture, Water and the Environment, AWE) (refer Appendix A)

## 2 Purpose

This Annual Compliance Report has been prepared to meet the requirements of Condition 7 of the EPBC approval 2017/8133 which states that:

*"The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister".*

This Annual Compliance Report covers the period of 3 December 2019 to 3 December 2020 (the reporting period).

## 3 Description of Activities

### 3.1 Seismic Survey

The Trieste 3D Seismic Survey commenced on the 3 December 2019 with the commencement of on site inductions for survey personnel and the commencement of seismic line preparation (vegetation clearing) Line preparation (vegetation clearing) was completed on 17/12/2019. This phase of the project included surveyors working on foot to survey the lines, line preparation using vegetation mulchers, and other supporting activities including HSE support.

Native vegetation clearing for the project occurred between the 03/12/2019 and 17/12/2019. The EPBC Approval and the WA Department of Mines, Industry, Regulation and Safety (DMIRS) Clearing Permit CPS 8171/1 allowed for clearing of up to 74.45 ha of native vegetation however a total of 54.36 ha was cleared for the project. This was achieved following further refinement and reductions in the width of some seismic lines during line preparation activities. The final area of clearing was verified via a mulching verification report.

Seismic acquisition began on 16/01/2020 and was completed on 14/02/2020. This included laying and retrieving cordless receiver nodes (with access for personnel in UTVs), use of vibroseis buggies to provide the seismic source, and GPS base stations to facilitate acquisition. Line surveying and preparation occurred concurrently with acquisition, with teams working in different parts of the survey area.

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Following completion of the acquisition phase of the Trieste 3D Seismic Survey in February 2020, all personnel demobilised from site, with the exception of the Senior Field Manager, who remained on site to undertake final close-out activities, including completing notifications to landholders, agencies and other stakeholders, reporting requirements, and to erect rehabilitation signs.

Ongoing activities associated with the seismic survey will be limited to annual rehabilitation monitoring, and (if required) rehabilitation works and reporting. There is currently no requirement for active rehabilitation activities, however these activities may be required in the future if rehabilitation monitoring indicates that regeneration of native vegetation on the survey lines is not meeting the required completion criteria.

### **3.2 Rehabilitation Monitoring**

A rehabilitation monitoring methodology was developed and approved for the project in November 2018.

The initial rehabilitation monitoring survey was undertaken between 12 and 15 August 2019. The purpose of the survey was to establish analogue sites prior to vegetation clearing.

The inaugural post survey rehabilitation monitoring event was conducted between 19 and 23 October 2020.

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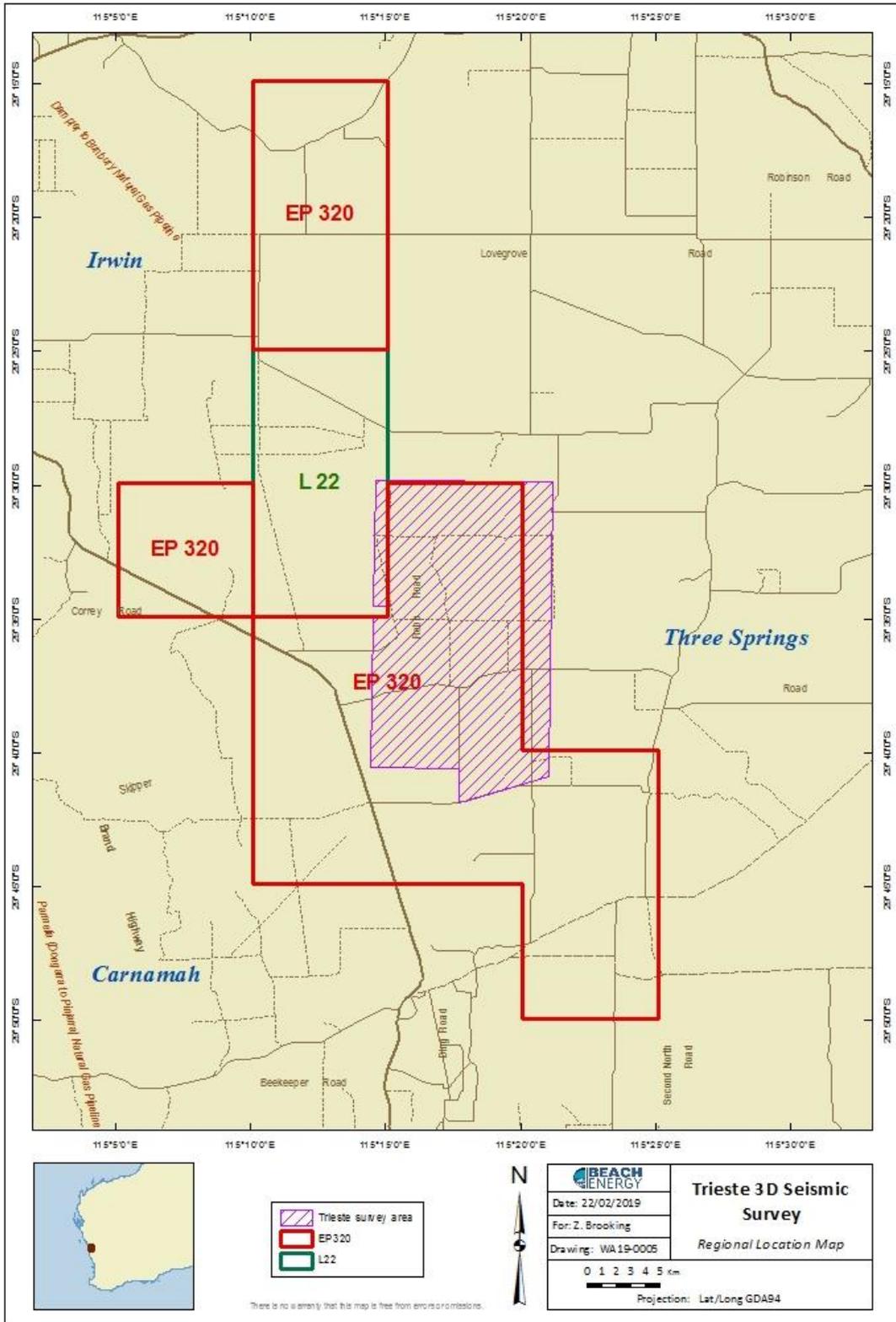


Figure 1: Trieste 3D Seismic Survey location

# Compliance Report EPBC 2017/8133

## 4 Assessment of Compliance with EPBC 2017 / 8133 Conditions

A summary of compliance against the thirteen conditions of approval defined in the approved EPBC 2017/8133 EPBC, for this reporting period, is provided in Table 1.

Table 1: Compliance with EPBC 2017/8133 Approval Conditions

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
<b>Part A – Conditions specific to the action</b>			
1	The approval holder must not clear more than 74.539 ha of <b>foraging habitat</b> for the <b>Carnaby's Black Cockatoo</b> within the survey boundary (map at Attachment A).	Compliant	<p>An Independent Audit undertaken by ERIAS Group in December 2019 (Appendix B) verifies that native vegetation clearing for the project did not exceed 74.539. A total of 54.36 ha was cleared for the project. Vegetation clearing was undertaken as part of line preparation activities prior to seismic acquisition. All vegetation clearing for the project is now complete.</p> <p>The clearing permit allowed for clearing of up to 74.45 ha for the purpose of undertaking a 3D seismic survey. Following completion of the survey, a mulching verification report was produced to audit the total area and location of clearing activities against the area approved in the clearing permit. The mulching verification report found that the total area cleared for the project was 54.36 ha, a reduction of over 20 ha compared to the area approved for clearing.</p> <p>Further detail can be found in the mulching verification report provided in Appendix C.</p>
2	To minimise the impacts of the action on <b>EPBC Act listed species</b> , the approval holder must implement condition 8 of the <b>Western Australian Clearing Permit (8171/1)</b> for the life of the approval from the <b>commencement of the action</b> .	Compliant	<p><b>Condition 8</b> of the WA Clearing Permit (8171/1) refers to Dieback and Weed Control.</p> <p><b>Condition 8 (a)</b> specifies steps that must be undertaken to minimise the risk of the introduction and spread of weeds and dieback.</p> <p>For details of compliance to Condition 8a of the WA Clearing Permit refer to the independent audit undertaken in December 2019 provided in Appendix B.</p> <p>The only project personnel and vehicles to enter the project area since the demobilisation of the seismic crew on 15 February 2020 have been ecological consultants undertaking the rehabilitation monitoring event in October 2020. The consultants utilised pre-existing access tracks in the survey area and did not drive on any undisturbed areas while completing this monitoring.</p> <p><b>Condition 8 (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any weeds growing within areas cleared under this Permit.</b></p> <p>This condition is Not Applicable at this stage of the project.</p> <p>A mulcher was used to clear vegetation in the project area. Topsoil, root stock and mulched material was retained and left in situ. As this method of clearing results in minimal soil disturbance and maintains vegetation cover the opportunity for weed species to impact the rehabilitation area impact of the regeneration capacity of the rehabilitation area is expected to be low.</p>

## Compliance Report EPBC 2017/8133

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
3	To minimise the impacts of the action on <b>foraging habitat</b> for the <b>Carnaby's Black Cockatoo</b> , the approval holder must implement condition 10 (relating to rehabilitation) of the <b>Western Australian Clearing Permit (8171/1)</b> . The objective of rehabilitation works is to re-establish a self-sustaining vegetation cover, integrated with the surrounding ecosystem, providing <b>foraging habitat</b> for the <b>Carnaby's Black Cockatoo</b>	Compliant	<p>If localised areas of significant weed incursion are impacting the ability of the vegetation to regenerate, targeted weed control will be applied on an as-needs basis. This will be informed by the annual rehabilitation monitoring.</p> <p><b>Condition 10</b> of the WA Clearing Permit (8171/1) refers to Retain and spread vegetation material and topsoil and rehabilitation.</p> <p>A mulcher was used to clear vegetation in the project area. Topsoil, root stock and mulched material was retained and left in situ. This provides a better environmental outcome than stockpiling and re-spreading material later.</p> <p><b>Condition 10a, 10b and 10c</b></p> <p>For compliance with Condition 10a, 10b and 10c refer to the Independent Audit undertaken in December 2019. A copy of this report is provided in Appendix B.</p> <p><b>Condition 10 (c) implement adequate measures to prevent third party access to survey lines and access tracks;</b></p> <p>The roughly mulched vegetation was left in situ in the project area. The nature of this material naturally discourages third party vehicle access to survey lines as it is likely to result in damage to vehicles if driven upon.</p> <p>'Rehabilitation in progress' signs were erected at selected seismic lines to discourage third party access.</p> <p><b>Condition 10 (d) Conduct monitoring in accordance with the document 'Mattiske, 2018. Proposed Seismic Line Rehabilitation Monitoring Methodology, Beharra Springs. Prepared by Mattiske Consulting Pty Ltd for Beach Energy, October 2018'.</b></p> <p>The initial rehabilitation monitoring survey was undertaken in spring 2019, in accordance with the approved rehabilitation method. The purpose of the survey was to establish analogue sites prior to vegetation clearing. Further detail can be found in the 2019 rehabilitation establishment report in (Appendix D).</p> <p>Mattiske Consulting completed the annual rehabilitation monitoring survey between 19-23 October 2020. The rehabilitation monitoring report is currently in draft.</p>
3a	The approval holder must continue rehabilitation works until the <b>Department</b> has provided written acceptance of a report by a <b>suitably qualified person</b> certifying and providing evidence that all of the <b>completion criteria</b> have been met	Compliant	<p>Rehabilitation works currently consist of rehabilitation monitoring as per Condition 10 (d) of the WA Clearing Permit (8171/1).</p> <p>There is currently no requirement for active rehabilitation works to be undertaken in the project area. The requirement for rehabilitation works will be determined following the conclusion of the initial 5 year rehabilitation monitoring period. In the event that the rehabilitation monitoring program indicates that regeneration of vegetation on seismic lines is not meeting the required completion criteria, then Beach will determine the next course of action to achieve completion criteria.</p>

## Compliance Report EPBC 2017/8133

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
			Beach will continue to undertake monitoring by a suitably qualified person until the cleared area has met the completion criteria
3b	Following submission to the <b>Department</b> of the certified report demonstrating that <b>the completion criteria</b> have been achieved in accordance with condition 3(a), the <b>suitably qualified expert</b> must monitor the rehabilitation area at least once every two years, during spring, for the life of the approval with sufficient effort to reliably ascertain whether the <b>completion criteria</b> continue to be met or exceeded	Not Applicable	
3c	If the monitoring undertaken in accordance with condition 3(b) determines that any of the <b>completion criteria</b> are no longer being met, the approval holder must, within 3 months of becoming aware that any of the <b>completion criteria</b> are no longer being met, commence undertaking corrective actions and continue these until the <b>Department</b> has provided written acceptance of a report by a <b>suitably qualified person</b> certifying and providing evidence that all the <b>completion criteria</b> have again been met	Not Applicable	
4	To compensate for the loss of up to 74.539 ha of <b>foraging habitat</b> for the <b>Carnaby's Black Cockatoo</b> , the approval holder must:		
4a(i)	Within one year of the <b>commencement of the action</b> submit to the <b>Minister</b> for approval: i) details of an offset that includes a minimum of 218.46 ha of <b>foraging habitat</b> for the <b>Carnaby's Black Cockatoo</b> . The approval holder must demonstrate that the proposed offset meets the principles of the <b>Department's EPBC Environmental Offsets Policy</b>	Compliant	Beach submitted to the Department details of a proposed offset of 218.46ha of foraging habitat for the Carnaby's Black Cockatoo demonstrating that the offset met the principles of the Department's EPBC Environmental Offsets Policy on 17 November 2020 (via email).

## Compliance Report EPBC 2017/8133

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
4a(ii)	ii) an Offset Management Plan for the proposed offset provided in accordance with condition 4(a)(i). The Offset Management Plan must include time-bound performance targets, completion criteria, details of a monitoring program, management actions, corrective actions and triggers for corrective actions to be undertaken in the event that performance targets have not been met	Not Applicable	Beach is currently seeking a variation to this condition via the Department (Post Approval). In order to satisfy both WA DMIRS Clearing Permit conditions and EPBC offset conditions (4b) for the Trieste project, Beach made a payment of \$104,860.80 into the offsets fund administered by WA Department of Water and Environmental Regulation (DWER) on 31 May 2019. At the time of payment, the location of a suitable offset site had not been identified and it was expected that a suitable property would not be located until after the Trieste project had been completed. These funds were then passed onto WA Department of Biodiversity, Conservation and Attractions (DBCA) who have only recently used this money to purchase a suitable offsets property. As this property will be managed by DBCA, Beach are not in a position to develop or submit an offset management plan for the property. Beach are currently consulting with the Department in relation to finalising and approving the proposed offset and seeking a variation to the Approval conditions.
4b	Within two years of the <b>commencement of the action</b> , provide written evidence to the <b>Department</b> that a financial contribution of at least \$104,860.80 has been made to an <b>approved conservation fund</b> for the purchase and ongoing management of the approved offset required by condition 4(a).	Compliant	Independent Audit undertaken in December 2019 (refer Appendix B) verifies payment of the offset was made on 31 May 2019 in the amount of \$104,860.80
4c	Provide the <b>Department</b> with the offset attributes, <b>shapefiles</b> , textual descriptions and maps to clearly define the location and boundaries of the offset site(s)	Compliant	Beach provided the Department with details of the offset attributes, shapefiles, textual descriptions and maps to clearly define the location and boundaries of the offset site. This was provided to and received by the Department on the 17 November 2020.
<b>Part B – Standard administrative conditions</b>			
<b>Notification of date of commencement of the action</b>			
5	The approval holder must notify the <b>Department</b> in writing of the date of <b>commencement of the action</b> within <b>10 business days</b> after the date of <b>commencement of the action</b>	Compliant	Independent audit undertaken in December 2019 (Appendix B) verifies that Beach advised the Department that it had commenced the seismic survey on 5 December 2019.
6	If the <b>commencement of the action</b> does not occur within 5 years from the date of this approval, then the approval holder must not <b>commence the action</b> without the prior written agreement of the <b>Minister</b>	Not Applicable	-
<b>Annual Compliance Reporting</b>			
7	The approval holder must prepare a <b>compliance report</b> for each 12 month period following the date of <b>commencement of the action</b> , or as otherwise agreed to in writing by the <b>Minister</b> . The approval holder must:	Compliant	This report addresses this requirement. The Annual Compliance Report will continue to be submitted annually unless otherwise agreed in writing by the minister.

Released on 23/12/2020 – Revision 0 - Status Issued for publication

Document Custodian is Head of Environment

Beach Energy Limited: ABN 20 007 617 969

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## Compliance Report EPBC 2017/8133

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
7a	publish each <b>compliance report</b> on the <b>website</b> within 20 <b>business days</b> following the relevant 12 month period;	Compliant	A copy of this report has been published on the Beach website.
7b	notify the <b>Department</b> by email that a <b>compliance report</b> has been published on the <b>website</b> within five <b>business days</b> of the date of publication, and provide a link to the published report;	Compliant	Beach will notify the Department within 5 business days of publication on the Beach website.
7c	keep all <b>compliance reports</b> publicly available on the <b>website</b> until this approval expires;	Compliant	
7d	exclude or redact <b>sensitive ecological data</b> from <b>compliance reports</b> published on the <b>website</b> ; and	Compliant	Information on the location of conservation significant taxa detected in the project area during the 2019 rehabilitation monitoring event has been excluded from the Rehabilitation Assessment report provided in Appendix D.
7e	where any <b>sensitive ecological data</b> has been excluded from the version published, submit the <b>full compliance</b> report to the <b>Department</b> within 5 <b>business days</b> of publication	Compliant	
<b>Reporting Non-compliance</b>			
8a	The approval holder must notify the <b>Department</b> in writing of any: <b>incident</b> ; non-compliance with the conditions; or non-compliance with the commitments made in <b>plans</b> . The notification must be given as soon as practicable, and no later than two <b>business days</b> after becoming aware of the <b>incident</b> or non-compliance. The notification must specify: the condition which is or may be in breach;	Compliant	Independent audit undertaken in December 2019 (Appendix B) verifies that at the time of site inspection no incidents had occurred that would be considered a breach of any condition of plans.  No incidents occurred during the seismic survey that would be considered a breach of any condition of plans.  As discussed above, Beach initiated dialogue with AWE Environment Compliance Branch on 17 November 2020, with regards to compliance with and closing out Condition 4 (a) and 4 (b).
8b	a short description of the <b>incident</b> and/or non-compliance; and		
8c	the location (including co-ordinates), date and time of the incident and/or non-compliance.		
9	The approval holder must provide to the <b>Department</b> the details of any <b>incident</b> or non-compliance with the conditions or commitments made in <b>plans</b> as soon as practicable and no later than <b>10 business days</b> after becoming aware of the <b>incident</b> or non-compliance, specifying:	Compliant	Refer to the independent audit undertaken in December 2019 (Appendix B). A review of incidents reported since the project was undertaken. A total of two incidents were recorded both involving spills of very small quantities of oil (both less than 300ml).
9a	any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;		

## Compliance Report EPBC 2017/8133

Condition Number / Reference	EPBC 2017/8133 Condition	Compliance	Evidence / Comments
9b	the potential impacts of the <b>incident</b> or non-compliance; and		
9c	the method and timing of any remedial action that will be undertaken by the approval holder		
<b>Independent Audit</b>			
10	The approval holder must ensure <b>that independent audits</b> of compliance with the conditions are conducted for the 12 month period from <b>commencement of the action</b> and for every subsequent 12 month period, or as otherwise requested in writing by the <b>Minister</b> .	Compliant	An Independent Audit of the project was conducted by ERIAS Group in December 2019. A copy of the audit report is provided in Appendix B.
11	For each <b>independent audit</b> , the approval holder must:		
11a	provide the name and qualifications of the independent auditor and the draft audit criteria to the <b>Department</b> ;	Compliant	Beach Energy nominated an independent auditor in a letter to the Department dated 28 November 2019 (refer to the Independent audit undertaken in December 2019 provided in Appendix B).
11b	only commence the <b>independent audit</b> once the audit criteria have been approved in writing by the <b>Department</b> ; and	Compliant	Beach received written approval of the draft audit criteria from the Department on 16 December 2020 (refer to the Independent audit undertaken in December 2019 provided in Appendix B). The Independent Audit commenced on 17 December 2019.
11c	submit an audit report to the <b>Department</b> within the timeframe specified in the approved audit criteria	Compliant	Email conformation that the Audit report was received on the 21 February 2020 satisfying Condition 10 and Condition 11 (Appendix E).
12	The approval holder must publish the audit report on the <b>website</b> within 10 <b>business days</b> of receiving the <b>Department's</b> approval of the audit report and keep the audit report published on the <b>website</b> until the end date of this approval	Compliant	Website publication on the 7 May 2020 following receipt of Department approval letter on the 6 May 2020. Beach published the Independent Audit Report against the EPBC Act approval conditions for the Trieste 3D Seismic Survey on the Beach website to fulfil EPBC Act approval condition 12.  Link: <a href="https://www.beachenergy.com.au/perth-basin/">https://www.beachenergy.com.au/perth-basin/</a>
<b>Completion of the Action</b>			
13	Within 30 days after the <b>completion of the action</b> , the approval holder must notify the <b>Department</b> in writing and provide <b>completion data</b>	Compliant	Email confirming completion of the action and inclusion of the completion data (Appendix F)

### **5 Identification of New or Increased Environmental Risks**

No new or increased risks have been identified in the reporting period. The on-ground acquisition phase of the seismic survey is now complete. Given that the seismic survey is complete, the likelihood of future incidents is extremely low as the only future activity associated with the project planned to occur on site is routine annual rehabilitation monitoring.

## 6 Document information and history

### Document custodian group

Title	Name/s
HSE&R - Environment	Tim Flowers

### Stakeholders

Position	Name
Head of Environment	Tim Flowers
Senior Environmental Advisor SAWA	Zoë Bowen

### Document history

Rev	Date	Changes made in first document	Reviewer/s	Consolidator	Approver
A	20/05/2020	Draft issued for internal review	Zoë Bowen	Pearl Catford	-
0	23/12/2020	Approved for submission to DMIRS	Zoë Bowen	Pearl Catford	Tim Flowers

**Appendix A Approval Notice and Conditions**



**APPROVAL**

**Trieste 3D Seismic Survey, near Eneabba, Western Australia (EPBC 2017/8133)**

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*. Note that section 134(1A) of the **EPBC Act** applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

**Details**

<b>Person to whom the approval is granted (approval holder)</b>	Lattice Energy Limited
<b>ACN or ABN of approval holder</b>	007 845 338
<b>Action</b>	To undertake an onshore three-dimensional (3D) seismic survey near Eneabba in the North Perth Basin, mapping geological formations to assist in the search for conventional gas reserves [See EPBC Act referral 2017/8133].

**Proposed Approval decision**

My decision on whether or not to approve the taking of the action for the purposes of the controlling provision for the action is as follows.

**Controlling Provisions**

<b>Listed Threatened Species and Communities</b>	
Section 18	Approve
Section 18A	Approve

***Period for which the approval has effect***

This approval has effect until 1 September 2034.

**Decision-maker**

<b><i>Name and position</i></b>	Chris Videroni A/g Assistant Secretary Assessments (WA, SA, NT) and Post Approval Branch
<b><i>Signature</i></b>	
<b><i>Date of decision</i></b>	11-10-2019

**Conditions of approval**

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

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## ANNEXURE A – CONDITIONS OF APPROVAL

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### Part A – Conditions specific to the action

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1. The approval holder must not clear more than 74.539 ha of **foraging habitat** for the **Carnaby's Black Cockatoo** within the survey boundary (map at [Attachment A](#)).
2. To minimise the impacts of the action on **EPBC Act listed species**, the approval holder must implement condition 8 of the **Western Australian Clearing Permit (8171/1)** for the life of the approval from the **commencement of the action**.
3. To minimise the impacts of the action on **foraging habitat** for the **Carnaby's Black Cockatoo**, the approval holder must implement condition 10 (relating to rehabilitation) of the **Western Australian Clearing Permit (8171/1)**. The objective of rehabilitation works is to re-establish a self-sustaining vegetation cover, integrated with the surrounding ecosystem, providing **foraging habitat** for the **Carnaby's Black Cockatoo**.
  - a. The approval holder must continue rehabilitation works until the **Department** has provided written acceptance of a report by a **suitably qualified person** certifying and providing evidence that all of the **completion criteria** have been met.
  - b. Following submission to the **Department** of the certified report demonstrating that the **completion criteria** have been achieved in accordance with condition 3(a), the **suitably qualified expert** must monitor the rehabilitation area at least once every two years, during spring, for the life of the approval with sufficient effort to reliably ascertain whether the **completion criteria** continue to be met or exceeded.
  - c. If the monitoring undertaken in accordance with condition 3(b) determines that any of the **completion criteria** are no longer being met, the approval holder must, within 3 months of becoming aware that any of the **completion criteria** are no longer being met, commence undertaking corrective actions and continue these until the **Department** has provided written acceptance of a report by a **suitably qualified person** certifying and providing evidence that all the **completion criteria** have again been met.
4. To compensate for the loss of up to 74.539 ha of **foraging habitat** for the **Carnaby's Black Cockatoo**, the approval holder must:
  - a. Within one year of the **commencement of the action** submit to the **Minister** for approval:
    - i. details of an offset that includes a minimum of 218.46 ha of **foraging habitat** for the **Carnaby's Black Cockatoo**. The approval holder must demonstrate that the proposed offset meets the principles of the **Department's EPBC Environmental Offsets Policy**
    - ii. an Offset Management Plan for the proposed offset provided in accordance with condition 4(a)(i). The Offset Management Plan must include time-bound performance targets, completion criteria, details of a monitoring program, management actions, corrective actions and triggers for corrective actions to be undertaken in the event that performance targets have not been met.
  - b. Within two years of the **commencement of the action**, provide written evidence to the **Department** that a financial contribution of at least \$104, 860.80 has been made to an **approved conservation fund** for the purchase and ongoing management of the approved offset required by condition 4(a).
  - c. Provide the **Department** with the offset attributes, **shapefiles**, textual descriptions and maps to clearly define the location and boundaries of the offset site(s).

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## Part B – Standard administrative conditions

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### Notification of date of commencement of the action

5. The approval holder must notify the **Department** in writing of the date of **commencement of the action** within 10 **business days** after the date of **commencement of the action**.
6. If the **commencement of the action** does not occur within 5 years from the date of this approval, then the approval holder must not **commence the action** without the prior written agreement of the **Minister**.

### Annual compliance reporting

7. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or as otherwise agreed to in writing by the **Minister**. The approval holder must:
  - a. publish each **compliance report** on the **website** within 20 **business days** following the relevant 12 month period;
  - b. notify the **Department** by email that a **compliance report** has been published on the **website** within five **business days** of the date of publication, and provide a link to the published report;
  - c. keep all **compliance reports** publicly available on the **website** until this approval expires;
  - d. exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and
  - e. where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

**Note:** **Compliance reports** may be published on the **Department's** website.

### Reporting non-compliance

8. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than two **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
  - a. the condition which is or may be in breach;
  - b. a short description of the **incident** and/or non-compliance; and
  - c. the location (including co-ordinates), date and time of the incident and/or non-compliance.
9. The approval holder must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
  - a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
  - b. the potential impacts of the **incident** or non-compliance; and
  - c. the method and timing of any remedial action that will be undertaken by the approval holder.

### Independent audit

10. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted for the 12 month period from **commencement of the action** and for every subsequent 12 month period, or as otherwise requested in writing by the **Minister**.
11. For each **independent audit**, the approval holder must:

- a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;
  - b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
  - c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
12. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

### **Completion of the action**

13. Within 30 days after the **completion of the action**, the approval holder must notify the **Department** in writing and provide **completion data**.

---

### **Part C - Definitions**

---

In these conditions, except where contrary intention is expressed, the following definitions are used:

**Approved conservation fund** is a conservation fund approved by the **Department** for the purpose of providing long-term management and improvement of **foraging habitat** for the **Carnaby's Black Cockatoo**.

**Business days** means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

**Carnaby's Black Cockatoo** means the EPBC Act listed Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).

**Clear** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation.

**Commencement of the action** means the first instance of any specified activity associated with the action including clearance of vegetation and **construction** of any infrastructure. **Commencement of the action** does not include minor physical disturbance necessary to:

- i. undertake pre-clearance surveys or monitoring programs;
- ii. install signage and /or temporary fencing to prevent unapproved use of the project area;
- iii. protect environmental and property assets from fire, weeds and feral animals, including erection or **construction** of fencing and signage, and maintenance or use of existing surface access tracks, if agreed in writing by the **Department**; and

**Completion criteria** are the completion criteria identified in Mattiske Consulting Pty Ltd (2018) *Proposed seismic line rehabilitation monitoring methodology*.

**Completion data** means an environmental report and spatial data information clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is shapefile.

**Completion of the action** means all specified activities associated with the action have permanently ceased.

**Compliance records** means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

**Compliance reports** means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with these approval conditions and commitments in the **plans**;
- ii. details of contingency measures or corrective actions that have been or will be implemented;
- iii. consistent with the **Department's Annual Compliance Report Guidelines (2014)**;
- iv. include a shapefile of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- v. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

**Construction** means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of fences and signage.

**Department** means the Australian Government agency responsible for administering the **EPBC Act**.

**Department's EPBC Act Environmental Offsets Policy** means the Department of Sustainability, Environment, Water, Population and Communities (2012) *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* available on the Department's website at: <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

**EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

**EPBC Act listed species** means the EPBC Act listed Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), Sandplain Duck Orchid (*Paracleana dixonii*), Star Sun Orchid (*Thelymitra stellata*) and Yandanooka Mallee (*Eucalyptus crispata*).

**EPBC Regulations** means the *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth).

**Foraging habitat** means foraging habitat for the **Carnaby' Black Cockatoo** as identified in the Department of Sustainability, Environment, Water, Population and Communities (2012) *EPBC Act referral guidelines for three threatened black cockatoo species* available on the Department's website at: <http://www.environment.gov.au/biodiversity/threatened/publications/epbc-act-referral-guidelines-three-threatened-black-cockatoo-species-carnabys-cockatoo>

**Incident** means any event which has the potential to, or does, impact on **protected matter(s)**.

**Independent audit**: means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2015).

**Monitoring data** means the data required to be recorded under the conditions of this approval.

**Minister** means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

**Plan(s)** means any of the documents required to be prepared, approved by the **Minister**, and/or implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

**Protected matter** means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

**Sensitive ecological data** means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*.

**Shapefile** means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

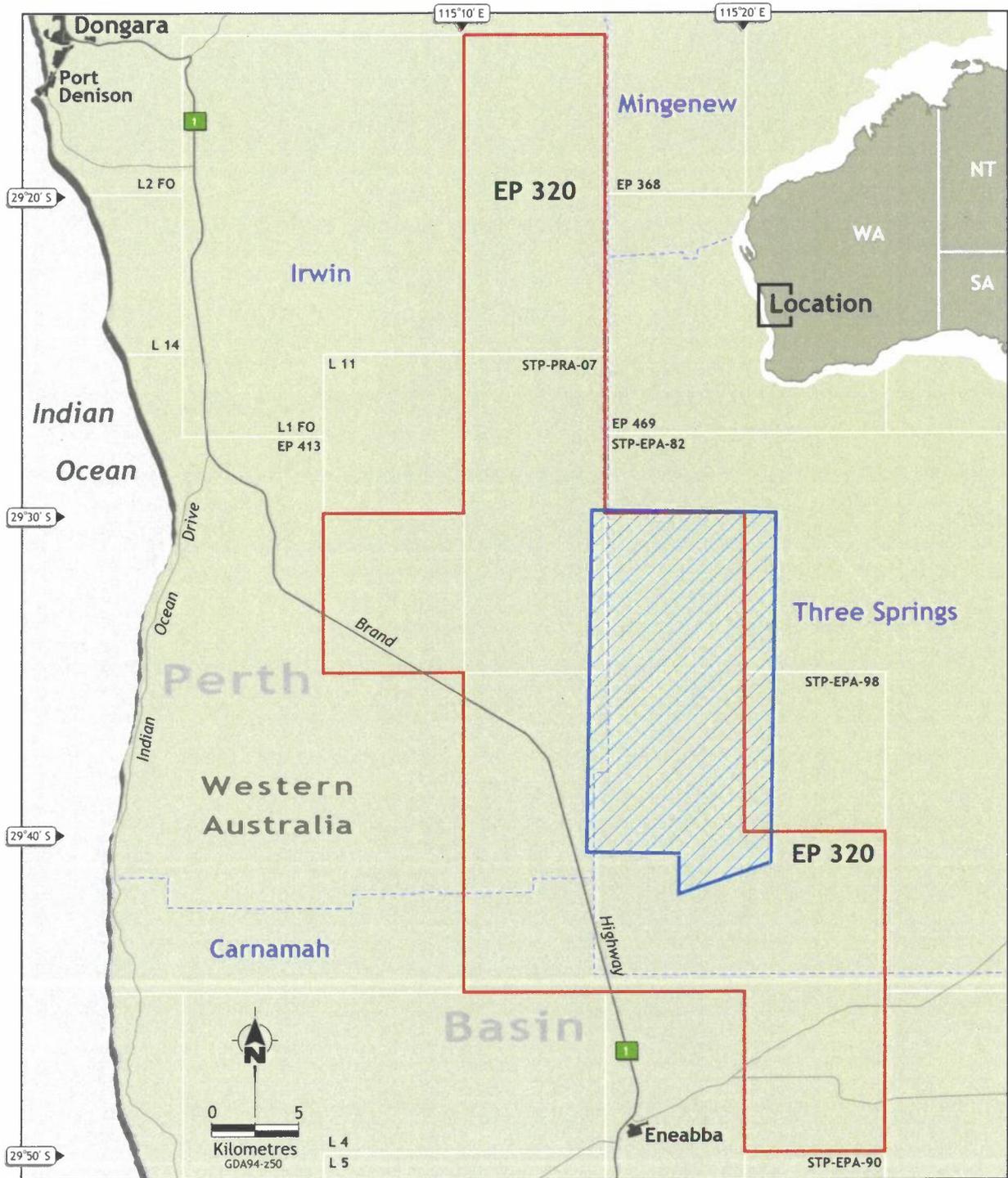
**Suitably qualified person** means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

**Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

**Western Australian Clearing Permit (8171/1)** means the Western Australian Clearing Permit (8171/1) granted by the Government of Western Australia under section 51E of the *Environment Protection Act 1986 (WA)* on 9 May 2019.

**ATTACHMENTS**

**1. Attachment A: Map of survey boundary**



**Legend**

-  Survey boundary (proposed)
-  Local Government Area boundary
-  Road network

**Petroleum Tenements**

-  EP 320 Exploration
-  Other permit Exploration/Production

**Trieste 3D Seismic Survey**  
EP 320



**Regional Location Map**

NoEX\_EP\_Trieste\_Location\_Map\_GDA94\_z50.dgn Updated 12 Dec 2017

## **Appendix B Independent Audit Trieste 3D Seismic Survey**

Independent Audit of Clearing Permit Conditions, Trieste 3D Seismic Survey (Report No. 01229F\_2\_v2). Unpublished report prepared for Beach Energy by ERIAS Group Pty Ltd, February 2020.



# INDEPENDENT AUDIT

## TRIESTE 3D SEISMIC SURVEY

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FEBRUARY 2020  
Report No. 01229F\_1\_v2





# Beach Energy

## Independent Audit – Trieste 3D Seismic Survey

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February 2020  
(Report No. 01229F\_1\_v2)

Prepared by ERIAS Group Pty Ltd  
(ACN: 155 087 362)

22B Beulah Road  
Norwood, South Australia, 5067  
Australia  
P +61 419 012 698  
E [info@eriasgroup.com](mailto:info@eriasgroup.com)  
W [eriasgroup.com](http://eriasgroup.com)

<b>Client Contact:</b>	Zoë Bowen Zoe.bowen@beachenergy.com.au
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<b>ERIAS Group Contact:</b>	David Browne David.browne@eriasgroup.com
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# 1. Executive Summary

Beach Energy submitted a referral to undertake the Trieste 3D Seismic Survey under the *Environment Protection and Diversity Conservation Act 1999* in December 20017. The submission of a referral was undertaken on the basis that the seismic survey may have significant impacts on the Carnaby's black cockatoo. The project was determined a controlled action and assessment of the project was undertaken via the bilateral agreement with Western Australia. The project received EPBC approval with conditions on 11 October 2019.

A condition of approval was:

- ◆ The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12 month period from commencement of the action and for every subsequent 12 month period, or as otherwise requested in writing by the Minister.

ERIAS Group was engaged by Beach Energy to undertake an independent audit to determine compliance with conditions outlined in the approval EPBC 2017/8133. To determine compliance ERIAS Group undertook the following:

- ◆ Developed audit criteria and methodology which was approved by Department of Environment and Energy on 16 December 2019.
- ◆ Review of environmental documentation including Trieste 3D Seismic Survey Environment Plan, Oil Spill Contingency Plan – Trieste 3D Seismic Survey, Rehabilitation Assessment – Trieste 3D Seismic Project, Proposed Seismic Line Rehabilitation Monitoring Methodology, Trieste 3D Seismic Survey Mulching Verification Assessment, Conditions of approval issued by WA Department of Biodiversity Conservation and Attractions and a number of daily reports, registers etc. associated with the implementation of the seismic survey.
- ◆ A site inspection over 16-18 December 2019 which involved inspection of mulching being undertaken in the field including inspection of seismic lines that had already been mulched. The site inspection also involved review of project documentation and interviews with field personnel.

ERIAS Group developed 42 audit criteria which were based on the 13 EPBC Act approval conditions outlined in EPBC 2017/8133. The audit found that Beach Energy was in compliance with 19 of the criteria while a further 23 criteria were considered not applicable at the time of the audit. A number of the criteria which were considered not applicable relate to actions which have not yet commenced i.e. submission of annual compliance report or rehabilitation monitoring. No non compliances were identified.

Of particular note is that while approval was received to clear 74.54 ha the that actual area cleared was further reduced to 54.36 ha being cleared. The reduction in the area cleared was achieved by reduction in the width of standard receiver lines (actual 2.1m vs approval 2.5m) and source lines (actual 3.5 vs approval 4.0m). In addition, some seismic lines were not cleared as previously planned following completion of the cultural heritage survey and other project requirements.

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
TRIESTE 3D SEISMIC SURVEY

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## 2. Auditor Certification

Auditor's name: David Browne

Position: Principal

Company: ERIAS Group

Contact details:

Email: [david.browne@eriasgroup.com](mailto:david.browne@eriasgroup.com)

Mobile: +61 419 012 698

Address: 22B Beulah Road, Norwood, SA, 5067

Auditor's Qualifications: BSc Natural Resources Management, University of Adelaide

Auditors Experience:

- ◆ 30 years environmental management experience in oil & gas, mining, infrastructure and agricultural sectors.

Auditor's declaration:

I, David Andrew Browne certify that, to the best of my knowledge, all information provided in the audit report attached to this audit certification statement is true, correct and complete.

I am aware that section 491 of the EPBC Act makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the regulations. The offence is punishable on conviction by imprisonment for not more than 1 year, a fine not more than 60 penalty units, or both.



Signature

Date: 20 February 2020

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
TRIESTE 3D SEISMIC SURVEY

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## 3. Introduction

Beach Energy through its subsidiary Lattice Energy operate the Beharra Springs Gas Facility and undertake exploration activities in the north Perth Basin. As part of its ongoing exploration program to provide additional gas reserves for the Beharra Springs Gas Facility, Beach Energy proposed to undertake the Trieste 3D Seismic Survey within Exploration Permit 320. The survey area is within the Geraldton Sandplains Bioregion.

The project is located approximately 13 km north of Eneabba and 40 km southeast of Dongara in Western Australia (Figure 3.1).

An *Environment Protection and Biodiversity Conservation Act 1999* referral was submitted to the Commonwealth Department of Environment and Energy on 22 December 2017 for a determination under the Act. The submission of a referral was undertaken on the basis that the seismic survey may have significant impacts on the Carnaby's black cockatoo. The project was determined to be a controlled action and was assessed under the bilateral agreement with Western Australia. The project was approved with conditions on 11 October 2019. One of the conditions of the approval was:

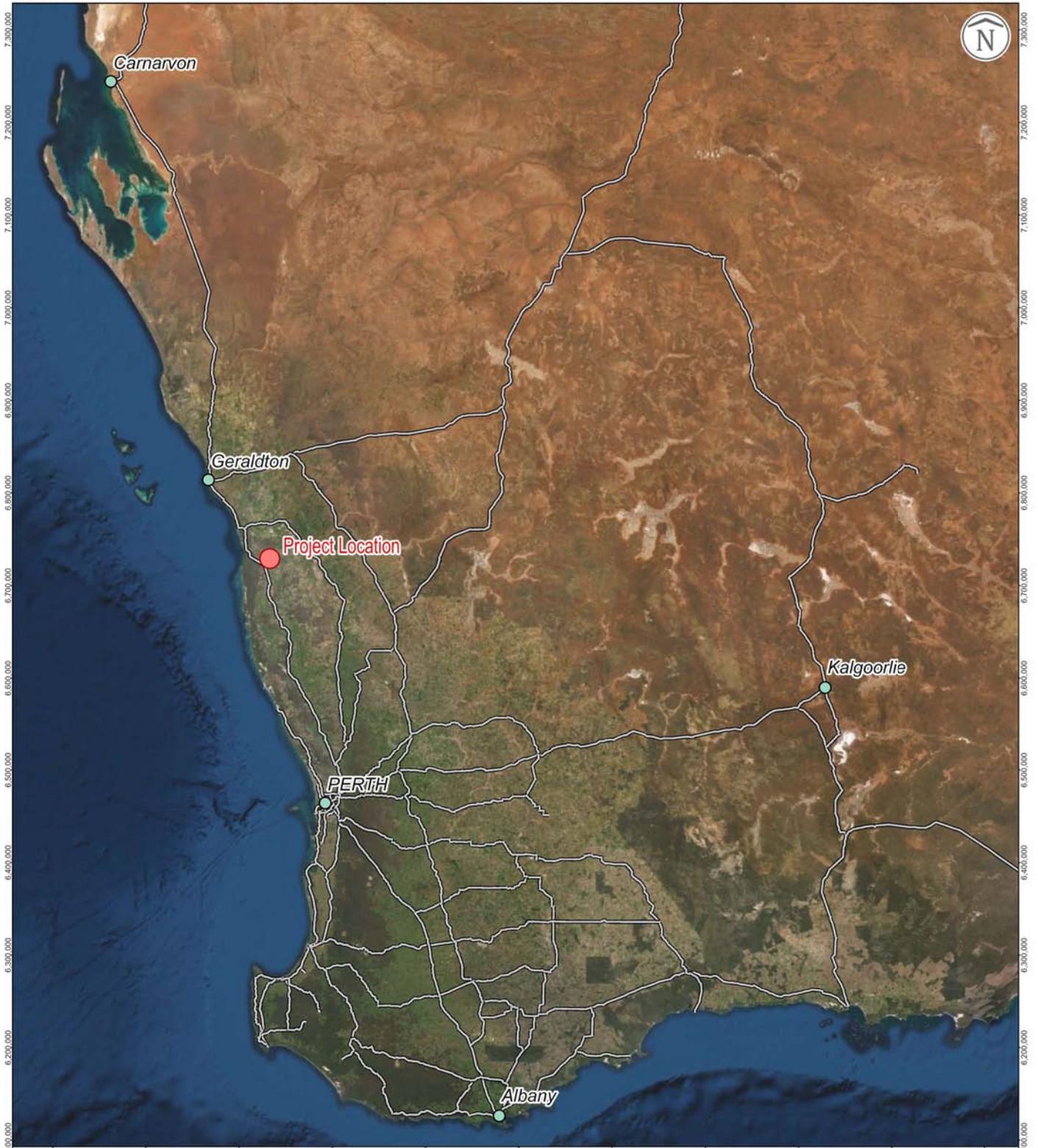
- ◆ Condition 10: The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12 month period from commencement of the action and for every subsequent 12 month period, or as otherwise requested in writing by the Minister.

This audit report has been prepared to meet the requirement of Condition 10. The audit was undertaken shortly after activities commenced as this was the period when disturbance of remnant native vegetation would occur.

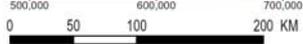
# PROJECT LOCATION OVERVIEW

Beach Energy Seismic Survey | Audit

FIGURE 3.1



SCALE: 1:6,000,000 @ A4



COORDINATE REFERENCE: GDA 1994 MGA Zone 50

- Project Location
- Towns
- Road

ERIAS Group 13-25 Church Street Hawthorn VIC 3122 Australia	Issue Date:	29.01.2020
	Map ID:	01229F_SS_GIS002_v0_3
	Figure Number:	01229F_SS_F03.1_GIS_v1
DATA SOURCE: Project data from Beach Energy, 2019. Base data from Beach Energy & GEODATA 250K, 2006. Imagery © ESRI, DigitalGlobe and Partners, 2019.		

## 4. Description of Activities

The Trieste 3D Seismic Survey covers an area of 217 km<sup>2</sup>. Land use within this area includes cereal cropping, grazing and remnant native vegetation. This audit is focused on the portion of land that is remnant native vegetation which is Unallocated Crown Land (Figure 4.1). Project details are outlined in Table 4.1.

**Table 4.1 – EPBC 2017/8133 Project Details**

EPBC Number	EPBC 2017/8133
Date of Issue	11 October 2019
Expiry	1 September 2034
Project Name	Trieste 3D Seismic Survey
Approval Holder	Lattice Energy Limited
Approved Action	To undertake an onshore three-dimensional (3D) seismic survey near Eneabba in the north Perth basin, mapping geological formations to assist in the search for conventional gas reserves
Location of Project	Approximately 13km north of Eneabba within Exploration Permit EP320
Reporting Period	December 2019
Date of Audit	A site inspection was undertaken over 16-18 December 2019
Audit Methodology	Compliance with audit criteria was based on a site inspection and evidence collected during the inspection, interviews with personnel (both in the field and Beach Energy head office) review of field documents/data and review of various background documents
Date of Report	January 2020

### 4.1 Approvals

To undertake the Trieste 3D Seismic Survey Beach Energy obtained three key environmental approvals (Table 4.2). These approvals are in addition to environmental requirements outlined in EP320.

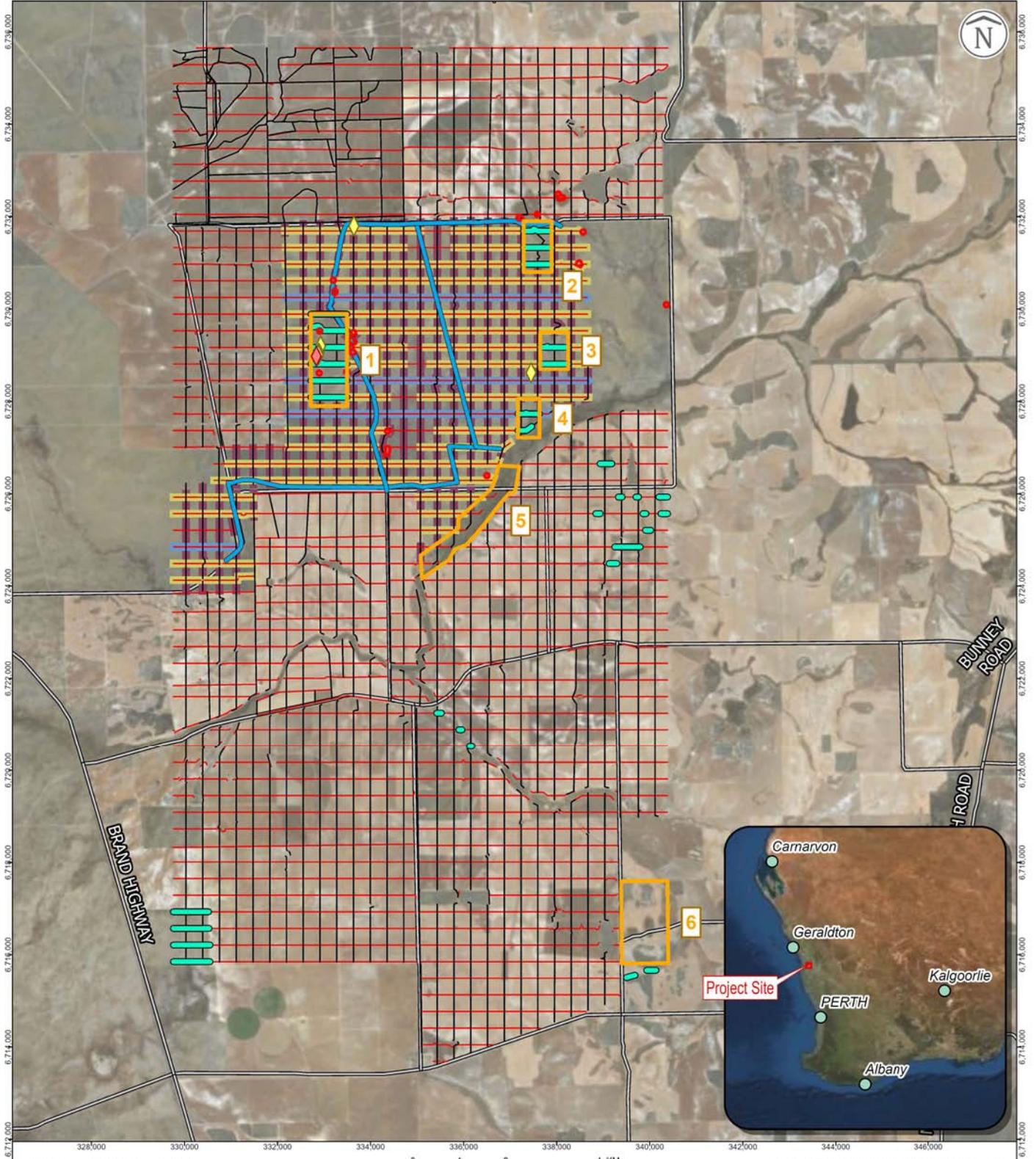
**Table 4.2 – EPBC 2017/8133 Project Details**

Approval	Details	Date of Issue	Expiry
EPBC 2017/8133	Undertake an onshore three-dimensional (3D) seismic survey	11 October 2019	1 September 2034
Clearing Permit 817/1	Clearing of not more than 74.539 ha of native vegetation	9 May 2019	31 May 2024
Authorisation to Take or Disturb Threatened Species TFL 53-1819	Authorisation to inadvertently take or disturb threatened species	10 May 2019	30 May 2024

# SEISMIC SURVEY LINES, CULTURAL HERITAGE SITES AND EXCLUSION ZONES

Beach Energy Seismic Survey | Audit

FIGURE 4.1



SCALE: 1:120,000 @ A4

0 1 2 4 KM

COORDINATE REFERENCE: GDA 1994 MGA Zone 50

- |                    |                                |                                    |
|--------------------|--------------------------------|------------------------------------|
| — Road             | — Cultural heritage hand carry | — Cultural heritage exclusion zone |
| — Inspection Route | — Mulching Source (v5)         | — Threatened flora 50m Buffer      |
| — Source line      | — Mulching Receiver (v6)       | <b>Cultural Heritage Artefacts</b> |
| — Receiver line    | — Mulching 4m                  | ◆ Manuport                         |
|                    |                                | ◆ Grindstone Fragment              |

ERIAS GROUP  
 13-25 Church Street  
 Hawthorn VIC 3122  
 Australia

Issue Date: 29.01.2020  
 Map ID: 01229F\_SS\_GIS001\_v0\_4  
 Figure Number: 01229F\_SS\_F04.1\_GIS\_v1

DATA SOURCE:  
 Project data from Beach Energy, 2019.  
 Base data from Beach Energy & GEODATA 250K, 2006.  
 Imagery © ESRI, DigitalGlobe and Partners, 2019.

## 5. Details of Compliance with EPBC 2017/8133 Approval Conditions

### 5.1 EPBC 2017/8133 Approval Condition 1

Approval Condition: The approval holder must not clear more than 74.539 ha of foraging habitat for the Carnaby's black cockatoo within the survey boundary (map at Attachment A).

Table 5.1 – Approval Condition 1

1	EPBC 2017/8133 Condition	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
1.1	Criteria: Demonstrate by as completed survey data that vegetation clearing of foraging habitat for the Carnaby's black cockatoo has not exceeded 74.539 ha.	On-site inspection of proposed habitat clearing vs actual habitat clearing. Inspect of Beach Energy vegetation clearance documentation and verification during site inspection. Check GIS mapping of as surveyed data.	GPS coordinates of each seismic line are entered into a navigation system which is used on the mulcher (Plate 1). The navigation system records where the mulcher has operated, and Terrex provide this data to Beach Energy on a daily basis. The data is analysed according to type of line mulched as the width varies (Source line 3.5m (Plate 2) and Standard Receiver line 2.1m (Plate 3) and Double Receiver line 4.0m) and this data is then used to calculate the area cleared according to source or receiver lines. Data is reported daily in the Daily Report together with a cumulative total. Terrex then survey every 20m along each source and receiver line.	Site inspection by D Browne 17 December 2019. Daily Report Trieste 3D 15 December 2019.pdf Prepared by Bruce Mitchell (Beach Energy Senior Field Manager) Email 19/12/19 from P Black to T Stehbens confirming that spot checks completed. Trieste 3D Seismic Survey - Mulching Verification Assessment report (February 2020).	An electronic system has been implemented to guide the mulcher to ensure that mulching is only undertaken in accordance with the planned seismic survey. Data collected is analysed daily to determine area cleared and accumulative data. The survey was initially planned based on Source lines being 4m wide and Receiver lines 2.5-4m wide. The actual width of Source lines has been reduced to 3.5m and Standard Receiver lines 2.1m and Double Receiver lines 4.0m.	Compliance

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
 TRIESTE 3D SEISMIC SURVEY

**Table 5.1 – Approval Condition 1 (cont'd)**

1 (c)	EPBC 2017/8133 Condition (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
1.1			At the commencement of mulching activities Source and Receiver lines were physically measured by Beach Energy personnel (and follow-up spot checking was also undertaken by Peter Black (on site Field Environmental Advisor) confirming width of Source and Receiver lines consistent with checks undertaken at commencement of program.		Beach Energy verification report used as complete GIS data combined with field measurements and found that the area cleared for the project was 54.36 ha against the approved project clearing footprint of 74.54 ha.	

## 5.2 EPBC 2017/8133 Approval Condition 2

Approval Condition: To minimise the impacts of the action on EPBC Act listed species, the approval holder must implement condition 8 of the Western Australian Clearing Permit (8171/1) for the life of the approval from the commencement of the action.

**Table 5.2 – Approval Condition 2**

2	EPBC 2017/8133 Condition 2	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
2.1	Criteria (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback:	Documentation which demonstrates equipment was inspected and was clean of soil and vegetation before arriving on site.	Weed Hygiene certificates for prestart and in field. Photographs of mulcher being blown down (Plates 4 and 5) and Weed Hygiene certificates for mulcher and 4WD entering private property	A sample of weed hygiene declaration certificates were reviewed including the following: 1 Central Earthmoving Weed Hygiene Declaration.tif 2 Central Earthmoving Weed Hygiene Declaration.tif 3 Central Earthmoving Weed Hygiene Declaration.tif 4 Central Earthmoving Weed Hygiene Declaration.tif	Both Beach Energy personnel and Terrex personnel have a high awareness of the importance of hygiene. The issue was a focus of the induction and was discussed during a prestart meeting attended by the auditor in relation to the need to clean down the mulcher when moving from mulching remnant native vegetation within the	Compliance

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
 TRIESTE 3D SEISMIC SURVEY

Table 5.2 – Approval Condition 2 (cont'd)

2 (c)	EPBC 2017/8133 Condition 2 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
2.1	(i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared.			1ETV518 - Weed Declaration_20191128.pdf 1GWQ871 - Weed Declaration_20191207.pdf 320SXX - Weed Declaration_20191128.pdf 484XPU - Weed Declaration_20191128.pdf 1GWY307 - Weed Declaration_20191128.pdf Weed Hygiene Certificate 17Dec19.jpg Weed Hygiene Certificate Mulcher 17Dec19.jpg	Unallocated Crown Land to a Private property.	
2.2	Criteria: (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback: (ii) ensure that no dieback or weed-affected soil, mulch, fill or other material is brought into the area to be cleared.	Documentation which certifies that any soil, mulch, fill or other material brought onto site was clean of dieback or weeds.	Site inspection did not identify any soil, mulch, fill or other material that had been imported to the site. Peter Black (Field Environmental Advisor) confirmed that no material has been brought onto site nor is any planned.	Not applicable as no material has been brought onto site.	Beach Energy nor its contractor Terrex has brought any soil, mulch, fill or other material onto site.	Compliance

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
 TRIESTE 3D SEISMIC SURVEY

Table 5.2 – Approval Condition 2 (cont'd)

2 (c)	EPBC 2017/8133 Condition 2 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
2.3	Criteria: (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback: (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.	Visual observations during site inspection.	Vehicles in unallocated crown land are restricted to existing fire access tracks. Mulching machine and fire support ute access the seismic lines. Auditor did not observe any evidence that vehicles were outside approved areas.	Not applicable.	The site inspection covered an extensive area of the Unallocated Crown Land that was being mulched for Source and Receiver lines. During the site inspection there was no evidence that vehicles had travelled off access tracks. Note that even travelling along lines that have been mulched posed a high risk of puncturing a tyre.	Compliance
2.4	Criteria: (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback: (iv) only move soils in dry conditions	Visual observations during site inspection.	Auditor did not observe and Peter Black (Field Environment Advisor) confirmed that no soil has been bought or moved onto site nor is any planned.	Not applicable.	Only mulching activities have been undertaken to date and there has been no requirement to move soil nor is it expected that there will be a requirement to move soil during the duration of the project.	Compliance

INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
 TRIESTE 3D SEISMIC SURVEY

Table 5.2 – Approval Condition 2 (cont'd)

2 (c)	EPBC 2017/8133 Condition 2 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
2.5	Criteria: (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback: (v) where dieback or weed-affected soil, mulch, fill or other material is to be removed from the area to be cleared, ensure it is transferred to areas of comparable soil disease status.	Confirm whether material has been removed from the area cleared through review of Beach Energy documentation relating to earthworks approval. If material has been removed inspection of area where relocated. Review documentation retesting of material moved re whether dieback or weed affected and status at new location.	No material was observed by the auditor to have been removed from the area cleared. This was confirmed by Peter Black (Field Environmental Advisor)	Not applicable.	No soil, mulch, fill or other material has been removed from the area being mulched.	Compliance
2.6	Criteria: (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any weeds growing within areas cleared under this Permit.	Review inspection reports re presence of weeds in areas cleared. Inspect areas where weed control has been implemented.	Hygiene inspection certificates were observed for equipment being used.	1 Central Earthmoving Weed Hygiene Declaration.tif 2 Central Earthmoving Weed Hygiene Declaration.tif 3 Central Earthmoving Weed Hygiene Declaration.tif 4 Central Earthmoving Weed Hygiene Declaration.tif 1ETV518 - Weed Declaration_20191128.pdf 1GWQ871 - Weed Declaration_20191207.pdf 320SXX - Weed Declaration_20191128.pdf 484XPU - Weed Declaration_20191128.pdf	Project activities commenced in late November 2019 with mulching commencing in December 2019. Since commencing the project there has been no rainfall.	Not applicable

Table 5.2 – Approval Condition 2 (cont'd)

2 (c)	EPBC 2017/8133 Condition 2 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
2.6 (c)				1GWY307 - Weed Declaration_20191128.pdf Weed Hygiene Certificate 17Dec19.jpg Weed Hygiene Certificate Mulcher 17Dec19.jpg No inspection reports have been prepared at this time as project had just commenced at time of site inspection.		

### 5.3 EPBC 2017/8133 Approval Condition 3

Approval Condition: To minimise the impacts of the action on foraging habitat for the Carnaby's black cockatoo, the approval holder must implement condition 10 (relating to rehabilitation) of the Western Australian Clearing Permit (8171/1). The object of rehabilitation works is to re-establish a self-sustaining vegetation cover, integrated with the surrounding ecosystem, providing foraging habitat for the Carnaby's black cockatoo.

- a. The approval holder must continue rehabilitation works until the Department has provided written acceptance of a report by a suitably qualified person certifying and providing evidence that all of the completion criteria have been met.
- b. Following submission to the Department of the certified report demonstrating that the completion criteria have been achieved in accordance with condition 3(a), the suitably qualified expert must monitor the rehabilitation area at least once every two years, during spring, for the life of the approval with sufficient effort to reliably ascertain whether the completion criteria continue to be met or exceeded.
- c. If the monitoring undertaken in accordance with condition 3(b) determines that any of the completion criteria are no long being met, the approval holder must, within 3 months of becoming aware that any of the completion criteria are no longer being met, commence undertaking corrective actions and continue these until the Department has provided written acceptance of a report by a suitably qualified person certifying and providing evidence that all the completion criteria have been met.

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**Table 5.3 – Approval Condition 3**

3	EPBC 2017/8133 Condition 3	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
3.1	Criteria: Retain the vegetative material removed by clearing.	Site inspection	Vegetative material was mulched in-situ (Plate 6).	Not applicable	Mulching of seismic lines was shown to be very effective with no material being removed and all vegetation remaining in-situ.	Compliance
3.2	Criteria: Stockpile cleared vegetative material in an area that has been cleared.	Site inspection	No stockpiling of vegetative material has been undertaken.	Not applicable	No stockpiling of vegetation has been required.	Compliance
3.3	Criteria: Within 12 months following clearing commence revegetation.	Site inspection		Not applicable	Condition not applicable at time of inspection	Not applicable
3.4	Criteria: Laying the vegetative material retained and stockpiled.	Site inspection	Vegetative material was mulched in-situ.	Not applicable	As the source and receiver lines were mulched there was no requirement to layer retained and stockpiled vegetation	Not applicable
3.5	Criteria: Implement adequate measures to prevent third party access to survey lines and access tracks.	Site inspection	Within 20m of public roads the mulcher was raised so that third party access is not encouraged. As the area is mulched the terrain is difficult and does not encourage third parties as the likelihood of puncturing a tyre is high due to the numerous sticks that protrude after the mulching. In a limited number of occasions, the mulcher was not raised, and mulching occurred up to the fire access track. This issue was observed on the first day that mulching occurred and had not occurred since.		Management practices have been implemented to prevent third party access. These include: <ul style="list-style-type: none"> <li>• Entering information into GPS to mark seismic lines and access tracks which identifies when mulcher is to be lifted (Plate 1).</li> <li>• Lifting of mulcher 20m before Public roads (Plate 7).</li> </ul> Beach Energy also intend to erect signs stating 'Rehabilitation in Progress' at selected seismic lines once the program is complete.	Compliance

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**Table 5.3 – Approval Condition 3 (cont'd)**

3 (c)	EPBC 2017/8133 Condition 3 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
3.6	Criteria: Conduct monitoring at a minimum of once every 2 years in accordance with the document 'Mattiske, 2018. Proposed Seismic Line Rehabilitation Monitoring Methodology, Beharra Springs. Prepared by Mattiske Consulting Pty Ltd for Beach Energy, October 2018'.	Review monitoring reports Inspect monitoring sites during field inspection.				Not applicable
3.7	Criteria: Submit to the Department certified report demonstrating that completion criteria have been achieved.	Review of certified monitoring report.				Not applicable
3.8	Criteria: If completion criteria are not being met, within 3 months submit a report detailing the corrective actions to be taken.	Report submitted to Department.				Not applicable

**Table 5.3 – Approval Condition 3 (cont'd)**

3 (c)	EPBC 2017/8133 Condition 3 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
3.9	Criteria: Continue rehabilitation monitoring until it can be demonstrated (certified report) that completion criteria have been achieved.	Letter from Department stating it has accepted report and completion criteria have been achieved.				Not applicable

## 5.4 EPBC 2017/8133 Approval Condition 4

Approval Condition: To compensate for the loss of up to 74.539 ha of foraging habitat for the Carnaby's black cockatoo, the approval holder must:

- a. Within one year of the commencement of the action submit to the Minister for approval:
  - i. Details of an offset that includes a minimum of 218.46 ha of foraging habitat for the Carnaby's black cockatoo. The approval holder must demonstrate that the proposed offset meets the principles of the Department's EPBC Environmental Offsets Policy
  - ii. An Offset Management Plan for the proposed offset provided in accordance with condition 4(a)(i). The Offset Management Plan must include time-bound performance targets, completion criteria, details of a monitoring program, management actions, corrective actions and triggers for corrective actions to be undertaken in the event that performance targets have not been met.
- b. Within two years of the commencement of the action, provide written evidence to the Department that a financial contribution of at least \$104,860.80 has been made to an approved conservation fund for the purchase and ongoing management of the approved offset required by condition 4(a).
- c. Provide the Department with the offset attributes, shapefiles, textual descriptions and maps to clearly define the location and boundaries of the offset site(s).

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**Table 5.4 – Approval Condition 4**

4	EPBC 2017/8133 Condition 4	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
4.1	Criteria: Offset which meets the principles of the Departments EPBC Environmental Offsets Policy	Documentation of: - Review of Offset Management Plan and supporting information - Letter or similar from Department approving Offset Management Plan		Environmental offset strategy, Trieste seismic survey project, March 2018t. Report prepared by RPS.		Not applicable
4.2	Criteria: Offset Management Plan containing: Time bound performance targets Completion criteria Monitoring program Management actions Corrective actions Triggers for corrective actions	Documentation of: - Review of Offset Management Plan and supporting information - Letter or similar from Department approving Offset Management Plan		Environmental offset strategy, Trieste seismic survey project, March 2018t. Report prepared by RPS.		Not applicable
4.3	Criteria: Payment of \$104,860.80 to an approved conservation fund for the purchase and ongoing management of the offset	Receipt of payment of \$104,860.80	Receipt from Department of Water and Environmental Regulation provided to auditor	RPO14025_RI002480_Acc.of Lattice Energy Resources Perth. pdf	Payment of the offset was made on 31 May 2019 in the amount of \$104,860.80.	Compliance

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**Table 5.4 – Approval Condition 4 (cont'd)**

4 (c)	EPBC 2017/8133 Condition 4 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
4.4	Criteria: Provide the Department with the offset attributes, shapefiles, textual descriptions and maps to clearly define the location and boundaries of the offset site(s).	Review of documentation which indicates the transfer of data has occurred.				Not applicable

## 5.5 EPBC 2017/8133 Approval Condition 5

Approval Condition: The approval holder must notify the Department in writing of the date of commencement of the action within 10 business days after the date of commencement of the action.

**Table 5.5 – Approval Condition 5**

5	EPBC 2017/8133 Condition 5	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
5.1	Criteria: Record of notification within 10 business days after commencement of the action.	Letter or similar notifying Department of commencement of the action.	Letter from Department of Environment and Energy acknowledging advice by Beach Energy on 5 December 2019 of commencement of the action.	2017-8133_Signed Letter_Commencement of Action Acknowledgement.pdf	Beach Energy advised the Department that it had commenced the seismic survey on 5 December 2019. This was 2 days after works had commenced and within the requirement to notify the Department within 10 business days after commencement of the action.	Compliance

## 5.6 EPBC 2017/8133 Approval Condition 6

Approval Condition: If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without prior written agreement of the Minister.

**Table 5.6 – Approval Condition 6**

6	EPBC 2017/8133 Condition 6	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6.1	Criteria: Agreement from Minister if commencement of the action does not occur within 5 years.	Letter or similar demonstrating that Minister has agreed to commencement of the action if greater than 5 years since approval.				Not applicable

## 5.7 EPBC 2017/8133 Approval Condition 7

Approval Condition: The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must:

- a. Publish each compliance report on the website within 20 business days following the relevant 12 month period;
- b. Notify the Department by email that a compliance report has been published on the website within five business days of the date of publication, and provide a link to the published report;
- c. Keep all compliance reports publicly available on the website until this approval expires;
- d. Exclude or redact sensitive ecological data from compliance reports published on the website; and
- e. Where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.

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**Table 5.7 – Approval Condition 7**

7	EPBC 2017/8133 Condition 7	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
7.1	Criteria: Prepare annual compliance report by 11 October 2020 and thereafter each year until 2034.	Review annual compliance report.				Not applicable
7.2	Criteria: Publish on Beach Energy's website the annual compliance report by end of October each year.	Check Beach Energy website.				Not applicable
7.3	Criteria: Within 5 days of annual compliance report being placed on the Beach Energy website notify the Department that the compliance report has been released to the public.	Sent email confirming date that Department was notified and containing link to report on Beach Energy website.				Not applicable
7.4	Criteria: Keep all compliance reports on website until 2034.	Check Beach Energy website.				Not applicable

**Table 5.7 – Approval Condition 7 (cont'd)**

7 (c)	EPBC 2017/8133 Condition 7 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
7.5	Criteria: Exclude or redact sensitive ecological data from compliance reports published on website.	Check of website to identify areas of redacted text.				Not applicable
7.6	Criteria: Within 5 days of annual compliance report being placed on the Beach Energy website provide the Department with a copy of the compliance report without the redacted text.	View email and/or letter sent to Department.				Not applicable

## 5.8 EPBC 2017/8133 Approval Condition 8

Approval Condition: The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify:

- a. The condition which is or may be in breach;
- b. A short description of the incident and/or non-compliance; and
- c. The location (including co-ordinates), date and time of the incident and/or non-compliance

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Table 5.8 – Approval Condition 8

8	EPBC 2017/8133 Condition 8	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
8.1	Criteria: Report within 2 business days any incident specifying: - the condition which is or may be in breach - a short description of the incident and/or non-compliance and - the location (including co-ordinates), date and time of the incident and/ or non-compliance	Incident report Email or letter to Department advising of incident.		Incident report ID 1175 (20191204 – Oil Spill – Beach.pdf Incident report ID 1176 (20191207 – Oil Spill – Beach.pdf	At the time of the site inspection no incident had occurred which would be considered a breach of any condition	Compliance
8.2	Criteria: Report within 2 business days any non-compliance with conditions specifying: - the condition which is or may be in breach - a short description of the incident and/or non-compliance and - the location (including co-ordinates), date and time of the incident and/ or non-compliance	Email or letter to Department advising of non-compliance.			At the time of the site inspection no non-compliance had occurred which would be considered a breach of any condition	Compliance

Table 5.8 – Approval Condition 8 (cont'd)

8 (c)	EPBC 2017/8133 Condition 8 (cont'd)	Verification Method (cont'd)	Evidence (cont'd)	Documents Sighted (cont'd)	Determination (cont'd)	Compliance Finding (cont'd)
8.3	<p>Criteria:                      Report within 2 business days any non-compliance with commitments made in plans specifying:</p> <ul style="list-style-type: none"> <li>- the condition which is or may be in breach</li> <li>- a short description of the incident and/or non-compliance and</li> <li>- the location (including co-ordinates), date and time of the incident and/ or non-compliance</li> </ul>	<p>Email or letter to Department advising of noncompliance with plans.</p>	<p>A review of all commitments within the environmental management plan (EMP) prepared for the Trieste seismic program was completed by the auditor. A total of 156 commitments were identified in the EMP (note that not all commitments were applicable at the time of the audit).</p>	<p>Lattice_Trieste_EP_Rev 5 CLEAN.pdf</p>	<p>Beach Energy was found to be in compliance with the majority of commitments with the following minor exceptions which were considered a partial compliance:</p> <ul style="list-style-type: none"> <li>• EP033 Permit to handle fauna obtained under the WA Biodiversity Conservation Act 2016. The Field Environmental Advisor has a fauna handling permit issued under the Queensland Nature Conservation (Administration) Regulation 2006. Note that the WA Department of Mines, Industry Regulation and Safety did not consider this a non-compliance).</li> <li>• EP065 Clean down facilities for vehicles and footwear to be available at the laydown sites. Auditor noted blow down occurring (Plate 4) however facilities were not available for footwear. Prior to leaving site a new daily procedure had been implemented re checking that boots were clean each day.</li> </ul>	<p>Compliance</p>

## 5.9 EPBC 2017/8133 Approval Condition 9

Approval Condition: The approval holder must provide to the Department the details of an incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying:

- a. Any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
- b. The potential impacts of the incident or non-compliance; and
- c. The method and timing of any remedial action that will be undertaken by the approval holder.

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**Table 5.9 – Approval Condition 9**

9	EPBC 2017/8133 Condition 9	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
9.1	Criteria: Report within 10 business days details of incident specifying: - any corrective action or investigation taken or intended - potential impact of the incident - method and timing of remedial action	Review of incident report and investigation. Interview with personnel involved or who undertook investigation. Review of documentation regard method of remedial action.	A review of incidents reported since the project was undertaken. A total of two incidents were recorded both involving spills of very small quantities of oil (both less than 300ml).	Incident report ID 1175 (20191204 – Oil Spill – Beach.pdf) Incident report ID 1176 (20191207 – Oil Spill – Beach.pdf)	No incident with the conditions or commitments made in plans has been reported.	Compliance
9.2	Criteria: Report within 10 business days details of non-compliance specifying: - any corrective action or investigation taken or intended - potential impact of the non-compliance - method and timing of remedial action	Review of non-compliance reporting. Review of investigation. Review documentation regarding method of remedial action.	A review of incidents reported since the project was undertaken. A total of two incidents were recorded both involving spills of very small quantities of oil (both less than 300ml).	Incident report ID 1175 (20191204 – Oil Spill – Beach.pdf) Incident report ID 1176 (20191207 – Oil Spill – Beach.pdf)	No non-compliance with the conditions or commitments made in plans has been reported.	Compliance

## 5.10 EPBC 2017/8133 Approval Condition 10

Approval Condition: The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12 month period from commencement of the action and for every subsequent 12 month period, or as otherwise requested in writing by the Minister.

**Table 5.10 – Approval Condition 10**

10	EPBC 2017/8133 Condition 10	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
10.1	Criteria: Independent audits are conducted to assess compliance with the conditions annually from commencement of the action and for every subsequent 12 month period.	Review audit reports prepared by Independent Auditor.				Not applicable

## 5.11 EPBC 2017/8133 Approval Condition 11

Approval Condition: For each independent audit, the approval holder must:

- a. Provide the name and qualifications of the independent auditor and the draft audit criteria to the Department;
- b. Only commence the independent audit once the audit criteria have been approved in writing by the Department; and
- c. Submit an audit report to the Department within the timeframe specified in the approved audit criteria.

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**Table 5.11 – Approval Condition 11**

11	EPBC 2017/8133 Condition 11	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
11.1	Criteria: Provide name and qualifications of Independent auditor to the Department.	Review letter or email.	Beach Energy nominated an independent auditor in a letter to DEE dated 28 November 2019.	Letter from DEE to Beach Energy (EPBC 2017-8133 – Letter approving auditor.pdf)	DEE responded on 6 December 2019 approving the appointment of the independent auditor.	Compliance
11.2	Criteria: Provide draft audit criteria to the Department.	Review letter or email.	Beach Energy submitted the draft audit criteria developed by ERIAS Group to DEE on 13 December 2019 for approval.	Letter from DEE to Beach Energy (EPBC 2017-8133 – Letter approving audit criteria.pdf)	DEE provided approval of the draft audit criteria on 16 December	Compliance
11.3	Criteria: Commence Independent Audit following approval for the audit criteria from the Department.	Compare dates of when Independent Audit was undertaken and when approval received from Department.	The site inspection was undertaken on 17 December 2019.	Letter from DEE to Beach Energy (EPBC 2017-8133 – Letter approving audit criteria.pdf)	The site inspection using the approved audit criteria was undertaken the day following approval by DEE.	Compliance
11.4	Criteria: Independent Audit report submitted within timeframe specified in audit criteria.	Review date of submission of Independent Audit report vs timeframe specified in audit criteria.				Not applicable at time of preparing audit report

## 5.12 EPBC 2017/8133 Approval Condition 12

Approval Condition: The approval holder must publish the audit report on the website within 10 business days of receiving the Department’s approval of the audit report and keep the audit report published on the website until the end date of this approval.

**Table 5.12 – Approval Condition 12**

12	EPBC 2017/8133 Condition 12	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
12.1	Criteria: Publish audit report on website within 10 days of receiving the Departments approval of the audit report.	Electronic data records indicating date report was published on website and date report was approved.				Not applicable
12.2	Criteria: Audit reports remain on website until end date of approval.	Review of website to confirm that audit reports remain.				Not applicable

### 5.13 EPBC 2017/8133 Approval Condition 13

Approval Condition: Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.

**Table 5.13 – Approval Condition 13**

13	EPBC 2017/8133 Condition 13	Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
13.1	Criteria: Advise Department in writing within 30 days after completion of the action.	Review of Letter.				Not applicable
13.2	Criteria: Provide Department with completion data.	Review of completion data.				Not applicable

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## 6. Plates

Plate 1: GPS navigation system used on mulcher indicating where mulching (green rectangle shape) is to occur. Note that when approaching a road no mulching is undertaken.

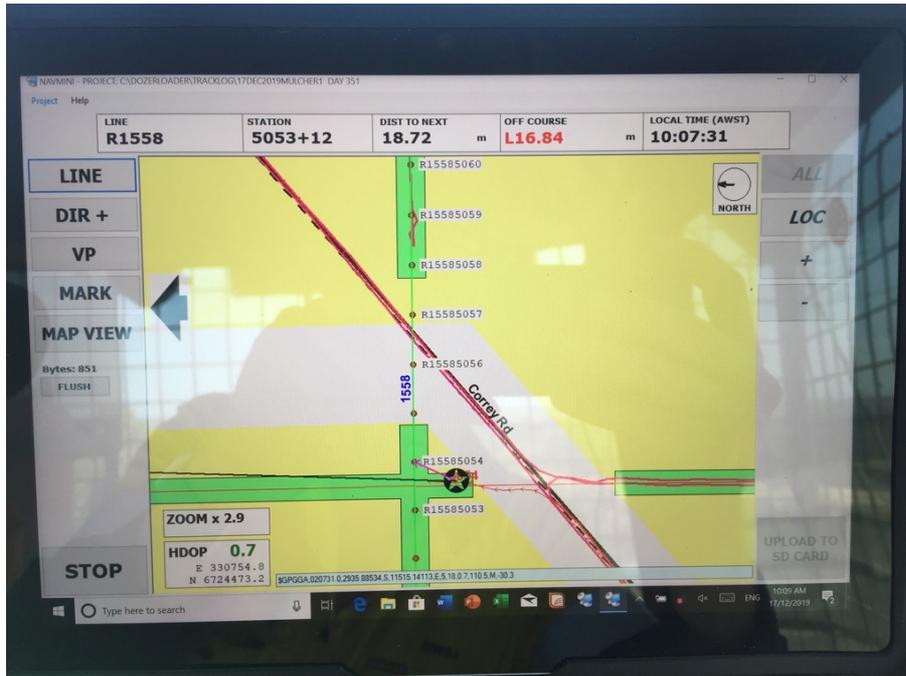


Plate 2: Source line.



**Plate 3: Standard Receiver line.**



**Plate 4: Mulcher being blown down prior to entering private property to continue undertaking mulching of remnant native vegetation.**



**Plate 5: Material collected following Mulcher being blown down.**



**Plate 6: Mulched material left in-situ.**



**Plate 7: Vegetation not mulched before public roads.**



INDEPENDENT AUDIT - TRIESTE 3D SEISMIC SURVEY  
TRIESTE 3D SEISMIC SURVEY

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**Melbourne, Australia**  
13-25 Church Street  
Hawthorn, Victoria, 3122  
Phone: +61 3 9208 6700

**Adelaide, Australia**  
22b Beulah Road  
Norwood, South Australia, 5067 Phone: +61  
419 012 698

**Brisbane, Australia**  
Level 6, 301 Queen Street  
Brisbane, Queensland, 4000  
Phone: +61 417 564 702

**Papua New Guinea**  
ERIAS Group PNG Limited  
C/- The Lodge, Level 3 Brampton Street  
Port Moresby, National Capital District, 121

**[www.eriasgroup.com](http://www.eriasgroup.com)**

## **Appendix C Mulching verification report**

Trieste 3D Seismic Survey Mulching Verification Report. Report prepared by Beach Energy Ltd, April 2020.

# Trieste 3D Seismic Survey

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## Mulching verification assessment

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Date	12 February 2020
Document owner	Environment group
Distribution	Support external compliance reporting

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### Document status

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Version	Date reviewed	Prepared by	Reviewed by	Endorsed by	Date of and final approval by
0	12/02/2020	Tegan Stehbens	Zoë Bowen	Zoë Bowen	12/02/2020

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## Introduction

Lattice Energy Ltd, as a wholly owned subsidiary of Beach Energy Ltd (Beach), was granted authorisation to clear native vegetation for the Trieste 3D Seismic Survey through Purpose Permit 8171/1 granted under section 51E of the *Environmental Protection Act 1986*, valid from 1 June 2019 to 31 May 2024. The permit allowed for clearing of up to **74.54 ha** for the purpose of undertaking a 3D seismic survey.

Vegetation clearing for the Trieste 3D Seismic Survey occurred over a period of two weeks in December 2019. Clearing was conducted using mulchers, which cut the vegetation just above ground level, leaving the rootstock and topsoil intact.

## Purpose

This mulching verification assessment demonstrates the actual, as-complete, vegetation clearing undertaken for the Trieste 3D Seismic Survey in order to demonstrate compliance with the clearing permit.

## Background

### Approved clearing

During the approval process, efforts to reduce the overall area of vegetation clearing led to a commitment to reduce the width of the seismic lines, originally 4.0 m wide for both source and receiver lines. Consequently:

- four receiver lines were nominated to be double cut (i.e. two passes of the mulcher) with a 4.0 m planned width to allow for light vehicle access
- the remaining receiver lines were reduced to maximum 2.5 m wide
- all source lines remained 4.0 m wide.

This allowed for a maximum vegetation clearing area of 74.54 ha, as approved in the clearing permit.

### Planned clearing

Further reductions in the area required to be cleared were achieved in the field by reducing the planned widths of the lines based on the specifications of vehicles involved (the vibroseis buggies, which require a 3.4 m wide clearance, and the UTVs, which require approximately 2.0 m). In addition, some lines were dropped or truncated, following consideration of cultural heritage exclusion areas identified during the on-ground cultural heritage survey and other project requirements.

Detailed GIS files containing the planned lines and exclusion areas were provided to the contractor for planning and operations. Daily uploads of GIS track logs from the field ensured compliance with the line clearing plan.

## Method

The onsite environmental advisor undertook spot checks of the mulched lines were undertaken by throughout the clearing program, specifically checking the actual width of lines against the expected width.

Upon completion, a surveyor checked the mulched lines and recorded a GPS point for the beginning, middle and end of each line. These points were used to create a shapefile of the as-complete cleared lines for comparison against the planned lines. The total area cleared was calculated by applying a buffer to each line.

A visual assessment of the as-complete cleared lines, against the planned lines, checked for deviations from the planned lines as well as for lines that were not cleared or were shorter than planned, with any significant differences noted. The visual assessment also considered exclusion areas identified by the cultural heritage assessment to ensure no mulching encroached on these areas.

## Results

Spot checks conducted by the onsite environmental advisor measuring width of cleared lines found:

- Standard receiver lines were consistently 2.1 m wide (as opposed to approved width of 2.5 m) (see Figure 1)
- Double-cut receiver lines (where the mulcher cleared two passes with a slight overlap) were consistently 4.0 m wide (see Figure 2)
- Source lines were consistently 3.5 m wide (two passes of the mulcher with approximately 0.7 m overlap; originally approved for 4.0 m wide) (see Figure 3).

Visual assessment of the as-complete mulched lines against the planned lines found no significant deviations (Figure 4). A number of lines were shorter than planned, and some were dropped completely. There were no encroachments on the exclusion areas identified by the cultural heritage assessment.

The total area cleared based on the as-complete GIS data and the in-field measurements of line widths found that the total area cleared for the project was **54.36 ha**, a reduction of over 20 ha when compared to the originally approved total clearing footprint of **74.54 ha**.



Figure 1 Mulched standard receiver line (width 2.1 m)



Figure 2 Double-cut receiver line (width 4.0 m)



Figure 3 Mulched source line (width 3.5 m)

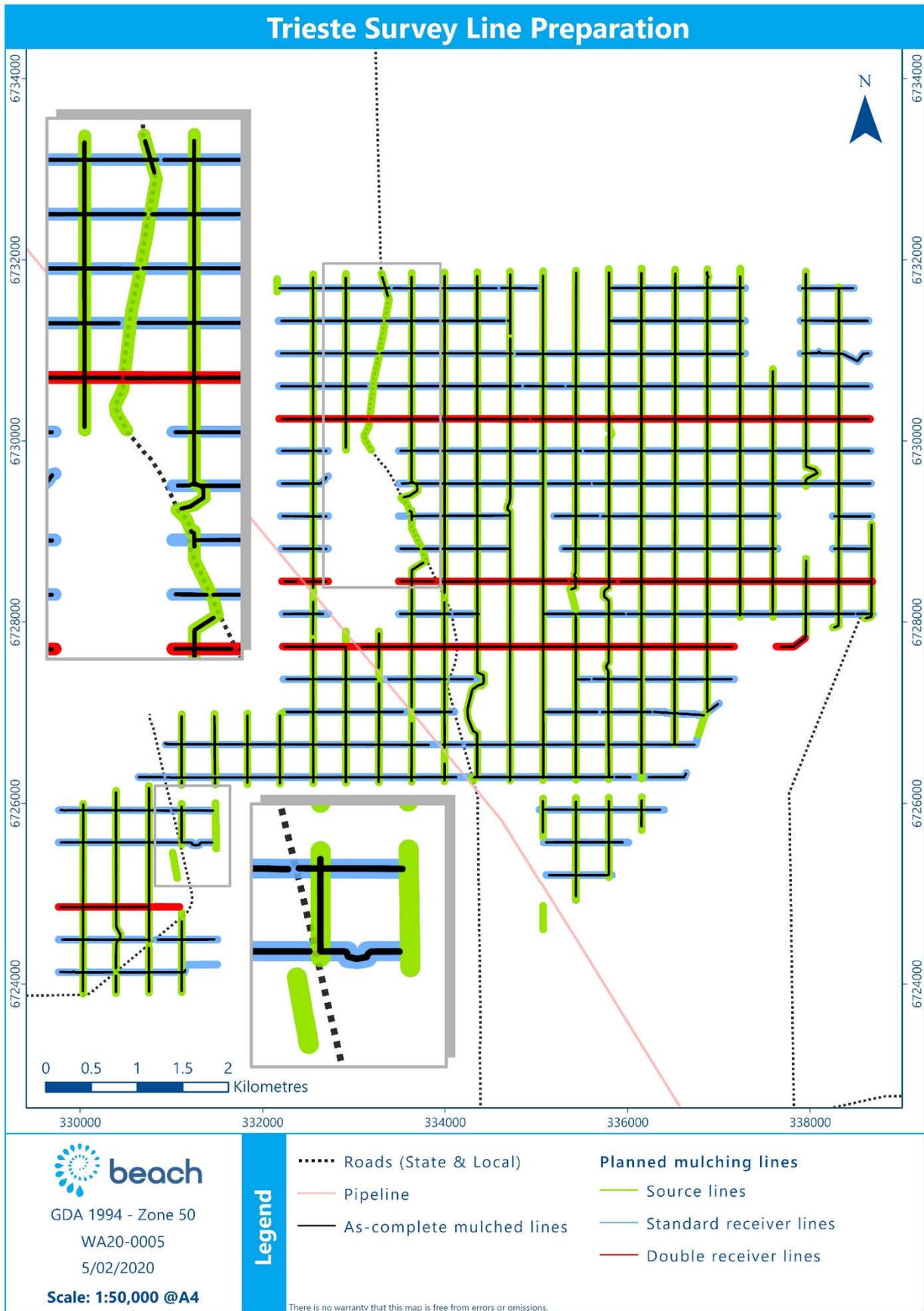


Figure 4 Comparison of as-complete mulched lines with planned lines

**Appendix D 2019 Rehabilitation Assessment, Trieste 3D Seismic Project, Arrowsmith**

Rehabilitation Assessment Trieste 3D Seismic Project, Arrowsmith. Prepared by Matiske Consulting Pty Ltd for Beach Energy Ltd, November 2019

# REHABILITATION ASSESSMENT

## TRIESTE 3D SEISMIC PROJECT,

### ARROWSMITH

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Prepared By



**Mattiske** Consulting Pty Ltd

Prepared For

**Beach Energy Limited**

Date

**November 2019**

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<b>DOCUMENT STATUS</b>				
<b>DOCUMENT REFERENCE: BEP1901/018/2019</b>				
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V2	Draft for client	S. Ruoss	E.M. Mattiske	20/11/19



**Mattice** Consulting Pty Ltd

(ACN 063 507 175, ABN 39 063 507 175)

PO Box 437

Kalamunda WA 6926

**Phone:** +61 8 9257 1625

**Email:** admin@mattice.com.au

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## LIST OF ABBREVIATIONS

- BAM Act:** *Biosecurity and Agriculture Management Act 2007* (WA)
- BC Act:** *Biodiversity Conservation Act 2016* (WA)
- BOM:** Bureau of Meteorology
- DotEE:** Department of the Environment and Energy
- DBCA:** Department of Biodiversity, Conservation and Attractions
- DPaW:** Department of Parks and Wildlife (now under DBCA)
- DPIRD:** Department of Primary Industries and Regional Development (includes Agriculture and Food)
- EP Act:** *Environmental Protection Act 1986* (WA)
- EPA:** Environmental Protection Authority
- EPBC Act:** *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
- IBRA:** Interim Biogeographical Regionalisation for Australia
- WAH:** Western Australian Herbarium (PERTH)
- WAOL:** Western Australian Organism List
- WC Act:** *Wildlife Conservation Act 1950* (WA) (superseded by BC Act as of 01 January 2010)

## EXECUTIVE SUMMARY

Mattiske Consulting Pty Ltd was commissioned by Beach Energy Limited in July 2019 to establish and monitor a series of analogue transects within the Trieste 3D Seismic survey area. The Trieste 3D Seismic survey area lies east of the Brand Highway between the towns Eneabba and Dongara, Western Australia. A large portion of the Trieste 3D Seismic survey area is Unallocated Crown Land and formed the focus area in which analogue transects were established to compare differences between future disturbance along proposed Source and Receiver lines. A total of 11 analogue transects were established and monitored in the Trieste 3D Seismic survey area in August 2019.

A total of 208 vascular plant taxa, representative of 98 genera and 39 families, were recorded within the Trieste 3D Seismic survey area transects. The majority of taxa recorded were representative of the Proteaceae (40 taxa), Myrtaceae (29 taxa) and Fabaceae (24 taxa) families.

No threatened flora species pursuant to pursuant to Part 2, Division 1, Subdivision 2 of the BC Act and as listed by DBCA (2018a), or pursuant to section 179 of the EPBC Act or listed by the DotEE (2019b), were recorded within the Trieste 3D Seismic survey area transects. Nine priority flora species, as listed by DBCA (2018b) were recorded within the Trieste 3D Seismic survey area transects. One Priority 2 taxa (*Synaphea xela*), six Priority 3 taxa (*Banksia fraseri* var. *crebra*, *Hemiandra* sp. Eneabba (H. Demarz 3687), *Hypocalymma gardneri*, *Mesomelaena stygia* subsp. *deflexa*, *Persoonia ?filiformis* and *Stylidium drummondianum*) and two Priority 4 taxa (*Banksia scabrella* and *Conostephium ?magnum*) were recorded.

No introduced (weed) species were recorded within the Trieste 3D Seismic survey area transects.

Key indicators of rehabilitation success such as native species richness and native species foliage cover were assessed for the 11 analogue transects in the Trieste 3D Seismic survey area. Species richness ranged from 18 to 25.5 taxa per quadrat. Across all 11 analogue transects an average species richness of 21.05 was recorded. Foliage cover ranged from 57.7 % to 94.04 % cover per quadrat. Across all 11 analogue transects an average foliage cover of 73.46 % was recorded.

In conclusion, results have shown that the Unallocated Crown Land area within the Trieste 3D Seismic survey area supports high conservation values with a high level of native species richness, native foliage cover, high number of priority listed taxa and lack of introduced (weed) species. At this time no disturbance has taken place on source and receiver lines within the Trieste 3D seismic survey area, however the current study has gathered important baseline information whereby future disturbance and rehabilitation can be compared.

## 1. INTRODUCTION

Mattiske Consulting Pty Ltd was commissioned in July 2019 by Beach Energy Limited to establish and monitor a series of analogue transects within the Trieste 3D Seismic survey area. More specifically, this survey outlines the methodology and results from rehabilitation assessment conducted in August 2019 adjacent to Source and Receiver lines within the Trieste 3D Seismic Project area, located within EP320.

### 1.1. Location and Scope of Project

The Trieste 3D Seismic survey area lies within the Irwin Botanical District of the South-West Botanical Province (Beard 1990), east of the Brand Highway between the towns Eneabba and Dongara, Western Australia. The Trieste 3D Seismic Project covers 21,820 ha, and includes areas of native vegetation, a small portion of Nature Reserve (R 25495) and a section of the Arrowsmith River, with remnant vegetation patches and large areas on private properties (Figure 1). The Unallocated Crown Land (UCL; accessible by Correy Road) formed the focus area in which analogue transects were established to compare differences between future disturbance along Source and Receiver lines. Assessing the progress of regrowth after seismic activities through comparisons with analogue sites can allow for progressive improvements and remedial actions to be undertaken in management practices.

### 1.2. Environmental Legislation and Guidelines

The following key Commonwealth (federal) legislation relevant to this survey is the:

- *Environment Protection and Biodiversity Conservation Act 1999.*

The following key Western Australian (state) legislation relevant to this survey include the:

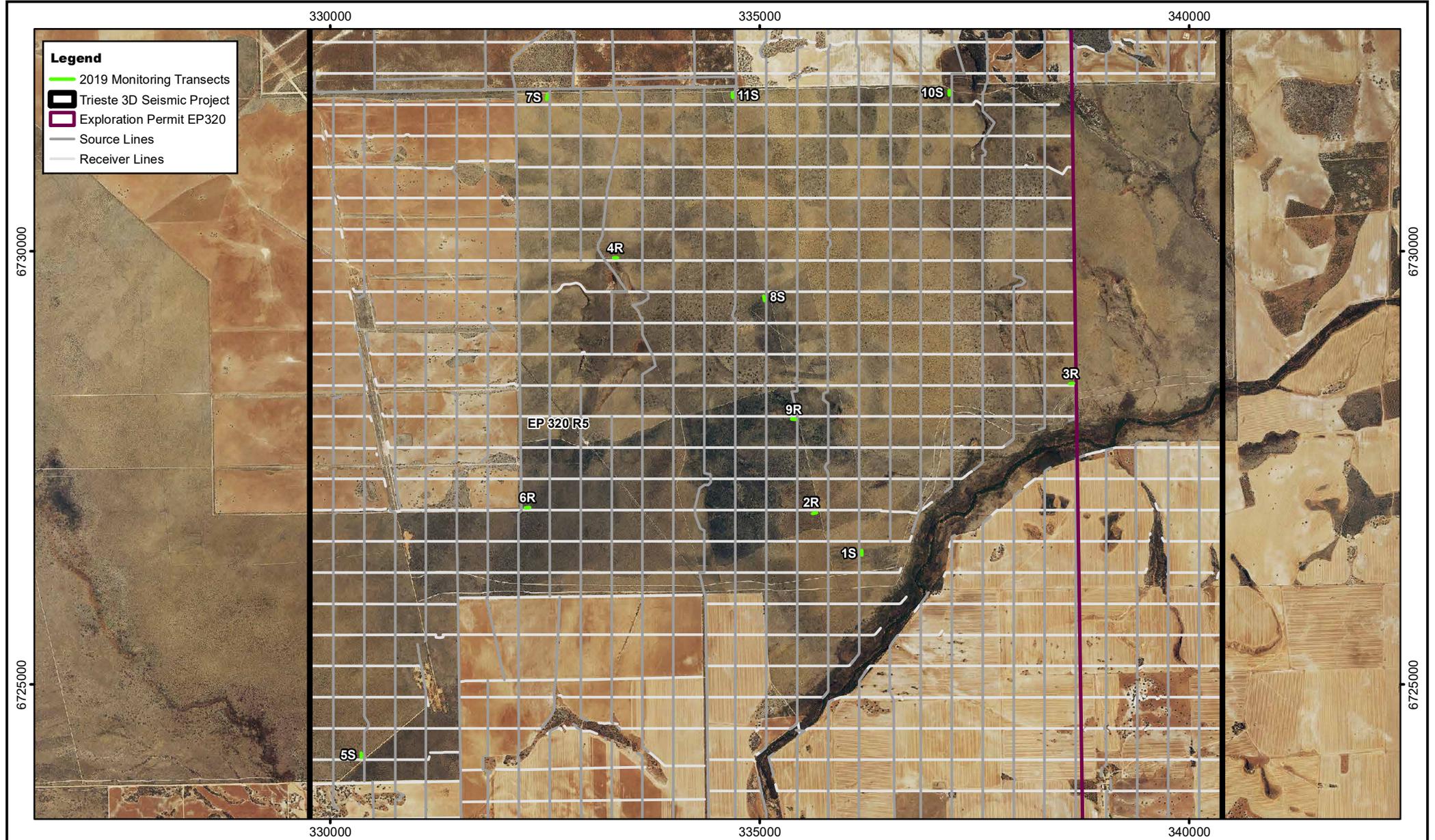
- *Biodiversity Conservation Act 2016 (BC Act);*
- *Biosecurity and Agriculture Management Act 2007 (BAM Act); and*
- *Environmental Protection Act 1986 (EP Act).*

Furthermore, key Western Australian guidelines relevant to this survey are the:

- *Environmental Factor Guideline: Flora and Vegetation* (Environmental Protection Authority [EPA] 2016a);
- *Technical Guidance – Flora and vegetation surveys for environmental impact assessment* (EPA 2016b); and

Definitions of flora and vegetation terminology commonly used throughout this report are provided in Appendix A.

Source:



0 0.75 1.5km  
 Scale: 1:60,000  
 MGA94 (Zone 50)  
 CAD Ref: a2505F005  
 Date: November 2019 Rev: A A4

**Mattiske** Consulting Pty Ltd  
 28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640  
 Author: E M Mattiske MCPL Ref: BEP1901/018/2019  
 Drawn: CAD Resources ~ www.cadresources.com.au  
 Tel: (08) 9246 3242 ~ Fax (08) 9246 3202

**Trieste 3D Seismic Survey  
 Transects  
 August 2019**

Figure:

**1**

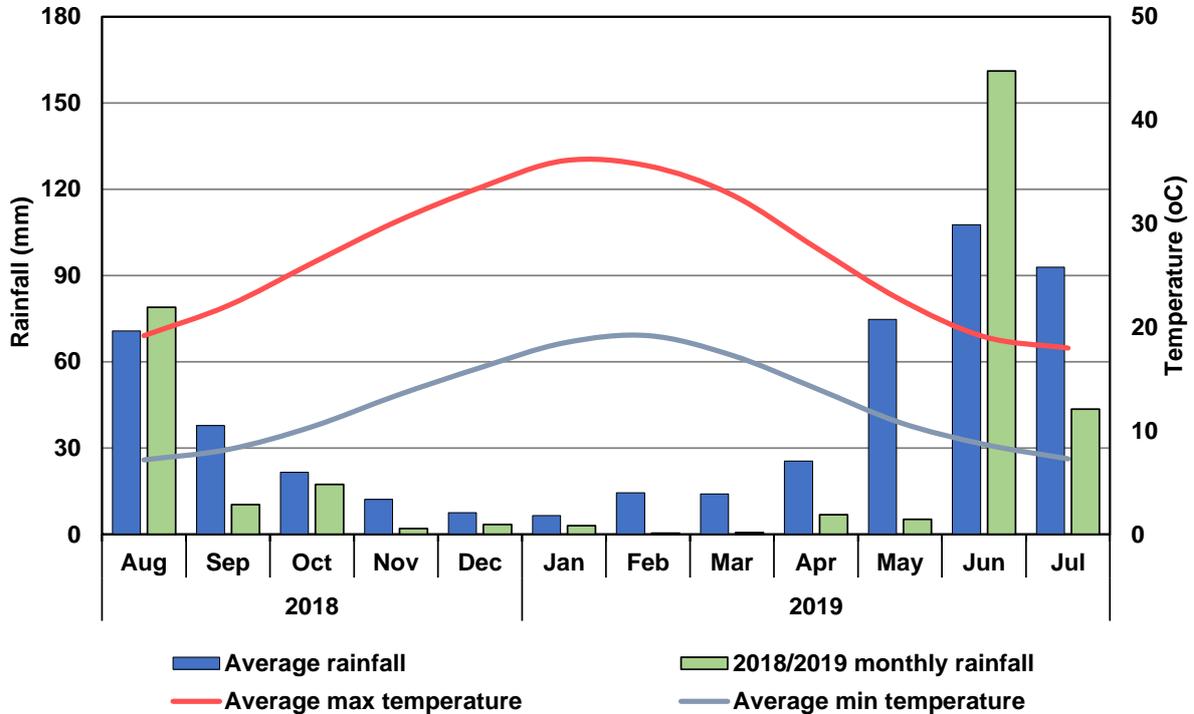
## 2. BACKGROUND

### 2.1. Regional Context

The Trieste 3D Seismic survey area lies within the Irwin Botanical District of the South-West Botanical Province (Beard 1990). More recently, the vegetation of Western Australia has been assigned to bioregions and subregions under the Interim Biogeographical Regionalisation for Australia (IBRA), with the survey area being within the Lesueur Sandplain sub region of the Geraldton Sandplains Bioregion (*Interim Biogeographical Regionalisation for Australia, Version 7, DotEE 2019a*).

### 2.2. Climate

Beard (1990) described the climate of the Northern Sandplains as dry, warm Mediterranean. The area has a winter precipitation of 300-500 mm and 7-8 dry months per year (Beard 1990). Rainfall and temperature data for Eneabba is no longer available due to the closing of the Eneabba weather station, therefore rainfall data from Green Grove and long term temperature data from Carnamah (Bureau of Meteorology [BOM] 2019) are illustrated in Figure 2. Below average rainfall was received in the 3 months prior to the survey (May to July 2019; 210 mm cf. 275.4) although June 2019 rainfall was 53.5 mm above average (Figure 2).



**Figure 2: Rainfall and temperature data for Trieste 3D Seismic survey area**

**Note:** Long-term average monthly rainfall (1951-2019) for Green Grove and temperature (1940-2019) for Carnamah, together with monthly rainfall and temperature data for the period of August 2018 to July 2019 (BOM 2019).

### 2.3. Soils and Topography

The Trieste 3D Seismic survey area is located within the Lesueur Sandplain sub region of the Geraldton Sandplains Bioregion (*Interim Biogeographical Regionalisation for Australia, Version 7, DotEE 2019a*). The system present in the 3D Seismic survey area is the Eridoon system, which occupies a flat coastal plain between coastal limestone deposits and the Pleistocene shoreline. The extensive, undulating, lateritic sandplains mantling Permian to Cretaceous strata (Desmond and Chant 2001), consist of yellow sand that has been blown into ridges, with lakes and swamps in the depressions (Beard 1976).

## 3. OBJECTIVES

The aim of this survey was to establish and undertake flora and vegetation monitoring of transects within the Trieste 3D Seismic survey area to quantify and analyse the botanical values of analogue sites for future comparison to rehabilitation areas. Specifically, the objectives were to:

- Establish a series of analogue transects adjacent to source and receiver lines with the Trieste 3D Seismic survey area;
- Collect and identify vascular plant species present within analogue transects;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity Conservation and Attractions and plant collections held at the Western Australian Herbarium (WAH 1998-) and listed by the Department of the Environment and Energy (2019) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Review the management status of vascular plant species recorded with reference to the *Biosecurity and Agriculture Management Act 2007* (Department of Primary Industries and Regional Development 2018) and Environmental Weed Strategy for WA (Department of Parks and Wildlife 2013);
- Assess each site for species richness and foliage cover; and
- Prepare a report summarising the findings.

## 4. METHODS

### 4.1. Field Survey

Establishment and monitoring of analogue transects in the Trieste 3D Seismic survey area was undertaken by four experienced botanists from Mattiske Consulting Pty Ltd, between the 12<sup>th</sup> and 15<sup>th</sup> of August 2019, in accordance with methods outlined in *Technical Guidance – Flora and vegetation surveys for environmental impact assessment* (EPA 2016b). All botanists held valid collection licences to collect flora for scientific purposes, issued under the BC Act.

Eleven analogue transects (6 along source lines; 5 along receiver lines) were established and monitored in the Trieste 3D Seismic survey area in August 2019. Transects locations were selected through field reconnaissance, to capture of a variety of vegetation communities. Transect locations are displayed in Table 1 and displayed in Figure 1. Photographs taken at the start and end of each transect are displayed in Appendix B.

All plant specimens collected during the field surveys were dried and processed in accordance with the requirements of the WAH. The plant species were identified based on taxonomic literature and through comparison with pressed specimens housed at the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998- ).

**Table 1: Location of transects established and monitored in the Trieste 3D Seismic survey area, August 2019**

**Note:** S=source line, R=receiver line

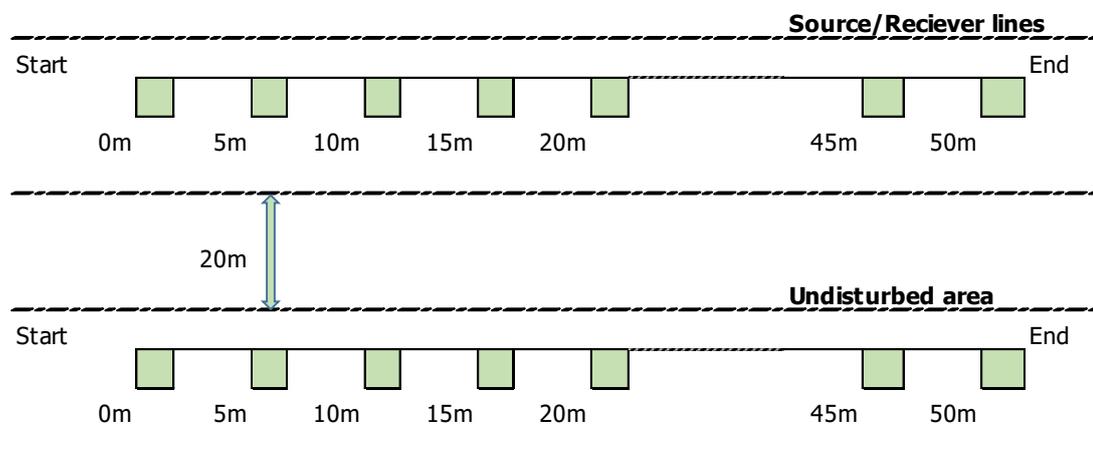
Transect	Impact/ Analogue	Start (GDA94_50J)		End (GDA94_50J)	
		Easting	Northing	Easting	Northing
1S	Analogue	336184	6726494	336184	6726543
2R	Analogue	335658	6726981	335610	6726968
3R	Analogue	338652	6728473	338603	6728470
4R	Analogue	333341	6729920	333293	6729919
5S	Analogue	330357	6724153	330361	6724206
6R	Analogue	332321	6727039	332269	6727038
7S	Analogue	332522	6731800	332519	6731749
8S	Analogue	335045	6729478	335052	6729430
9R	Analogue	335412	6728058	335366	6728060
10S	Analogue	337203	6731854	337202	6731802
11S	Analogue	334678	6731821	334681	6731772

## 4.2. Sampling and Transect Design

Transect and quadrat layout is specified below:

- Analogue transects were established parallel to Source and Receiver lines, 20 m away in representative vegetation;
- Each 50 m transect made up of 10, 2 x 2 m quadrats spaced at 5 m intervals on the right hand side of the transect. Photographs taken from the 'start' of transects (wooden stakes indicate start and end points of each transect).

The layout of transects is displayed below in Figure 3.



**Figure 3: Layout of transects established and monitored in the Trieste 3D seismic survey area, August 2019**

The parameters recorded at each transect included: GPS location of start and end of transect; photo at start and end of transect; topography and vegetation description (to align with broad vegetation groupings). The floristic parameters recorded at each 2 x 2 m quadrat included: the percentage of alive and dead foliage (vegetation) cover of each taxa; number of alive and dead plants of each taxa and average height of each taxa.

## 5. FIELD SURVEY RESULTS

### 5.1. Flora

A total of 208 vascular plant taxa, representative of 98 genera and 39 families, were recorded within the Trieste 3D Seismic survey area transects. The majority of taxa recorded were representative of the Proteaceae (40 taxa), Myrtaceae (29 taxa) and Fabaceae (24 taxa) families (see Appendix C for a complete species list). Annual species accounted for 2.4 % of all taxa.

#### 5.1.1. Threatened and Priority Flora

No threatened flora species pursuant to pursuant to Part 2, Division 1, Subdivision 2 of the BC Act and as listed by DBCA (2018a), or pursuant to section 179 of the EPBC Act or listed by the DotEE (2019b), were recorded within the Trieste 3D Seismic survey area transects.

Nine priority flora species, as listed by DBCA (2018b) were recorded within the Trieste 3D Seismic survey area transects (see Appendix D for numbers and locations). One Priority 2 taxa (*Synaphea xela*), six Priority 3 taxa (*Banksia fraseri* var. *crebra*, *Hemiandra* sp. Eneabba (H. Demarz 3687), *Hypocalymma gardneri*, *Mesomelaena stygia* subsp. *deflexa*, *Persoonia* ?*filiformis* and *Stylidium drummondianum*) and two Priority 4 taxa (*Banksia scabrella* and *Conostephium* ?*magnum*) were recorded. A brief description of these species is provided below:

##### **PRIORITY 2:**

***Synaphea xela* (P2) – PROTEACEAE** – *Synaphea xela* (P2) is sprawling shrub growing to 40 cm high. It produces yellow flowers and has been recorded as flowering August to December. It grows in gravelly or clayey sand over laterite. WAH houses 7 specimens of *Synaphea xela* (P2) from the Geraldton Sandplains (WAH 1998- ).

##### **PRIORITY 3:**

***Banksia fraseri* var. *crebra* (P3) – PROTEACEAE** – *Banksia fraseri* var. *crebra* (P3) is a shrub growing to 60 cm high. It produces yellow/green flowers and has been recorded as flowering in April to September. It grows in white, grey, yellow or red sand, gravel, laterite or granite. WAH houses 16 specimens of *Banksia fraseri* var. *crebra* (P3) from the Geraldton Sandplains and Swan Coastal Plain (WAH 1998- ).

***Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) – LAMIACEAE** – *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) is a straggly erect shrub growing to 90 cm high. It produces blue/violet flowers and has been recorded as flowering in February. It grows in yellow/grey sand on flat land sometimes associated with disturbance. WAH houses 33 specimens of *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) from the Geraldton Sandplains (WAH 1998- ).



**Plate 1:** *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3)

***Hypocalymma gardneri* (P3) – MYRTACEAE** – *Hypocalymma gardneri* (P3) is a shrub growing to 30 cm high. It produces yellow flowers and has been recorded as flowering in August to September. It grows in grey-brown sand and laterite on sandplains, upper slopes and heathland. WAH houses 22 specimens of *Hypocalymma gardneri* (P3) from the Geraldton Sandplains (WAH 1998- ).



**Plate 2:** *Hypocalymma gardneri* (P3)

***Mesomelaena stygia* subsp. *deflexa* (P3) – CYPERACEAE** – *Mesomelaena stygia* subsp. *deflexa* (P3) is a tufted perennial sedge to 50 cm high. It produces brown-black flowers and has been recorded as flowering in March to October. It grows in white, grey or lateritic sand. WAH houses 29 specimens of *Mesomelaena stygia* subsp. *deflexa* (P3) from the Geraldton Sandplains (WAH 1998- ).



**Plate 3:** *Mesomelaena stygia* subsp. *deflexa* (P3)

***Persoonia ? filiformis* (P3) – PROTEACEAE** – *Persoonia ? filiformis* (P3) is an erect spreading shrub to 40 cm high. It produces yellow flowers and has been recorded as flowering in November to December. It grows in yellow or white sand over laterite. WAH houses 23 specimens of *Persoonia ? filiformis* (P3) from the Geraldton Sandplains (WAH 1998- ).



**Plate 4:** *Persoonia ? filiformis* (P3)

***Stylidium drummondianum* (P3) – STYLIDACEAE** – *Stylidium drummondianum* (P3) is a rosetted perennial herb to 25 cm high. It produces pink flowers and has been recorded as flowering in August to October. It grows in sand or clayey sand over laterite on hillslopes and breakaways. WAH houses 36 specimens of *Stylidium drummondianum* (P3) from the Geraldton Sandplains and Avon Wheatbelt (WAH 1998- ).



**Plate 5:** *Stylidium drummondianum* (P3)

#### **PRIORITY 4:**

***Banksia scabrella* (P4) – PROTEACEAE** – *Banksia scabrella* (P4) is a lignotuberous shrub growing to 2 m high. It produces yellow/cream/purple flowers and has been recorded as flowering in September to January. It grows in white, grey or yellow sand, sometimes with lateritic gravel on sandplains and lateritic ridges. WAH houses 51 specimens of *Banksia scabrella* (P4) from the Geraldton Sandplains (WAH 1998- ).



**Plate 6:** *Banksia scabrella* (P4)

***Conostephium ?magnum* (P4) – ERICACEAE** – *Conostephium ?magnum* (P4) is an erect multi stemmed shrub growing to 2 m high. It produces pink-purple flowers and has been recorded as flowering in July to September. It grows in white-grey sand, sometimes associated with lateritic gravels in sand dunes, swampland, disturbed roadsides, drainage channels and open woodland. WAH houses 30 specimens of *Conostephium ?magnum* (P4) from the Geraldton Sandplains and Swan Coastal Plain (WAH 1998- ).

#### **5.1.2. Introduced (Weed) Species**

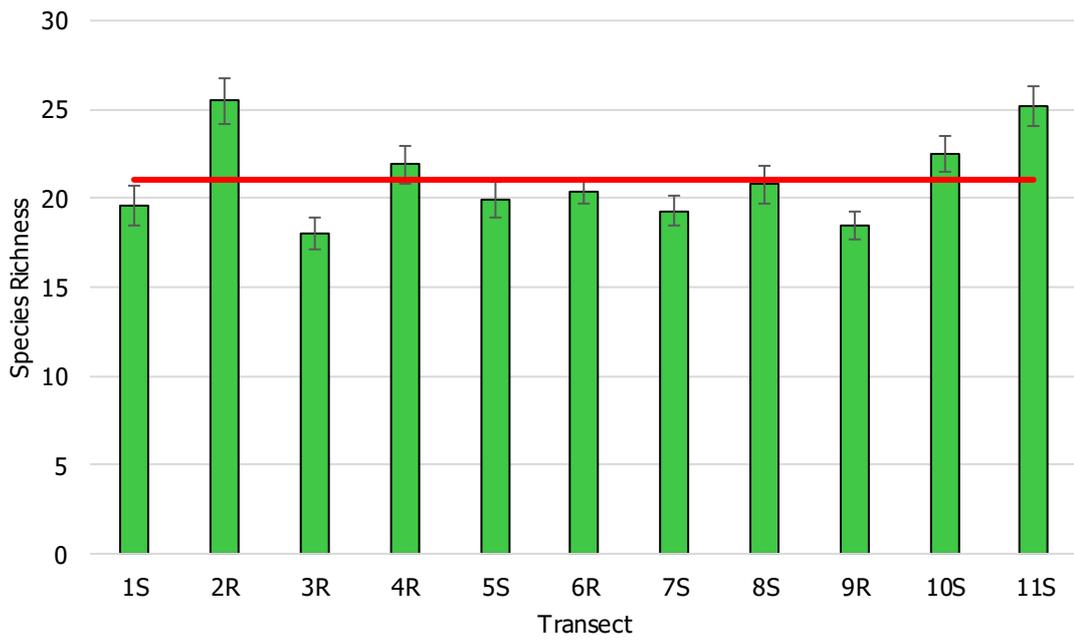
No introduced (weed) species were recorded within the Trieste 3D Seismic survey area transects.

#### **5.1.3. Species Richness**

Species richness of the 11 analogue transects established and monitored in the Trieste 3D Seismic survey area in August 2019 ranged from 18 (3R) to 25.5 (2R) taxa per quadrat (Figure 4). Across all 11 analogue transects an average species richness of 21.05 was recorded. In line with recommended completion criteria targets of 20 % richness compared to analogues at 12 months and 40 % richness compared to analogues at 24 months, future impact transects aim to meet a target of 4.21 taxa per quadrat at 12 months and 8.42 taxa per quadrat at 24 months.

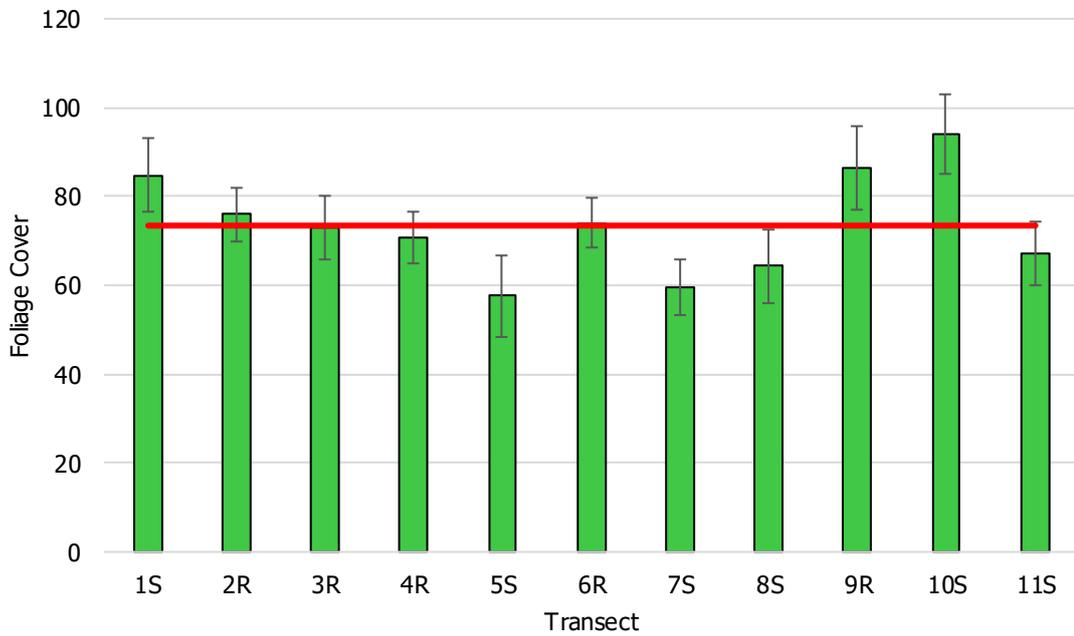
#### **5.1.4. Species Foliage Cover**

Foliage cover of the 11 analogue transects established and monitored in the Trieste 3D Seismic survey area in August 2019 ranged from 57.7 % (5S) to 94.04 % (10S) cover per quadrat (Figure 5). Across all 11 analogue transects an average foliage cover of 73.46 % was recorded. In line with recommended completion criteria targets of 10 % foliage cover at 12 months, 20 % foliage cover at 24 months and 40 % foliage cover at 5 years, future impact transects aim to meet a target of 7.35 %, 14.69 % and 29.38% cover respectively.



**Figure 4: Total species richness per quadrat across monitored transects Trieste 3D seismic survey area, August 2019**

**Note:** S=source line, R=receiver line; red line indicates average.



**Figure 5: Total Foliage cover per quadrat across monitored transects Trieste 3D seismic survey area, August 2019**

**Note:** S=source line, R=receiver line; red line indicates average.

## 6. DISCUSSION AND CONCLUSIONS

Mattiske Consulting Pty Ltd was commissioned by Beach Energy Limited in July 2019 to establish and monitor a series of analogue transects within the Trieste 3D Seismic survey area. The Trieste 3D Seismic survey area lies east of the Brand Highway between the towns Eneabba and Dongara, Western Australia. A large portion of the Trieste 3D Seismic survey area is Unallocated Crown Land and formed the focus area in which analogue transects were established to compare differences between future disturbance along proposed Source and Receiver lines. A total of 11 analogue transects (6 along sources lines; 5 along receiver lines) were established and monitored in the Trieste 3D Seismic survey area in August 2019.

A total of 208 vascular plant taxa, representative of 98 genera and 39 families, were recorded within the Trieste 3D Seismic survey area transects. The majority of taxa recorded were representative of the Proteaceae (40 taxa), Myrtaceae (29 taxa) and Fabaceae (24 taxa) families.

No threatened flora species pursuant to pursuant to Part 2, Division 1, Subdivision 2 of the BC Act and as listed by DBCA (2018a), or pursuant to section 179 of the EPBC Act or listed by the DotEE (2019b), were recorded within the Trieste 3D Seismic survey area transects. Nine priority flora species, as listed by DBCA (2018b) were recorded within the Trieste 3D Seismic survey area transects. One Priority 2 taxa (*Synaphea xela*), six Priority 3 taxa (*Banksia fraseri* var. *crebra*, *Hemiandra* sp. Eneabba (H. Demarz 3687), *Hypocalymma gardneri*, *Mesomelaena stygia* subsp. *deflexa*, *Persoonia ?filiformis* and *Stylidium drummondianum*) and two Priority 4 taxa (*Banksia scabrella* and *Conostephium ?magnum*) were recorded. *Mesomelaena stygia* subsp. *deflexa* (P3) was the most commonly occurring priority species, recorded from two transects and 18 quadrats totalling 137 plants.

No introduced (weed) species were recorded within the Trieste 3D Seismic survey area transects.

Key indicators of rehabilitation success such as native species richness and native species foliage cover were assessed for the 11 analogue transects in the Trieste 3D Seismic survey area. Species richness ranged from 18 to 25.5 taxa per quadrat. Across all 11 analogue transects an average species richness of 21.05 was recorded. Foliage cover ranged from 57.7 % to 94.04 % cover per quadrat. Across all 11 analogue transects an average foliage cover of 73.46 % was recorded.

In conclusion, results have shown that the Unallocated Crown Land area within the Trieste 3D Seismic survey area supports high conservation values with a high level of native species richness, native foliage cover, high number of priority listed taxa and lack of introduced (weed) species. At this time no disturbance has taken place on source and receiver lines within the Trieste 3D seismic survey area, however the current study has gathered important baseline information whereby future disturbance and rehabilitation can be compared.

## 7. ACKNOWLEDGEMENTS

The authors would like to thank John Mitchell and Tegan Stehbens from Beach Energy Limited for their assistance with this project.

## 8. PERSONNEL

The following Mattiske Consulting Pty Ltd personnel were involved in this project:

NAME	POSITION	PROJECT INVOLVEMENT	FLORA COLLECTION PERMITS
Dr EM Mattiske	Managing Director & Principal Ecologist	Planning, managing, editing, reporting	N/A
Dr S Ruoss	Project Leader	Planning, fieldwork, data analysis, reporting	FB62000031; Permit to Take Declared Rare Flora [TFL 17-1819]
Dr F Riviera	Senior Botanist	Fieldwork	FB62000027
Dr J Tsakalos	Botanist	Fieldwork	N/A
Ms J Rogers	Botanist	Fieldwork, editing	FB62000032
Mr B Ellery	Taxonomist	Plant identification	N/A

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## APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

**Table A1.1 Federal definition of threatened flora species**

**Note:** Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
<b>Ex</b>	<b>Extinct</b>	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
<b>ExW</b>	<b>Extinct in the Wild</b>	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
<b>CE</b>	<b>Critically Endangered</b>	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
<b>E</b>	<b>Endangered</b>	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
<b>V</b>	<b>Vulnerable</b>	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
<b>CD</b>	<b>Conservation Dependent</b>	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

**Threatened flora** are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; Department of Biodiversity, Conservation and Attractions (2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act (DBCA 2018a). Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

**Table A1.2 State definition of threatened flora species**

**Note:** Adapted from Department of Biodiversity, Conservation and Attractions (2018a).

CODE	CATEGORY	DEFINITION
CR	<b>Critically endangered</b>	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i> ).
EN	<b>Endangered</b>	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i> ).
VU	<b>Vulnerable</b>	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i> ).
EX	<b>Presumed extinct species</b>	Species that have been adequately searched for and there is no reasonable doubt that the last individual has died (listed under Schedule 4 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i> ).

**Priority flora** species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened or have recently been removed from the threatened species list” for other than taxonomic reasons” (Department of Biodiversity, Conservation and Attractions 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (Environmental Protection Authority 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

**Table A1.3: State definition of priority flora species**

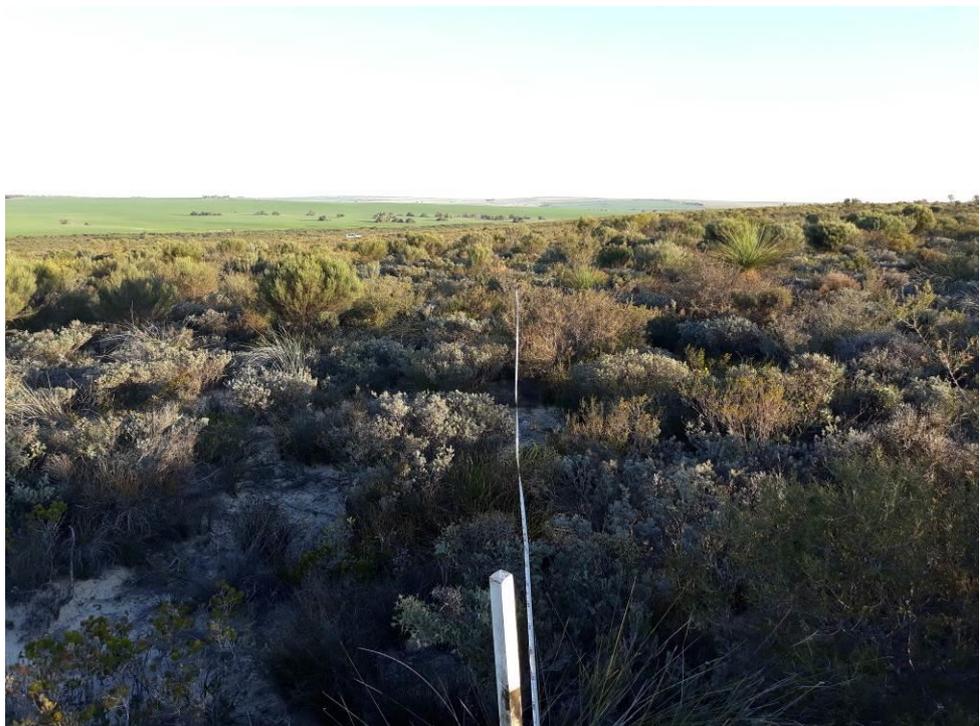
**Note:** Adapted from Department of Biodiversity, Conservation and Attractions (2018b).

CODE	CATEGORY	DEFINITION
<b>P1</b>	<b>Priority 1:</b> Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
<b>P2</b>	<b>Priority 2:</b> Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
<b>P3</b>	<b>Priority 3:</b> Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
<b>P4</b>	<b>Priority 4:</b> Rare, Near Threatened, and other species in need of monitoring	<b>a) Rare</b> - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. <b>b) Near Threatened</b> - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. <b>c) Other</b> - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 1: Transect 1S Control Start**



**Plate 2: Transect 1S Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 3: Transect 2R Control Start**



**Plate 4: Transect 2R Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 5: Transect 3R Control Start**

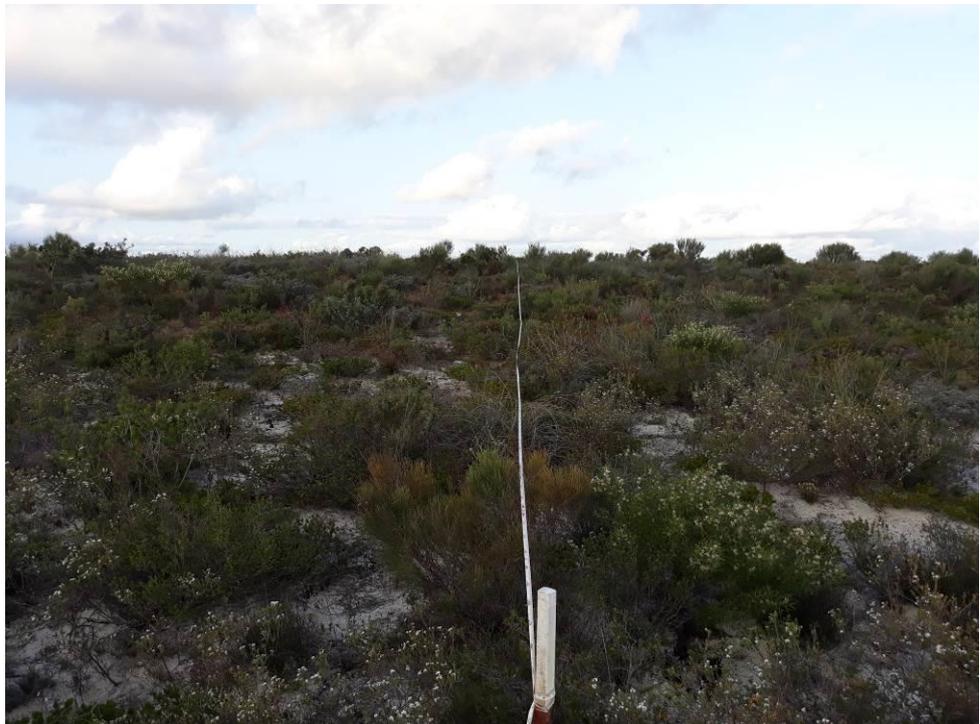


**Plate 6: Transect 3R Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 7: Transect 4R Control Start**



**Plate 8: Transect 4R Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 9: Transect 5S Control Start**



**Plate 10: Transect 5S Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 11: Transect 6R Control Start**



**Plate 12: Transect 6R Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 13: Transect 7S Control Start**



**Plate 14: Transect 7S Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 15: Transect 8S Control Start**



**Plate 16: Transect 8S Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 17: Transect 9R Control Start**



**Plate 18: Transect 9R Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 19: Transect 10S Control Start**



**Plate 20: Transect 10S Control End**

**APPENDIX B: PHOTOS OF ANALOGUE TRANSECTS ESTABLISHED AND MONITORED IN THE TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**



**Plate 21: Transect 11S Control Start**



**Plate 22: Transect 11S Control End**

**APPENDIX C: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN TRANSECTS  
FROM TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**

**Note:** \* denotes introduced species; P1-P4 denote priority flora species (DBCA 2019, WAH 1998-).

FAMILY	SPECIES
ANARTHRIACEAE	<i>Lyginia barbata</i>
APIACEAE	<i>Xanthosia huegelii</i> <i>Xanthosia</i> sp. Apiaceae sp.
ASPARAGACEAE	<i>Acanthocarpus preissii</i> <i>Chamaescilla versicolor</i> <i>Laxmannia omnifertilis</i> <i>Laxmannia sessiliflora</i> <i>Lomandra ?suaveolens</i> <i>Lomandra</i> sp. <i>Thysanotus ?dichotomus</i> <i>Thysanotus</i> sp. (climbing)
ASTERACEAE	<i>Gnephosis tenuissima</i> <i>Pterochaeta paniculata</i>
BORAGINACEAE	<i>Halgania</i> sp.
BORYACEAE	<i>Borya sphaerocephala</i>
CASUARINACEAE	<i>Allocasuarina campestris</i> <i>Allocasuarina humilis</i> <i>Allocasuarina microstachya</i>
CENTROLEPIDACEAE	<i>Centrolepis pilosa</i>
COLCHICACEAE	<i>Burchardia congesta</i>
CYPERACEAE	<i>Caustis dioica</i> <i>Lepidosperma ?apricola</i> <i>Lepidosperma ?squamatum</i> <i>Lepidosperma</i> sp. P1 small head (M.D. Tindale 166A) <i>Lepidosperma</i> sp. <i>Mesomelaena pseudostygia</i> <i>Mesomelaena stygia</i> subsp. <i>deflexa</i> (P3) <i>Schoenus ?andrewsii</i> <i>Schoenus clandestinus</i> <i>Schoenus curvifolius</i> <i>Schoenus pleiostemoneus</i> <i>Schoenus</i> sp.
DASYPOGONACEAE	<i>Calectasia narragara</i>
DILLENiaceae	<i>Hibbertia acerosa</i> <i>Hibbertia aurea</i> <i>Hibbertia crassifolia</i> <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> <i>Hibbertia robur</i> <i>Hibbertia subvaginata</i>

**APPENDIX C: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN TRANSECTS  
FROM TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**

**Note:** \* denotes introduced species; P1-P4 denote priority flora species (DBCA 2019, WAH 1998-).

FAMILY	SPECIES
DROSERACEAE	<i>Drosera erythrorhiza</i> <i>Drosera pallida</i> <i>Drosera eneabba</i> <i>Drosera</i> sp. (climbing) <i>Drosera</i> sp.
ECDEIOCOLEACEAE	<i>Ecdeiocolea monostachya</i> <i>Georgeantha hexandra</i>
ERICACEAE	<i>Andersonia heterophylla</i> <i>Andersonia lehmanniana</i> subsp. <i>lehmanniana</i> <i>Andersonia</i> sp. <i>Astroloma glaucescens</i> <i>Astroloma microdonta</i> <i>Conostephium ?magnum</i> (P4) <i>Leucopogon inflexus</i> <i>Leucopogon</i> sp. Northern ciliate (R. Davis 3393) <i>Leucopogon</i> sp. <i>Lysinema pentapetalum</i> <i>Styphelia xerophylla</i> <i>Styphelia</i> sp. Eneabba (N. Marchant s.n. PERTH 01291777) Ericaceae sp.
EUPHORBIACEAE	<i>Monotaxis grandiflora</i> <i>Stachystemon axillaris</i>
FABACEAE	<i>Acacia auronitens</i> <i>Acacia blakelyi</i> <i>Acacia dilatata</i> <i>Acacia pulchella</i> <i>Acacia stenoptera</i> <i>Bossiaea eriocarpa</i> <i>Chorizema aciculare</i> subsp. <i>laxum</i> <i>Cristonia stenophylla</i> <i>Daviesia daphnoides</i> <i>Daviesia divaricata</i> subsp. <i>divaricata</i> <i>Daviesia ?incrassata</i> subsp. <i>teres</i> <i>Daviesia nudiflora</i> <i>Daviesia pedunculata</i> <i>Daviesia podophylla</i> <i>Daviesia triflora</i> <i>Gastrolobium spinosum</i> <i>Gastrolobium</i> sp. <i>Gompholobium tomentosum</i> <i>Isotropis cuneifolia</i> <i>Jacksonia floribunda</i> <i>Jacksonia hakeoides</i> <i>Jacksonia nutans</i> <i>Jacksonia</i> sp. <i>Mirbelia trichocalyx</i>

**APPENDIX C: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN TRANSECTS  
FROM TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**

**Note:** \* denotes introduced species; P1-P4 denote priority flora species (DBCA 2019, WAH 1998-).

FAMILY	SPECIES
GOODENIACEAE	<i>Dampiera juncea</i> <i>Dampiera spicigera</i> <i>Dampiera</i> sp. <i>Scaevola canescens</i> <i>Verreauxia reinwardtii</i>
HAEMODORACEAE	<i>Anigozanthos humilis</i> <i>Conostylis ?aculeata</i> <i>Conostylis androstemma</i> <i>Conostylis angustifolia</i> <i>Conostylis aurea</i> <i>Conostylis neocymosa</i> <i>Conostylis</i> sp. <i>Haemodorum</i> sp.
HEMEROCALLIDACEAE	<i>Johnsonia pubescens</i> <i>Tricoryne</i> sp.
IRIDACEAE	<i>Patersonia drummondii</i>
LAMIACEAE	<i>Hemiandra</i> sp. Eneabba (H. Demarz 3687) (P3) <i>Pityrodia ?hemigenioides</i>
LAURACEAE	<i>Cassytha glabella</i> <i>Cassytha ?racemosa</i> <i>Cassytha</i> sp.
MALVACEAE	<i>Guichenotia sarotes</i> <i>Lasiopetalum drummondii</i>
MYRTACEAE	<i>Babingtonia camphorosmae</i> <i>Beaufortia elegans</i> <i>Calothamnus blepharospermus</i> <i>Calothamnus longissimus</i> <i>Calothamnus quadrifidus</i> subsp. <i>angustifolius</i> <i>Calothamnus sanguineus</i> <i>Calytrix ?drummondii</i> <i>Calytrix sapphirina</i> <i>Calytrix</i> sp. <i>Darwinia speciosa</i> <i>Eremaea beaufortioides</i> <i>Eremaea ectadioclada</i> <i>Eremaea violacea</i> subsp. <i>violacea</i> <i>Eucalyptus ?horistes</i> <i>Eucalyptus todtiana</i> <i>Hypocalymma gardneri</i> (P3) <i>Hypocalymma hirsutum</i> <i>Hypocalymma</i> sp. <i>Leptospermum oligandrum</i> <i>Leptospermum spinescens</i> <i>Melaleuca aspalathoides</i>

**APPENDIX C: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN TRANSECTS  
FROM TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**

**Note:** \* denotes introduced species; P1-P4 denote priority flora species (DBCA 2019, WAH 1998-).

FAMILY	SPECIES
MYRTACEAE (continued)	<i>Melaleuca leuropoma</i> <i>Melaleuca ?trichophylla</i> <i>Pileanthus filifolius</i> <i>Scholtzia laxiflora</i> <i>Verticordia densiflora</i> <i>Verticordia grandis</i> <i>Verticordia ?plumosa</i> <i>Verticordia</i> sp.
OLACACEAE	<i>Olax benthamiana</i>
ORCHIDACEAE	<i>Caladenia</i> sp. <i>Prasophyllum</i> sp. Orchidaceae sp.
POACEAE	<i>Amphipogon turbinatus</i> <i>Amphipogon</i> sp. <i>Neurachne alopecuroidea</i> Poaceae sp.
POLYGALACEAE	<i>Comesperma</i> sp.
PROTEACEAE	<i>Adenanthos cygnorum</i> <i>Banksia attenuata</i> <i>Banksia candolleana</i> <i>Banksia carlinoides</i> <i>Banksia dallanneyi</i> <i>Banksia fraseri</i> var. <i>crebra</i> (P3) <i>Banksia hookeriana</i> <i>Banksia nivea</i> <i>Banksia scabrella</i> (P4) <i>Banksia sessilis</i> <i>Banksia shuttleworthiana</i> <i>Banksia sphaerocarpa</i> var. <i>sphaerocarpa</i> <i>Banksia tridentata</i> <i>Conospermum triplinervium</i> <i>Conospermum unilaterale</i> <i>Grevillea biformis</i> subsp. <i>biformis</i> <i>Grevillea eriostachya</i> <i>Grevillea shuttleworthiana</i> subsp. <i>canarina</i> <i>Hakea auriculata</i> <i>Hakea circumalata</i> <i>Hakea costata</i> <i>Hakea eneabba</i> <i>Hakea incrassata</i> <i>Hakea lissocarpha</i> <i>Hakea neospathulata</i> <i>Hakea polyanthema</i> <i>Hakea prostrata</i> <i>Hakea trifurcata</i> <i>Isopogon linearis</i>

**APPENDIX C: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN TRANSECTS  
FROM TRIESTE 3D SEISMIC SURVEY AREA, AUGUST 2019**

**Note:** \* denotes introduced species; P1-P4 denote priority flora species (DBCA 2019, WAH 1998-).

FAMILY	SPECIES
PROTEACEAE (continued)	<i>Isopogon tridens</i> <i>Lambertia multiflora</i> <i>Persoonia acicularis</i> <i>Persoonia ? filiformis</i> (P3) <i>Petrophile brevifolia</i> <i>Petrophile drummondii</i> <i>Petrophile linearis</i> <i>Petrophile macrostachya</i> <i>Petrophile scabriuscula</i> <i>Petrophile shuttleworthiana</i> <i>Synaphea xela</i> (P2)
RESTIONACEAE	<i>Alexgeorgea nitens</i> <i>Chordifex sinuosus</i> <i>Desmocladius asper</i> <i>Desmocladius parthenicus</i> <i>Desmocladius semiplanus</i> <i>Lepidobolus preissianus</i>
RHAMNACEAE	<i>Cryptandra myriantha</i> <i>Cryptandra</i> sp. <i>Polianthion wichurae</i> <i>Stenanthemum notiale</i> subsp. <i>notiale</i>
RUBIACEAE	<i>Opercularia vaginata</i>
RUTACEAE	<i>Boronia cymosa</i> <i>Boronia ramosa</i> subsp. <i>anethifolia</i>
SAPINDACEAE	<i>Dodonaea ericoides</i>
STYLIDIACEAE	<i>Stylidium crossocephalum</i> <i>Stylidium drummondianum</i> (P3) <i>Stylidium flagellum</i> <i>Stylidium</i> sp.
THYMELAEACEAE	<i>Pimelea</i> sp.
VIOLACEAE	<i>Hybanthus floribundus</i> subsp. Hill River (E.M. Bennett 2252)
XANTHORRHOEACEAE	<i>Xanthorrhoea drummondii</i>

**Appendix E Department Receival of Independent Audit**



Our reference: EPBC 2017/8133  
Email: [audit@awe.gov.au](mailto:audit@awe.gov.au)

Ms Tegan Stehbens  
Environmental Advisor  
Beach Energy Ltd  
GPO Box 175  
ADELAIDE, SA 5001

Dear Ms Stehbens

**Trieste 3D Seismic Survey, near Eneabba, WA (EPBC 2017/8133)  
Independent Audit Report 2020**

I write in relation to the Trieste 3D Seismic Survey Independent Audit Report February 2020 submitted to the Department of Agriculture, Water and the Environment (the Department) on 21 February 2020 in accordance with condition 10 and 11 of approval EPBC 2017/8133.

The Department has reviewed the audit report prepared by the ERIAS Group and found that it satisfies the requirements of condition 10 and 11 and approves the audit report.

Condition 12 requires that this audit report be published within 10 business days of receiving this approval.

Please note that conditions of the approval require the approval holder to maintain accurate records of all activities associated with, or relevant to, the approval conditions so that they can be made available to the Department on request. Please ensure to maintain accurate records of all activities associated with, or relevant to, the conditions of your approval. These documents may be subject to audit and be used to verify compliance. Summaries of audits may be published by the Department.

Section 142 of the Act requires an approval holder to comply with conditions attached to an approval. Penalties may apply to approval holders who contravene conditions.

If you would like to discuss this matter further, please contact Nicholas Scholari on (02) 6274 1284 or by email at [audit@awe.gov.au](mailto:audit@awe.gov.au).

Yours sincerely

Toni Hart  
A/g Director  
Environmental Audit Section  
6 May 2020

**Appendix F Notification to Department confirming completion of Activity and provision of completion data**

## Zoë Bowen

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**From:** EPBC Monitoring <EPBCMonitoring@awe.gov.au>  
**Sent:** Wednesday, 11 March 2020 8:58 AM  
**To:** Tegan Stehbens; EPBC Monitoring  
**Cc:** Wayne Mothershaw; Zoë Bowen; Lattice Energy Compliance; Tim Flowers; Samantha Nunan  
**Subject:** RE: Notification of commencement [SEC=OFFICIAL]

Hi Tegan,

Thank you for your prompt reply.

We will await your response regarding the delivery of the offset as required by Condition 4 of the EPBC Act Approval 2017/8133 including the offset attributes, shapefiles, textual descriptions and maps to clearly define the location and boundaries of the offset site(s).

Regards,

***Compliance Monitoring Team***

Environment Compliance Branch  
Compliance Division  
Department of Agriculture, Water and the Environment  
GPO Box 787, CANBERRA ACT 2601

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**From:** Tegan Stehbens <Tegan.Stehbens@beachenergy.com.au>  
**Sent:** Wednesday, 11 March 2020 9:13 AM  
**To:** Kranti Kulkarni <Kranti.Kulkarni@awe.gov.au>; EPBC Monitoring <EPBCMonitoring@environment.gov.au>  
**Cc:** Wayne Mothershaw <Wayne.Mothershaw@beachenergy.com.au>; Zoë Bowen <Zoe.Bowen@beachenergy.com.au>; Lattice Energy Compliance <LatticeEnergyCompliance@beachenergy.com.au>; Tim Flowers <Tim.Flowers@beachenergy.com.au>; Samantha Nunan <Samantha.Nunan@beachenergy.com.au>  
**Subject:** RE: Notification of commencement [SEC=OFFICIAL]

Thank you, Compliance Monitoring Team.

Please find attached a receipt for payment of \$104,860.80 to the WA Department of Water and Environmental Regulation, in accordance with Condition 9 of the WA Clearing Permit 8171/1, issued for the Trieste project.

Beach is currently seeking clarification from the WA Department of Water and Environmental Regulation (via Kelly Faulkner, Executive Director of Regulatory Services) regarding the status of this payment and the delivery of the offset as required by Condition 4 of the EPBC Act Approval for the Trieste project (EPBC 2017/8133). We will advise the Compliance Monitoring Team of the outcome.

Kind regards,  
Tegan Stehbens



**Tegan Stehbens** | Environment Advisor | Beach Energy Limited

80 Flinders Street, Adelaide, SA 5000  
GPO Box 175, Adelaide SA 5001

**E:** [Tegan.Stehbens@beachenergy.com.au](mailto:Tegan.Stehbens@beachenergy.com.au)

**Reception:** +61 8 8338 2833 **W:** [www.beachenergy.com.au](http://www.beachenergy.com.au)

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**From:** Kranti Kulkarni <[Kranti.Kulkarni@awe.gov.au](mailto:Kranti.Kulkarni@awe.gov.au)>

**Sent:** Wednesday, 11 March 2020 8:20 AM

**To:** Tegan Stehbens <[Tegan.Stehbens@beachenergy.com.au](mailto:Tegan.Stehbens@beachenergy.com.au)>

**Cc:** Wayne Mothershaw <[Wayne.Mothershaw@beachenergy.com.au](mailto:Wayne.Mothershaw@beachenergy.com.au)>; Zoë Bowen

<[Zoe.Bowen@beachenergy.com.au](mailto:Zoe.Bowen@beachenergy.com.au)>; Lattice Energy Compliance <[LatticeEnergyCompliance@beachenergy.com.au](mailto:LatticeEnergyCompliance@beachenergy.com.au)>;

EPBC Monitoring <[EPBCMonitoring@environment.gov.au](mailto:EPBCMonitoring@environment.gov.au)>

**Subject:** FW: Notification of commencement [SEC=OFFICIAL]

Hi Tegan,

Thank you for email dated 21 February 2020.

The Department acknowledges the receipt of the Mulching verification report and the Independent audit report for Trieste 3D Seismic Survey, near Eneabba, Western Australia (EPBC 2017/8133), which satisfies the condition of 13 of the approval EPBC 2017-8133.

To assist the Department in understanding the status of the approval including compliance with condition 4, can you please email the Department the receipt of payment of \$104,860.80 and offset attributes, shapefiles, textual descriptions and maps to clearly define the location and boundaries of the offset site(s)?

For any further questions please contact the EPBC Monitoring Mailbox.

Kind regards

***Compliance Monitoring Team***

Environment Compliance Branch

Compliance Division

Department of Agriculture, Water and the Environment

GPO Box 787, CANBERRA ACT 2601

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**From:** Tegan Stehbens <[Tegan.Stehbens@beachenergy.com.au](mailto:Tegan.Stehbens@beachenergy.com.au)>

**Sent:** Friday, 21 February 2020 4:03 PM

**To:** EPBC Monitoring <[EPBCMonitoring@awe.gov.au](mailto:EPBCMonitoring@awe.gov.au)>; EPBC Monitoring <[EPBCMonitoring@environment.gov.au](mailto:EPBCMonitoring@environment.gov.au)>

**Cc:** Wayne Mothershaw <[Wayne.Mothershaw@beachenergy.com.au](mailto:Wayne.Mothershaw@beachenergy.com.au)>; Zoë Bowen

<[Zoe.Bowen@beachenergy.com.au](mailto:Zoe.Bowen@beachenergy.com.au)>; Lattice Energy Compliance <[LatticeEnergyCompliance@beachenergy.com.au](mailto:LatticeEnergyCompliance@beachenergy.com.au)>

**Subject:** RE: Notification of commencement [SEC=OFFICIAL]

Thank you, Compliance Monitoring Team.

Your request for completion data is noted, and Beach Energy is of course happy to comply. Can your team please provide some indication of what sort of data you would expect for a project of this nature?

For example, we can confirm that the area of native vegetation temporarily cleared for the project was **54.36 ha**, significantly less than the **74.54 ha** provided for in the project approval (mulching verification report attached).

Additionally, there were no incidents affecting Matters of National Environmental Significance during the project; all known locations of threatened flora were avoided and no new individuals or populations were found during operations.

Further details pertaining to operations on site during the Trieste survey can be found in the independent audit report, submitted to the Environmental Audit Section earlier today.

Please let me know if there is any other information you require.

Kind regards,  
Tegan Stehbens

**Tegan Stehbens** | Environment Advisor | Beach Energy Limited



80 Flinders Street, Adelaide, SA 5000  
GPO Box 175, Adelaide SA 5001

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**From:** EPBC Monitoring <[EPBCMonitoring@awe.gov.au](mailto:EPBCMonitoring@awe.gov.au)>

**Sent:** Friday, 21 February 2020 3:17 PM

**To:** Tegan Stehbens <[Tegan.Stehbens@beachenergy.com.au](mailto:Tegan.Stehbens@beachenergy.com.au)>; EPBC Monitoring <[EPBCMonitoring@environment.gov.au](mailto:EPBCMonitoring@environment.gov.au)>

**Cc:** Wayne Mothershaw <[Wayne.Mothershaw@beachenergy.com.au](mailto:Wayne.Mothershaw@beachenergy.com.au)>; Zoë Bowen

<[Zoe.Bowen@beachenergy.com.au](mailto:Zoe.Bowen@beachenergy.com.au)>; Lattice Energy Compliance <[LatticeEnergyCompliance@beachenergy.com.au](mailto:LatticeEnergyCompliance@beachenergy.com.au)>

**Subject:** RE: Notification of commencement [SEC=OFFICIAL]

Hi Tegan,

Thank you for email dated 19 February 2020 and notifying the Department of completion of work.

Condition 13 of the EPBC 2017/8133 requires that the approval holder must notify the Department in writing within 30 days after the completion of the action, and provide **completion data**.

Can you please provide completion data for our records?

Thankyou

Regards,

**Compliance Monitoring Team**

Environment Compliance Branch

Compliance Division

Department of Agriculture, Water and the Environment

GPO Box 787, CANBERRA ACT 2601

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**From:** Tegan Stehbens <[Tegan.Stehbens@beachenergy.com.au](mailto:Tegan.Stehbens@beachenergy.com.au)>

**Sent:** Wednesday, 19 February 2020 10:51 AM

**To:** EPBC Monitoring <[EPBCMonitoring@environment.gov.au](mailto:EPBCMonitoring@environment.gov.au)>

**Cc:** Wayne Mothershaw <[Wayne.Mothershaw@beachenergy.com.au](mailto:Wayne.Mothershaw@beachenergy.com.au)>; Zoë Bowen

<[Zoe.Bowen@beachenergy.com.au](mailto:Zoe.Bowen@beachenergy.com.au)>; Lattice Energy Compliance <[LatticeEnergyCompliance@beachenergy.com.au](mailto:LatticeEnergyCompliance@beachenergy.com.au)>

**Subject:** RE: Notification of commencement

To whom it may concern,

Please be advised that Lattice Energy (as a subsidiary of Beach Energy) has completed work on the Trieste 3D Seismic Survey (EPBC 2017/8133). Seismic acquisition was completed on 11 February 2020, with demobilisation on **15 February 2020**.

Please don't hesitate to contact me if there are any queries or concerns regarding this notice.

Regards

Tegan Stehbens



**Tegan Stehbens | Environment Advisor | Beach Energy Limited**



80 Flinders Street, Adelaide, SA 5000

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**From:** Tegan Stehbens

**Sent:** Thursday, 5 December 2019 2:30 PM

**To:** [epbcmonitoring@environment.gov.au](mailto:epbcmonitoring@environment.gov.au)

**Cc:** Wayne Mothershaw <[Wayne.Mothershaw@beachenergy.com.au](mailto:Wayne.Mothershaw@beachenergy.com.au)>; Zoe Bowen ([zoe.bowen@beachenergy.com.au](mailto:zoe.bowen@beachenergy.com.au))

<[zoe.bowen@beachenergy.com.au](mailto:zoe.bowen@beachenergy.com.au)>; Lattice Energy Compliance <[LatticeEnergyCompliance@beachenergy.com.au](mailto:LatticeEnergyCompliance@beachenergy.com.au)>

**Subject:** Notification of commencement

To whom it may concern,

Please be advised that Lattice (as a subsidiary of Beach Energy) has commenced work on the Trieste 3D Seismic Survey (EPBC 2017/8133). The project began with site inductions undertaken on **Tuesday 3 December 2019**. Seismic line preparation (surveying and vegetation clearing) is currently underway, with seismic acquisition due to commence from the week of 7 January 2020.

Please don't hesitate to contact me if there are any queries or concerns regarding this notice.

Regards  
Tegan Stehbens

