

**Coal & Allied Operations Pty Ltd** 

Yancoal Australia Ltd

Warkworth Mining Limited

EPBC 2002/629 and EPBC 2009/5081

Annual Compliance Report - 1 February 2017 to 31 January 2018

Date of Submission: Thursday 3 May 2018

#### **Declaration of accuracy**

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.

I declare that all the information presented in this compliance report is technically accurate.

Signed	
Full name (please print) Andrew Speechly	_
Position (please print) Manager Environment and Community	
Organisation (please print including ABN/ACN if applicable)	
Yancoal Australia Ltd (ABN 82 111 859 119)	
Date 03 May 2018	

Document Title	Version	Date effective	Comment
Annual Compliance Report (EPBC2002/629	1	May 2018	Submitted to Department of the
and EPBC2009/5081)			Environment and Energy

# Contents page

1.	Introduction	1
1.1	Objective	1
1.2	Background	1
2.	Condition Compliance	2
2.1	EPBC 2002/629	2
2.2	EPBC 2009/5081	4
3.	New environmental risks and potential threats to Matters of National and	
	State Environmental Significance	11
ATTA	CHMENT A: Regional Offset Management Plan Annual Report 2017	12
ATTA	CHMENT B: Local Offset Management Plan Annual Report 2017	13
ΔΤΤΔ	CHMENT C: FPRC 2009/5081 Compliance Register (Condition 17)	14

#### 1. Introduction

#### 1.1 Objective

This annual Compliance Report has been prepared in accordance with the *Annual Compliance Report Guidelines* (Commonwealth of Australia 2014) to satisfy Condition 4 of the EPBC 2002/629 Approval and Condition 15 of the EPBC 2009/5081 Approval, for the period 1 February 2017 to 31 January 2018 (reporting period). Both Approvals are held by Warkworth Mining Limited (WML) which is also a wholly owned subsidiary of Yancoal Australia Limited (YAL).

#### 1.2 Background

WML holds two Commonwealth and one NSW approvals to construct and operate an open cut coal mine, located approximately 15 kilometres southwest of Singleton in the Hunter Valley, NSW. The Commonwealth Minister for the Environment, under provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), has issued two approvals to WML to construct, operate and extend the open cut coal mine, the first in February 2004 (EPBC 2002/629) and the second in August 2012 (EPBC 2009/5081).

The EPBC 2002/629 approval (last modified in November 2016) requires WML to offset the impact upon Matters of National Environmental Significance (MNES) by protecting and managing no less than 1,586 hectares (ha) of habitat for the Regent Honeyeater (*Anthochaera phrygia*) and Swift Parrot (*Lathamus discolor*). At least 1,586ha of the Goulburn River and Bowditch Biodiversity Areas (BAs) are to be secured as an Offset Area, with a legally binding mechanism for enduring protection by 17 February 2018.

The EPBC 2009/5081 approval (last modified in November 2016) requires WML to offset the MNES by protecting and managing a total of no less than 2,626 hectares (ha), of habitat for the Regent Honeyeater (*Anthochaera phrygia*) and Swift Parrot (*Lathamus discolor*). The Offset Areas to be protected with a legally binding mechanism for enduring protection by 17 February 2018 are shown in the table below. Table 1 provides a location of the BAs and their proximity to Warkworth Coal Mine. There are also conditions relating to water management and rehabilitation on the mine site.

Yancoal have requested an extension of the due dates for the provision of a legally binding mechanism to secure the offset areas associated with EPBC 2002/629 and EPC 2009/5081 to 15 February 2019. This revised date will align with that specified in the NSW Planning approval SSD 6464 for legal protection of these offset areas. The extension request letter was sent to DoEE on 7 December 2017.

Table 1 Location and size of the EPBC Offset Areas

Locality	Biodiversity Area	Offset Area (ha)	EPBC2002/629	EPBC2009/5081 Phase 1	EPBC2009/5081 Phase 2
Local	Southern (Putty Road Offset Area)	94		94	1 11d3C 2
	Southern	892			892
	Southern Total	986		94	892
	Northern	341			341
Regional	North Rothbury	41			41
	Goulburn River	1,066	1,066		
	Bowditch	520	520		
	Bowditch	82			82
	Putty	383			383
	Seven Oaks	519			519
	Condon View	345			345
Total		4,282	1,586	94	2,602

# 2. Condition Compliance

# 2.1 EPBC 2002/629

EPBC2002/629 Condition Number	Condition	Compliance status	Evidence/Comments (Goulburn River BA, Bowditch BA)
1	By no later than 17 February 2018, unless otherwise agreed by the Minister in writing, the person taking the action must register a legally binding conservation covenant over the Biodiversity Management Areas identified in the map at Attachment A. The mechanism/s must provide enduring protection of no less than:	Pending	A request was sent to DoEE on 7 December 2017 to extend the due date for a legally binding conservation covenant over the biodiversity areas to 15 February 2019. The request was sought on the basis of aligning the timeframe with the NSW Project Approval SSD 6464. Approval from DoEE is pending.
	<ul> <li>a) 1,586 ha of suitable habitat for Anthochaera phrygia (regent honeyeater) and Lathamus discolour (swift parrot).</li> </ul>		
2	To offset the impacts to the regent honeyeater and swift parrot, the person taking the action must submit to the Minister for approval an Offset Management Plan (OMP) for all of the Biodiversity Management	Compliant	Regional Offset Management Plan (ROMP) submitted to the Environment Assessment Branch of Department of Environment (DoE) for Minister approval 14 April 2014 (13 April 2014 was a Sunday). Regional OMP approved by Minister 06 August 2014.
	Areas by no later than 13 April 2014.  The OMP must include, but not be limited to, the following information:		The Independent Audit completed in 2015 indicated that separate Offset Management Plans for Bowditch and Goulburn River BAs would be preferable. In addition separate plans are required for the legally binding mechanism. Therefore in February 2017 individual plans were submitted to the Department for approval. In response to comments received from the Department of Environment and Energy (DoEE), a further three versions of the individual plans were submitted during 2017. The final revision, submitted to DoEE in December 2017, was approved on 16 February 2018.
2a	a textual description and map to clearly define the location and boundaries of all of the Biodiversity Management Areas. This must be accompanied with the offset attributes and a shapefile	Compliant	Section 2.1 MP Location and Description
2b	details of management actions to protect and enhance the extent and condition of habitat values of the offset areas including but not limited to rehabilitation, weed control, fire management, erosion and sediment control, management of livestock and restrictions on access of no less than 1,586 hectares of habitat for the regent honeyeater and swift parrot	Compliant	Section 3 Objectives, Key Performance Indicators and Completion Criteria and Section 4 Conservation Management Actions of the MP.
2c	the timing, responsibilities and performance criteria for management actions	Compliant	Section 4 Conservation Management Actions of the MP.
2d	a monitoring plan including the undertaking of ecological surveys by a qualified ecologist to assess the success of the management actions against identified milestones and objectives	Compliant	Section 5 Monitoring of the MP.
2e	a process to report, to the department, the management actions undertaken in the offset areas and the outcome of those actions, including identifying any need for improved management	Compliant	Section 1.3 Function of the MP.
2f	a description of the potential risks to successful management and rehabilitation in the offset areas, and a description of the contingency measures that would be implemented to mitigate these risks	Compliant	Section 4 Conservation Management Actions of the MP.

EPBC2002/629 Condition Number	Condition	Compliance status	Evidence/Comments (Goulburn River BA, Bowditch BA)
2g	details of parties responsible for management, monitoring and implementing the plan, including their position or status as a separate contractor.	Compliant	Section 1.3.2 Key Stakeholders and Roles.
	The approved OMP must be implemented. The person taking the action must publish the approved OMP on their website within 1 month of the OMP being approved by the Minister. The approved OMP must remain published until the expiry of the approval or until such time as agreed in writing by the Minister.	Compliant	The Regional Offset Management Plan Annual Report 2017(Attachment B) provides a summary of the management and monitoring activities completed in 2017.  Approved Regional Offset Management Plan was originally published on Rio Tinto Coal Australia website on 5 September 2014 and is now published on the Yancoal Australia Insite website at the link below.  https://insite.yancoal.com.au/asset/download/150/ff0efb/warkworth-regionaloffsetmanagementplan-062014-1.pdf  The individual Offset Management Plans will be published when also approved by NSW Department of Planning & Environment (DP&E). Approval of the Offset Management Plans by DP&E is a requirement of Condition 36 of the NSW Planning Approval SSD 6464.
	Note: For clarity, the Biodiversity Management Areas in condition 1 and identified on the map in Attachment A can accommodate offset requirements for more than one species habitat within the one area, if a qualified ecologist verifies that suitable habitat is present and includes specific habitat requirements for the relevant species.		
3	The Compliance Report (referred to in condition 4) due in 2015, and Compliance Reports due in each subsequent fifth year until the expiry of the approval, must be audited by an independent auditor. Prior to the commencement of each audit, the independent auditor and the audit criteria must be approved by the Department.	Complaint	The 2015 Compliance Report Audit (i.e. this report) was audited in 2015 by an independent auditor (Peter Horn), approved by DoE on 24 July 2015.  The Independent Audit report was sent to DoE on 20 October 2015.  Next audit due 2020.
4	Within three months of every 12 month anniversary of the Commencement of Construction, the person taking the action must publish a report (the Compliance Report) on their website addressing compliance with each of the conditions of this approval, including implementation of any plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the Compliance Report is published. The person taking the action must also notify any non-compliance with this approval to the department in writing within 2 business days of becoming aware of the non-compliance. The person taking the action must continue to annually publish the Compliance Report until such time as agreed in writing by the Minister.	Compliant	This report Commencement of Construction June 2004.
5	If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval a revised version of that plan. The varied activity shall not commence until the Minister has approved the revised plan in writing. If the Minister approves the revised plan that plan must be implemented in place of the plan originally approved.	Compliant	Individual management plans were submitted to the Department for approval in February 2017 and subsequent revisions were submitted in December 2017.

EPBC2002/629 Condition Number	Condition	Compliance status	Evidence/Comments (Goulburn River BA, Bowditch BA)
6	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and communities or listed migratory species to do so, the Minister may require that the person taking the action make specified revisions to a management plan specified in the conditions and submit the revised plan for the Minister's written approval.  The revised approved plan must be implemented. Unless the Minister has approved the revised plan the person taking the action must continue to implement the originally approved plan, as specified in the conditions.	Compliant	Comments on the individual management plans were received from DoEE on 13/04/2017 and 22/06/2017. Agreed changes were made to the revised management plans submitted in December 2017.

## 2.2 EPBC 2009/5081

EPBC2009/5081	Condition	Compliance status	Evidence/Comments (Southern BA, Northern
Condition Number			BA, Putty BA, Condon View BA, Seven Oaks BA, Bowditch BA, North Rothbury BA)
1	To offset the impact on the foraging habitat for Anthochaera Phrygia (regent honeyeater) and Lathamus discolor (swift parrot), the person taking the action must register a legally binding conservation mechanism over 94ha of land, as illustrated in the map at Attachment A as the Phase 1 Offset. The conservation mechanism must provide enduring protection for the Phase 1 Offset and must be registered by 17 February 2018. The person taking the action must notify the department in writing within 1 month of the registration of the conservation mechanism.	Pending	A request was sent to DoEE on 7 December 2017 to extend the due date for a legally binding conservation covenant over the biodiversity areas to 15 February 2019. The request was sought on the basis of aligning the timeframe with the NSW Project Approval SSD 6464. Approval from DoEE is pending.
2	To offset the impacts on the foraging habitat of the regent honeyeater and swift parrot, the person taking the action must submit to the Minister for approval an Offset Management Plan (OMP) for the Phase 1 Offset identified in Attachment A by no later than 13 April 2014.  The OMP must include, but not be limited to the following:	Compliant	Draft Putty Road Offset - Offset Management Plan (OMP) submitted to Department of Environment and Energy (DoEE) 14 April 2014 (13 April was a Sunday). DoEE approval of Putty Road Offset OMP dated 4 July 2014. In February 2017 a Southern BA Offset Management Plan was submitted to the Department for approval, as it contains the Phase 1 Offset (Putty Road Offset Area) and the Phase 2 Offset. This plan is to be used as part of the legally binding mechanism to secure both the Phase 1 and 2 Offsets. A revised version of the Southern BA Management Plan was submitted to DoEE in December 2017 to address comments provided by DoEE on the February 2017 version. The Southern BA Management Plan was approved by DoEE on 16 February 2018
2a	a textual description and map to clearly define the location and boundaries of all of the offset areas. This must be accompanied with the offset attributes and a	Compliant	Section 2.1 Location and description of the MP

	shapefile		
2b	details of management actions to protect and enhance the extent and condition of habitat values of the offset areas including but not limited to rehabilitation, weed control, fire management, erosion and sediment control, management of livestock and restrictions on access to habitat for the regent honeyeater and swift parrot	Compliant	Section 3 Objectives, Key Performance Indicators and Completion Criteria and Section 4 Conservation Management Actions of the MP.
2c	the timing, responsibilities and performance criteria for management actions	Compliant	Section 4 Conservation Management Actions of the MP.
2d	a monitoring plan including the undertaking of ecological surveys by a qualified ecologist to assess the success of the management actions against identified milestones and objectives	Compliant	Section 5 Monitoring of the MP.
2e	a process to report, to the department, the management actions undertaken in the offset areas and the outcome of those actions, including identifying any need for improved management	Compliant	Section 1.3.2 Key Stakeholders and Roles.
2f	a description of the potential risks to successful management and rehabilitation in the offset areas, and a description of the contingency measures that would be implemented to mitigate these risks	Compliant	Section 4 Conservation Management Actions and Section 6 Risk Assessment of the MP.
2g	details of parties responsible for management, monitoring and implementing the plan, including their position or status as a separate contractor.	Compliant	Section 1.3.2 Key Stakeholders and Roles.
	The approved OMP must be implemented.  Note: Offset areas can accommodate offset requirements for more than one species habitat within the one area, if a qualified ecologist verifies that suitable habitat is present and includes specific habitat requirements for the relevant species.	Compliant	Implementation of the conservation management strategies and monitoring as described in the Putty Road OMP and the broader Local OMP is supported by their Annual Reports. The Local OMP describes the management of the area surrounding the Putty Road Offset, this area is referred to as the Southern Biodiversity Area.  The Local Offset Management Plan Annual Report 2016 (Attachment B) provides a summary of the management and monitoring activities completed in 2017.
3	Prior to Commencement of Construction of Phase 2 of the action, the person taking the action must submit to the Minister details of at least 2,532 hectares of suitable habitat for the Regent Honeyeater and Swift Parrot (Phase 2 Offset) to offset impacts on foraging habitat for these two species.  The details of offset sites must include offset attributes and shapefiles and ecological assessment reports. If the offset sites are different to those offset sites previously approved under the approval granted on 9 August 2012, the new offset sites must be submitted to the Minister for approval.	Compliant	Submission of the Phase 2 offsets details was on the 12 January 2016.  Approval of Phase 2 offsets was 17 February 2016.
4	To offset impacts on the foraging habitat of the Regent Honeyeater and Swift Parrot, the person taking the actio		A request was sent to DoEE on 7 December 2017 to extend the due date for a legally binding conservation

	must register a legally binding conservation mechanism on all offset sites within 2 years of the date of the submission of details /approval of the Phase 2 Offset.  The person taking the action must notify the Department in writing within one month of the registration of the conservation mechanism.	covenant over the biodiversity areas from 17 February 2018 to 15 February 2019. The request was sought on the basis of aligning the timeframe with the NSW Project Approval SSD 6464. Approval from DoEE is pending.  The approved Phase 2 offsets are to be secured on or before 15 February 2019.
5	The approved OMP, as described in condition 2, must be Complaint revised by the person taking the action to include, but not be limited to, those activities as described in condition 2a-g for the Phase 2 Offset. The revised OMP must be submitted for approval by the Minister within 12 months of the submission of details/approval of Phase 2 Offset.	The OMP is to be revised to include the approved Phase 2 offsets on or before 17 February 2017.  Plans were submitted for approval on 15 February 2017 for the Southern, Northern, North Rothbury, Seven Oaks, Condon View and Putty BAs.
Re-establishment of Woodland in Biodivers	sity Management and Offset Areas	
6	Within 12 months of the Commencement of Construction Compliant of Phase 1, the person taking the action must submit to	Draft Putty Road Offset REP submitted to DoE 2 February 2015.
	the Minister for approval a Re-establishment Plan (REP) for the Phase 1 Offset area. The REP must include, but	Comments were received on the 18 July 2016.
	not be limited to the following:  a. details of the areas to be re-established (re- establishment areas) including location and maps;	WML sought approval to address these comments in the Southern BA Management Plan, which was submitted on 15 February 2017. This plan includes a compliance table to show that all elements of this condition are met.
	<ul> <li>b. documentation including mapping of current environmental values relevant to MNES of the re-establishment areas;</li> </ul>	The Local Offset Management Plan Annual Report 2016 (Attachment B) provides a summary of the management and monitoring activities completed in 2017.
	<ul> <li>where revegetation through planting seedlings and/or seeds is intended, details of appropriate species and ratios of species relevant to historically occurring listed migratory and listed threatened species' habitat;</li> </ul>	
	<ul> <li>the source and provenance of the seeds and/or seedlings which will be used;</li> </ul>	
	<ul> <li>e. measures to address threats to MNES including but not limited to grazing pressure and damage by livestock and adverse impacts from feral animals and weeds;</li> </ul>	
	<li>f. measures to provide fire management regimes appropriate for the MNES;</li>	
	<li>g. measures to manage the MNES in accordance with the recommendations of the approved recovery plan for the migratory and threatened species;</li>	
	<ul> <li>monitoring measures including ecological surveys to measure the establishment and ongoing success of the revegetation based on a comparison with high quality habitat for the MNES;</li> </ul>	
	<ul> <li>i. performance measures and reporting         requirements against identified objectives,         including trigger levels for contingency         measures to be taken to ensure performance         measures and objectives are met; and         j. identify persons responsible and</li> </ul>	

	arrangements for implementing the REP and for reporting on performance.  The approved REP must be implemented.		
7	The approved REP, as described in condition 6, must be revised by the person taking the action to include at least those activities as described in conditions 6a-j for the Phase 2 Offset. The revised REP must be submitted for approval by the Minister within 12 months of the Commencement of Construction of Phase 2 of the action. The approved revised REP must be implemented.	Compliant	The REP is to be revised to include the approved Phase 2 offsets on or before 16 February 2017.  The Management Plans submitted for the Southern, Northern, North Rothbury, Seven Oaks, Condon View and Putty BAs on 15 February 2017 for approval. These plans contained the requirements of the REP and include a compliance table to show that all elements of this condition are met.
8	As a precautionary approach, the person taking the action must within 6 months of the date of this approval, or such other timeframe as specified in writing by the Minister, provide to the Minister any NSW Government approved water management plans which apply to the approved action.	Compliant	Water Management Plan (WMP) approved by NSW regulator 10 September 2014. A copy of the WMP was sent to DoEE on 15 September 2014. No request has been received by DoEE to provide further copies of the WMP.  The Water Management Plan was revised and submitted to NSW Department of Planning and Environment (DPE) on 2/12/2015 following the WML and MTO Continuation Approvals. It was subsequently approved on 29/1/2016. A minor revision to update monitoring programmes was completed on 21/3/2016. A major revision was submitted to DPE on 16/5/2017, following the incorporation of stream and riparian health monitoring in Wollombi Brook and Loders Creek. The plan was approved 26 June 2017.  The latest version of the WMP can be found at https://insite.yancoal.com.au/asset/download/270/ecf0f3 /180212-mtw-water-management-plan-v4.1.pdf
9	The person taking the action must within 6 months of the date of this approval, or such other timeframe as specified by the Minister, provide to the Minister a report on:  a. any updated modelling of surface and groundwater impacts that have been undertaken in preparing the water management plans  b. how the water management plans have addressed groundwater and surface water impacts on nationally listed threatened species and ecological communities	Compliant	These conditions are addressed in the WMP (refer Condition 8).
10	If, after receiving the water management plans described in condition 8 and the report in condition 9, the Minister is not satisfied the water management plans adequately address impacts on listed threatened species and ecological communities, the Minister may require in writing that the person taking the action provide additional information within a specified timeframe.	Not triggered	
11	The person taking the action must, within 12 months of the Commencement of Construction of Phase 1, and within 12 months of the Commencement of	Compliant	The Mine Site Rehabilitation Plan (MSRP) is contained within the Mining Operations Plans; a copy was submitted to DoE 2 February 2015.

	Construction of Phase 2, submit to the Minister for approval a Mine Site Rehabilitation Plan (MSRP) for the progressive rehabilitation and revegetation of no less than 32ha woodland of mined areas for Phase 1 and 2,303ha of woodland habitat on mined areas for Phase 2.  The MSRP must include, at a minimum, the following information:  a. the desired outcomes/objectives of implementing the MSRP  b. details of the vegetation communities to be rehabilitated and the timing of progressive rehabilitation  c. a process to progressively report to the department the rehabilitation management actions undertaken and the outcome of those actions, and the mechanisms to be used to identify the need for improved management  d. a description of the potential risks to successful management and rehabilitation on the project site, and a description of the contingency measures that would be implemented to mitigate these risks  e. details of parties responsible for reviewing and implementing the plan  f. details of long term management and protection of the mine site  The approved MSRP must be implemented.		Comments were received on the 18 July 2016. RTCA sought and received approval to address these comments in the next revision of the MSRP.
12	The person taking the action must submit to the Minister for approval a Mine Closure Plan (MCP) at least 6 months prior to the closure of the mine. The approved MCP must be implemented. Note: The person taking the action may develop a single mine rehabilitation plan to align with the requirements of this approval and those of the NSW Government.	Not triggered	
13	All survey data collected for the project must be collected and recorded so as to conform to data standards notified from time to time by the department. When requested by the department, the person taking the action must provide to the department all species and ecological survey data and related survey information from ecological surveys undertaken for MNES. This survey data must be provided within 30 business days of request, or in a timeframe agreed to by the department in writing. The department may use the survey data for other purposes.	Compliant	All survey data is retained by WML, the offset data is stored within the Biodiversity Offset Portal. Access to the portal was provided to DoEE in 2015.  No requests for survey data have been received.
14	Within 14 days after the Commencement of Construction of Phases 1 and 2, the person taking the action must advise the department in writing of the actual date of Commencement of Construction.	Compliant	Phase 1 construction commenced on 3 February 2014 and WML notified DoEE in writing on 13 February 2014.  Phase 2 construction commenced on 16 February 2016 and WML notified DoEE in writing on 16 February 2016.

19	If the Minister believes that it is necessary or convenient	Not triggered	
18	If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval a revised version of that plan. The varied activity shall not commence until the Minister has approved the revised plan in writing. If the Minister approves the revised plan that plan must be implemented in place of the plan originally approved.	Not triggered	
	reviews have been approved by the Minister d. the dates on which the subsequent reviews are due The register must be submitted to the department at the time as the Compliance Report, as described at condition 15.		
	<ul><li>b. if a plan has not been approved by the Minister, the date on which it was, or is expected to be, submitted to the Minister.</li><li>c. the dates on which reports on the outcomes of</li></ul>		
	a. the date on which each plan was approved by the Minister		
17	Where the conditions require the person taking the action to submit a plan for the Minister's approval, the person taking the action must maintain a register recording:	Compliant	Compliance Register submitted with this report (Attachment C)
16	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Not triggered	
15	Within 3 months of every 12 month anniversary of the Commencement of Construction of Phase 1, the person taking the action must publish a report (the Compliance Report) on their website addressing compliance with each of the conditions of this approval, including implementation of any plans as specified in the conditions. Documentary evidence providing proof of the date of publication and noncompliance with any of the conditions of this approval must be provided to the department at the same time as the Compliance Report is published. The person taking the action must also notify any non-compliance with this approval to the department in writing within 2 business days of becoming aware of the noncompliance.  The person taking the action must continue to annually publish the Compliance Report until such time as agreed in writing by the Minister.	Compliant	Compliance report due before 3 May each year (based on date of commencement of construction 3 February 2014).  2017 Compliance Report published on Yancoal Australia Insite website 3 May 2018.

	for the better protection of listed threatened species and communities or listed migratory species to do so, the Minister may require that the person taking the action make specified revisions to a management plan specified in the conditions and submit the revised plan for the Minister's written approval.  The revised approved plan must be implemented. Unless the Minister has approved the revised plan the person taking the action must continue to implement the originally approved plan, as specified in the conditions.	
20	If, at any time after 5 years from the date of this Not triggered approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.	The action has commenced as per the Commencement of Construction (3 February 2014)
21	The person taking the action must maintain accurate records substantiating all activities and outcomes associated with or relevant to the above conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the department.  Such records may be subject to audit by the department or an independent auditor appointed and/or approved by	Records of activities and outcomes are maintained by WML.
	the department, and used to verify compliance with the conditions of approval. Summaries of audits will be posted on the department's website. The results of audits may also be publicised through the general media.	
22	Unless otherwise agreed to in writing by the Minister, the Compliant person taking the action must publish all plans referred to in these conditions of approval on their website. Each plan must be published on the website within 1 month of being approved. The person taking the action must notify the department within 5 business days of publishing the plan on their website and the plan must remain on the website for the period this approval has effect.	All approved plans have been published on the Yancoal Australia Insite website.

# 3. New environmental risks and potential threats to Matters of National and State Environmental Significance

Trespassing and illegal tree clearing and timber getting within the Southern Biodiversity Area during the reporting period resulted in felling approximately 40 full sized trees and 100 small trees. This unauthorised activity was reported to both Department of Environment and Energy and Department of Planning and Environment in October 2017.

ATTACHMENT A: Regional Offset Management Plan Annual Report 2017	





Regional Biodiversity Areas

**Annual Report 2017** 

April 2018

Annual report for the period from January to December 2017, for activities described in the Management Plans for all regional Warkworth Mining Limited offsets including:

- Goulburn River Biodiversity Area
- Seven Oaks Biodiversity Area
- Bowditch Biodiversity Area
- Putty Biodiversity Area
- Condon View Biodiversity Area
- North Rothbury Biodiversity Area

Note that a portion of Condon View Biodiversity Area is an offset for Hunter Valley Operations to satisfy

# **Table of Contents**

1	Intro	oduction	3
2	Loca	ation and landholder details	4
3	Sum	nmary of activities – 2017	8
3	.1	Summary of climatic conditions	8
4	Mon	nitoring Activities	. 12
		Bird assemblages monitoring	
4	.2	Habitat restoration monitoring	. 12
5	Prog	gress in attaining Conservation Objectives against Key Performance	
Indi	icator	'S	. 12

#### 1 INTRODUCTION

This annual report is a requirement of the Management Plans for all regional Warkworth Mining Limited offsets for the 2017 reporting period from 1 January through to 31 December 2017.

The annual report provides a summary of the key management activities completed across the biodiversity offsets located within the Goulburn River, Seven Oaks, Bowditch, Putty, Condon View and North Rothbury Biodiversity Areas (BAs).

The management plans describe the conservation management strategies and monitoring to achieve and measure improvement and protection of the offsets biodiversity values. It is a compliance requirement of the Commonwealth and NSW environmental approvals to implement the management plans.

The Regional Offset Management Plan (ROMP) was prepared to satisfy the consent requirements for the New South Wales (NSW) Hunter Valley Operations (HVO) South Project Approval (PA 06\_0261) and the Warkworth Mine Commonwealth EPBC 2002/629 Approval. In November 2015, the NSW Warkworth Continuation Project Approval (SSD-6464) was granted providing both NSW and Commonwealth approval for the same disturbance area. Phase 2 of the EPBC2009/5081 action also commenced on 16 February 2016. In response to the granting of these new approvals, new Management Plans for the Bowditch and Goulburn River BA have been prepared to satisfy the Commonwealth approval EPBC2009/5081 and the NSW consent (SSD-6464), replacing the ROMP. On 10 October 2016 HVO was granted approval (EPBC2016/7604), The Condon View BA provides 168ha of suitable direct offset to be compliant with this approval. Management Plans have also been prepared and submitted for the new regional BAs: Seven Oaks, Putty, Condon View and North Rothbury.

The Biodiversity Offset Portal contains all the supporting documentation for this report, including photo point monitoring. Access to the portal is restricted, relevant regulators have been provided with login details; please contact MTW should you require assistance.

1

### 2 LOCATION AND LANDHOLDER DETAILS

The locations of the regional BAs are shown in Figure 1, further details are provided in Table 1. The land is owned by Warkworth Mining Limited (WML). The Goulburn River and Condon View BAs are owned by Warkworth Mining Limited and have a portion of the total area designated as an offset for Hunter Valley Operations (HVO). Details of the Warkworth Offset and HVO Offset areas are in Table 2 and Figure 2 and 3.

#### **Table 1 Regional Biodiversity Areas**

Biodiversity Area	Local Government Area	Land Owner	Area (ha)	Offset Area (ha)	Location
Goulburn River	Upper Hunter / Mid-Western	Warkworth Mining Limited	1,539	1,206	'The Rivers' 30km west of Merriwa, via Dulhunty Road, Comialla Road and Golden Hwy.
Bowditch	Muswellbrook	Warkworth Mining Limited	607	602	3km north of Sandy Hollow, 3450 Wybong Road, via Golden Hwy.
Seven Oaks	Mid-Western	Warkworth Mining Limited	521	519	35km west of Merriwa via Ulan Road, Summer Hill Road, Durridgerie Road and Smedes Road.
Condon View	Singleton	Warkworth Mining Limited	553	345	5km west of Putty via Box Tree Clearing Trail off Putty Valley Road.
Putty	Singleton	Warkworth Mining Limited	386	383	5km south of Putty via Box Gap Road.
North Rothbury	Cessnock	Warkworth Mining Limited	41	41	1km south of North Rothbury via Wine Country Drive.

#### Table 2 Goulburn River and Condon View Biodiversity Areas

Biodiversity Land Owner Area	Area (ha)	Warkworth Offset Area (ha)	HVO Offset Area (ha)
Goulburn River Warkworth Mining Limited	1,539	1,066	140
Condon View Warkworth Mining Limited	553	345	168

#### Warkworth Mine

# Location of the Warkworth Mine Biodiversity Areas EPBC Annual Compliance Report



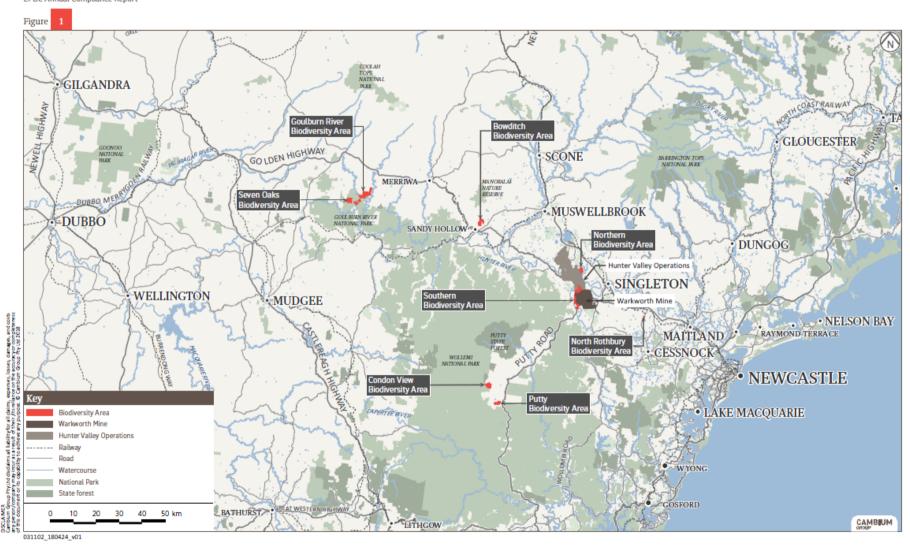


FIGURE 1 LOCATION OF WARKWORTH MINING LIMITED BIODIVERSITY AREAS



Cadastral boundaries and offset areas at the Goulburn River Biodiversity Area  $_{\mbox{\scriptsize Management}}$  Plan 2017

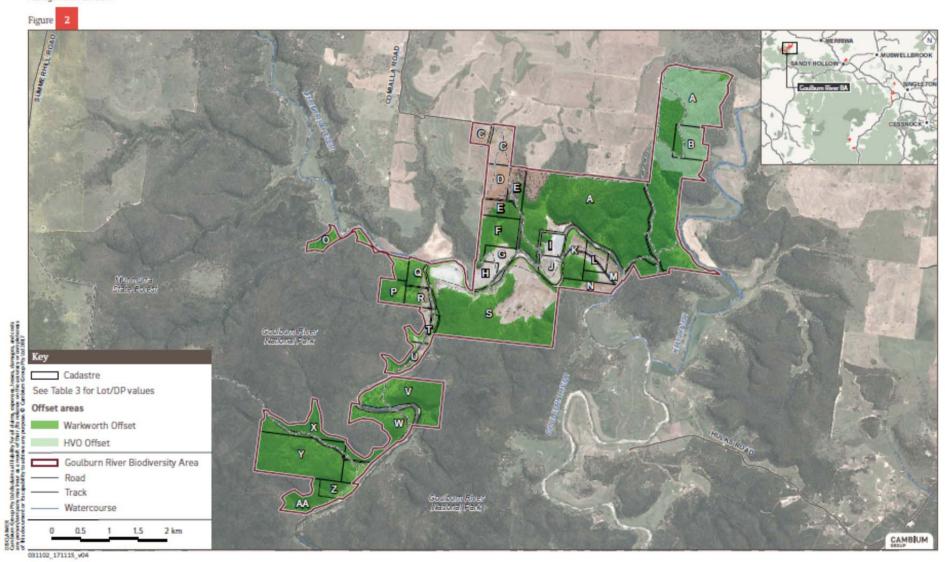


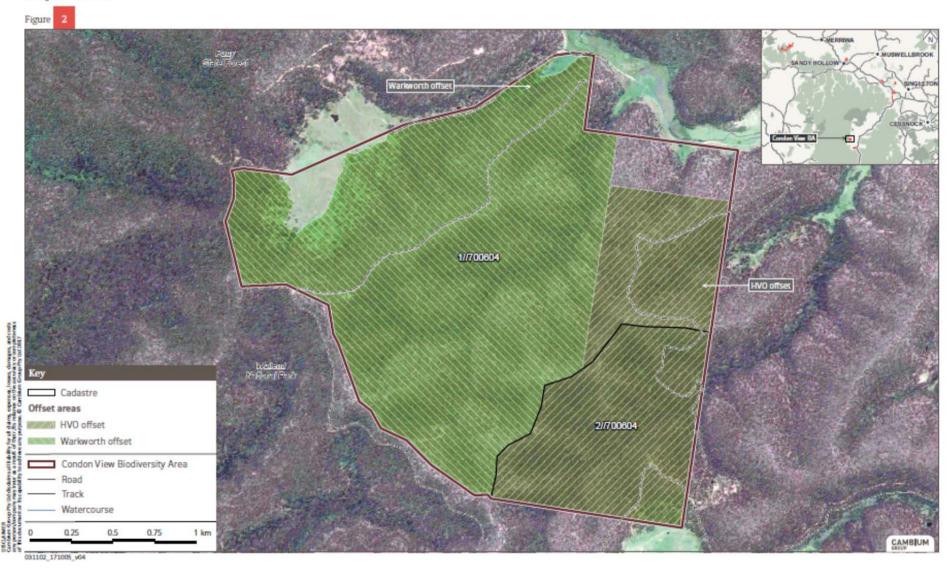
Figure 2 Offset areas at the Goulburn River Biodiversity Area

Regional BA Annual Report

#### Warkworth Mine and Hunter Valley Operations







Regional BA Annual Report

### 3 SUMMARY OF ACTIVITIES – 2017

Table 3 provides a summary of the activities undertaken during the reporting period (year 1) and the progress in attaining the Performance Criteria for the key Conservation Management Strategies in the management plans.

## 3.1 Summary of climatic conditions

Figure 4 shows the monthly actual rainfall compared to the long term average for the regional Biodiversity Areas for the reporting period. In 2017, rainfall for most months was close to average, with the exception of well below average rainfall in February, July and September and much higher than average rainfall in March.

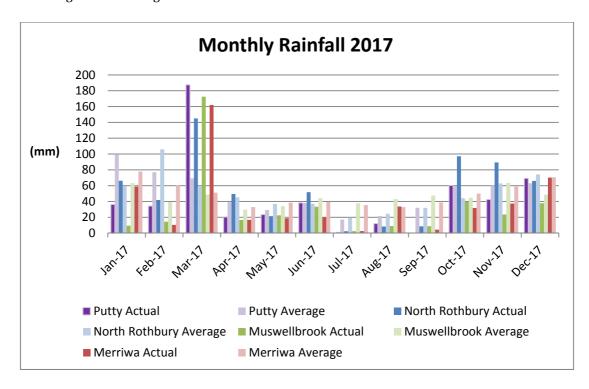


FIGURE 4 MONTHLY RAINFALL - 2017

Table 3 Summary of progress against Performance Criteria (PC)

Conservation Actions	Year 1 to Year 4 (2017 is Year 1)	Year 5 to Year 10	Completion Criteria	Actions 2018
ACTIVE RESTORATION				
Goulburn River BA Yellow Box –	Grey Box – Red Gum grassy woodland (21.5ha)	and River Oak riparian woodland (24.2ha)		
PC	Collection of seed. Plant propagation. Tubestock planted.		Planting achieves above 70% survival.	Collection of seed and plant propagation
	Completed survival assessment.			
Activity / Progress	Seed collection undertaken.			
All Regional BAs				
PC	Review monitoring data to identify areas that If re-planting is identified, develop a re-estable	require re-planting. ishment plan and implement within 12 months		Review Habitat Restoration Monitoring data.
Activity / Progress	No re-planting identified from annual ecologic	al monitoring results/recommendations.		-
PASSIVE RESTORATION				
Weed control and monitoring				
PC	At least two weed control events each year for species listed in Table 14 of Management Plans and other weeds recorded from monitoring activities.  Complete Rapid Condition Assessment and Property Inspections.	At least one weed control event each year for species t listed in Table 14 of Management Plans and other weeds recorded from monitoring activities.  Complete Rapid Condition Assessment and Property Inspections.	Ecological monitoring data indicates a trajectory for reduction in exotic plant cover over three consecutive assessments.	Weed management in autumn and spring.
				Review Habitat Restoration Monitoring data.
				Rapid Condition Assessment
Activity / Progress	Weed contractor engaged to undertake weed control activities in Autumn and Spring 2017 to control noxious species and stop weeds spreading into previously un-infested areas.  Management of the Goulburn River BA and Bowditch BA has involved the removal of grazing. Recent monitoring results from these BA's has shown an increase in exotic species cover compared with 2014 levels. The increased exotic grass cover is likely to be due to the removal of cattle which were selectively grazing the palatable exotic species.			Property Inspections

<b>Conservation Actions</b>	Year 1 to Year 4 (2017 is Year 1)	Year 5 to Year 10	Completion Criteria	Actions 2018
Pest control and monitoring				
PC  Activity / Progress	At least two control events each year for species listed in Management Plans, and any other species recorded from monitoring activities.  All actions recorded in the Annual Report.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete Rapid Condition Assessment and Property Inspections.  Noisy Miner ground shoot at the Goulburn River BA to assist the survivability of the Regent Honeyeater: 350 Noisy Miners controlled under NPWS Section 120/121.  Sixty Five feral cattle were mustered and removed from the Goulburn River BA.  1080 ground baiting undertaken in autumn and spring.  Trapping for wild dogs and foxes was undertaken on the Goulburn River and Seven Oaks BA.  Shooting for other vertebrate pests was undertaken across the BAs.	Complete Rapid Condition Assessment and Property Inspections.	No observed vertebrate pest or damage.  Ecological monitoring demonstrates a trajectory to benchmark values for all attributes measured over three consecutive assessments (the average of all plots).	Participation in HLLS Aerial Baiting programme in autumn.  Participation in HLLS Wild Dog Association programme.  Schedule shooting, baiting and trapping programmes.  Control of noisy miners in the Regent Honeyeater breeding area at GRBA
Grazing				
PC	Grazing is conducted in accordance with the l Boundary fences maintained. Complete Rapid Condition Assessment and F	·		Undertake Property Inspections.  Rapid Condition Assessment
Activity / Progress	Cattle excluded from all BAs.  Feral and trespassing cattle removed from Go Rapid Condition Assessment and Property Ins	oulburn River BA . spections undertaken and boundary fence repaired as re	quired.	_
Regional BA Bushfire Manageme	ent Plan (BFMP) and monitoring			
PC	Actions implemented.  Review and revise if required.  Complete Rapid Condition Assessment and Property Inspections.	Actions implemented.  Review and revise if required.  Complete Rapid Condition Assessment and Property Inspections.  Completed ecological fire management plan.	All required actions of BFMP have been implemented. BFMP has been reviewed annually and revised if required.	Review BFMP.
Activity / Progress	BFMP reviewed to add all new BAs.	,		-

Conservation Actions	Year 1 to Year 4 (2017 is Year 1)	Year 5 to Year 10	Completion Criteria	Actions 2018
Erosion monitoring inspections	and reports			
PC	Complete Rapid Condition Assessment and I	Rapid Condition Assessment and		
Activity / Progress	No significant erosion issues identified during	monitoring.		Property Inspections
Dam conversion and rehabilitati	ion and monitoring			
PC	Prepare dam conversion plan.	Observed natural flow regime and no erosion.	All works completed.	Prepare dam conversion plan.
	Dam conversion complete and rehabilitation has stabilised the site.	Property inspections.		
	Property inspections.			_
Activity / Progress	Property inspections undertaken.			
Natural Regeneration and moni	toring			
PC	Annual weed control, vertebrate pest and fire plans.	Implement actions as per Management plans.		
	Complete Rapid Condition Assessment and I			
Activity / Progress	Rapid Condition Assessment and Property In	spections undertaken.		
	Actions implemented as per management pla			
Controlled Activities				
PC	No reported incidents of prohibited actions ur	ndertaken Yancoal, contractors, consultants or other ager	nts of Yancoal.	Undertake Property Inspections.
	Any clearing of vegetation reported in Annual	Report.		
	Signage and locks (where required) maintain	ed.		
	Complete risk assessment for any recreation	activities.		
	All occupants of residents compliant with requ	uirements of the MP.		
	No Cultural Heritage sites knowingly disturbe	d and any protective barricading maintained.		
	Damaged and unwanted fences removed.			
	All Property Inspections completed.			_
Activity / Progress	No reported incidents of prohibited actions ur	ndertaken in 2017.		
	New Biodiversity Area signs were installed ar	nd monthly property inspections were undertaken		

#### 4 MONITORING ACTIVITIES

The following table provides a summary of the monitoring activities undertaken as detailed in the management plans. Monitoring reports and results are available on the Biodiversity Offset Portal.

**Table 4 Monitoring Activity Summary** 

Monitoring	2017	Date/s	Completed by
Bird Assemblage	N/A	August 2016, next due July – August 2018	Niche Environment and Heritage
Habitat Restoration	N/A	November 2016, next due September – November 2018	Niche Environment and Heritage
Rapid Condition Assessment	Х	November 2017, next due September – November 2018	Advisor – Land Management
Property Inspection	Х	April/November 2017, next due April/November 2018	Rural and Environmental Management

# 4.1 Bird assemblages monitoring

Bird Assemblage monitoring was not required to be undertaken during 2017. The results from the 2016 Bird Assemblage monitoring were presented in the 2016 Annual Report for Regional Offsets.

#### 4.2 Habitat restoration monitoring

Habitat Restoration monitoring was not required to be undertaken during 2017. The results from the last round of Habitat Restoration monitoring conducted in 2016 were presented in the 2016 Annual Report for Regional Offsets.

# 5 PROGRESS IN ATTAINING CONSERVATION OBJECTIVES AGAINST KEY PERFORMANCE INDICATORS

The primary conservation objectives for the Regional BAs are to:

- enhance landscape connectivity within the surrounding landscape;
- improve fauna movement and flora dispersal opportunities within the surrounding landscape;
- increased condition and area of suitable habitats for threatened fauna species within protected reserves, specifically for the Regent Honeyeater and Swift Parrot;
- provide refuge and habitat for local fauna populations and transient species, particularly threatened species; and
- enhance network of protected vegetation within the Hunter Valley.

Table 4 details the progress in attainment of the long-term conservation objectives. The baseline data presented is from the first monitoring completed in 2014. The Rapid Condition Assessment (RCA) monitoring results indicate that the vegetation and habitat health is being maintained in comparison to the baseline data.

# Table 5 Goulburn River BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	КРІ	Progress comment
Woodland (MZ2, MZ3, MZ4, MZ5 and MZ7)		Total area: 1,169ha RCA Average Health rating19.1/20	Maintain or increase area, connectivity and habitat condition over 10 years	RCA Average health rating 2015 - 17/20 2016 - 17.1/20 2017 - 17.1/20
	Fauna Habitat	Moderate potential habitat for Swift Parrot and Regent Honeyeater	improved habitat condition over 10 years	Area maintained. Stock removed.

### Table 6 Bowditch BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	KPI	Progress comment
Woodland (MZ1, MZ2 and MZ4)		Total area: 602ha RCA Average Health rating 17.8/20	Observed and measured increase or maintained RCA scores over 10 years	
	Fauna Habitat	Moderate potential habitat for Swift Parrot and Regent Honeyeater	Maintain or increase the condition and extent of habitat and bird usage over 10 years	

# Table 7 Seven Oaks BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	КРІ	Progress comment
Woodland (MZ3, MZ4 and MZ5)		Total area: 519ha RCA Average Health rating 17.6/20	Observe an increase in area, connectivity and habitat condition over 10 years	RCA Average Health rating 2016 – 18/20 2017 – 17.3/20
Fauna Habitat		Moderate potential habitat for Swift Parrot and Regent Honeyeater	Maintain or increase the condition and extent of habitat and bird usage over 10 years	

### Table 8 Condon View BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	KPI	Progress comment
Woodland (MZ2 and MZ4)		Total area: 515ha RCA Average Health rating19.1/20	Maintain or increase area, 0 connectivity and habitat condition over 10 years	RCA Average Health rating 2016 – 20/20 2017 – 18.2/20
	Fauna Habitat	Moderate potential habitat for Swift Parrot and Regent Honeyeater	Maintain or increase the condition and extent of habitat and bird usage over 10 years	

# Table 9 Putty BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	КРІ	Progress comment
Woodland (MZ2, MZ3 and MZ4)		Total area: 383ha RCA Average Health rating 17.4/20	Observe an increase in area, connectivity and habitat condition over 10 years	RCA Average Health rating 2016 – 17.3/20 2017 – 17.6/20
Fauna Habitat		Moderate potential habitat for Swift Parrot and Regent Honeyeater	Maintain or increase the condition and extent of habitat and bird usage over 10 years	

ANNUAL REPORT
April 2018

3 May 2018

# Table 10 North Rothbury BA: Biodiversity Values and KPIs

Biodiversity Value	Nested Conservation Value(s)	Description and baseline metric	KPI	Progress comment
Woodland (MZ1 and MZ2)		Total area: 41ha RCA Average Health rating 18/20	Observe an increase in area, connectivity and habitat condition over 10 years	RCA Average Health rating 2016 – 18/20 2017 – 18.2/20
	Fauna Habitat	Moderate potential habitat for Swift Parrot and Regent Honeyeater	Maintain or increase the condition and extent of habitat and bird usage over 10 years	

YANCOAL AUSTRALIA LTD PAGE 14 OF 14

ATTACHMENT B: Local Offset Management Plan Annual Report 2017





**Local Biodiversity Areas** 

**Annual Report 2017** 

April 2018

Annual report for the period from January to December 2017, for activities described in the Management Plans (2016) for all Local Warkworth Mining Limited offsets including:

- Southern Biodiversity Area (including the Putty Road Offset Area)
- Northern Biodiversity Area

# Table of Contents

1	Intr	oduction	3
2	Loc	ation and landholder details	3
		nmary of activities – 2017	
	3.1	Summary of climatic conditions	8
4	Moi	nitoring Activities	14
	4.1	Bird assemblages monitoring	14
	4.2	Habitat restoration monitoring	14
5	Pro	gress in attaining Conservation Objectives against Key Performance	
In	dicato	rs	14
6	Ada	aptive Management	15

#### 1 INTRODUCTION

This annual report is a requirement of the management plans for all Local Warkworth Mining Limited offsets for the 2017 reporting period from 1 January through to 31 December 2017.

The report provides a summary of the key management activities completed across the biodiversity offset located within the Southern (includes the Putty Road Offset Area) and Northern Biodiversity Areas (BAs).

The management plans describe the conservation management strategies and monitoring to achieve and measure improvement and protection of the offsets biodiversity values. It is a compliance requirement of the Commonwealth and NSW environmental approvals to implement the management plans.

The Local OMP (November 2014) was prepared to satisfy the consent requirements for the New South Wales (NSW) Warkworth Mine Development Approval (DA 300-9-2002i) and replaces the former *Flora and Fauna Management Plan* and *Warkworth Sands Woodland (WSW) Offset Area OMP*. In November 2015 the NSW Warkworth Continuation Project Approval (SSD-6464) was granted providing both NSW and Commonwealth approval for the same disturbance area. Phase 2 of the EPBC2009/5081 action also commenced on 16 February 2016. In response to the granting of these new approvals, new Management Plans for the Southern and Northern BA have been prepared to satisfy the Commonwealth approval EPBC2009/5081 and the NSW consent (SSD-6464), replacing both the Local and Putty Road OMPs.

The Biodiversity Offset Portal contains the supporting documentation for this report, including photo point monitoring. Access to the portal is restricted, relevant regulators have been provided with login details; please contact Yancoal Australia should you require assistance.

#### 2 LOCATION AND LANDHOLDER DETAILS

The locations of the local BAs are shown in Figure 1, Figure 2 and Figure 3, details are provided in Table 1. The land is owned by Warkworth Mining Limited (WML).

**Table 1 Local Biodiversity Areas** 

Biodiversity Area	Land Owner	Area (ha)	Offset Area (ha)	Location
Northern BA	Coal & Allied Operations Pty Ltd	344	341	Approximately 7km north of the Warkworth Mining Lease and in close proximity to the Hunter Valley Operations.
				Accessed via Comleroi Road.
Southern BA (including the Putty	Coal & Allied Operations Ptv Ltd	1,023	986	Immediately west and north of Warkworth Mine.
,	F ty Ltu			Intersected by Putty Road in the south, and Wallaby
Road Offset)	Miller Pohang Coal Company Pty Ltd			Scrub Road and the Golden Highway in the north.
	Warkworth Mining Limited			

#### Warkworth Mine





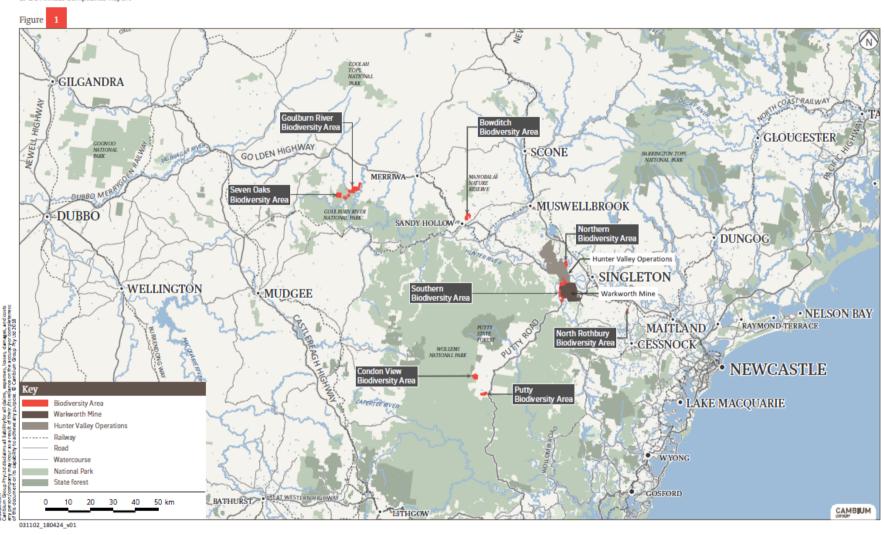


FIGURE 1 LOCATION OF WARKWORTH MINING LIMITED BIODIVERSITY AREAS

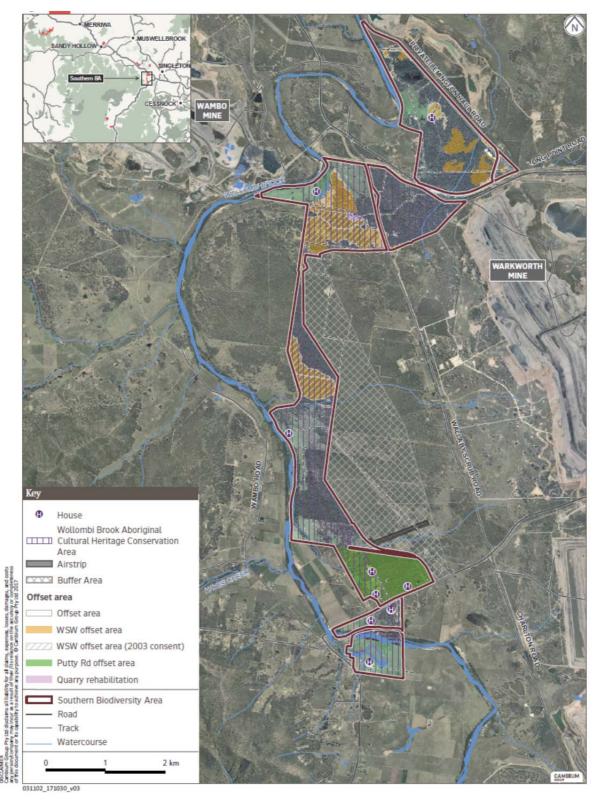


FIGURE 2 SOUTHERN BIODIVERSITY AREA - PUTTY ROAD OFFSET AREA

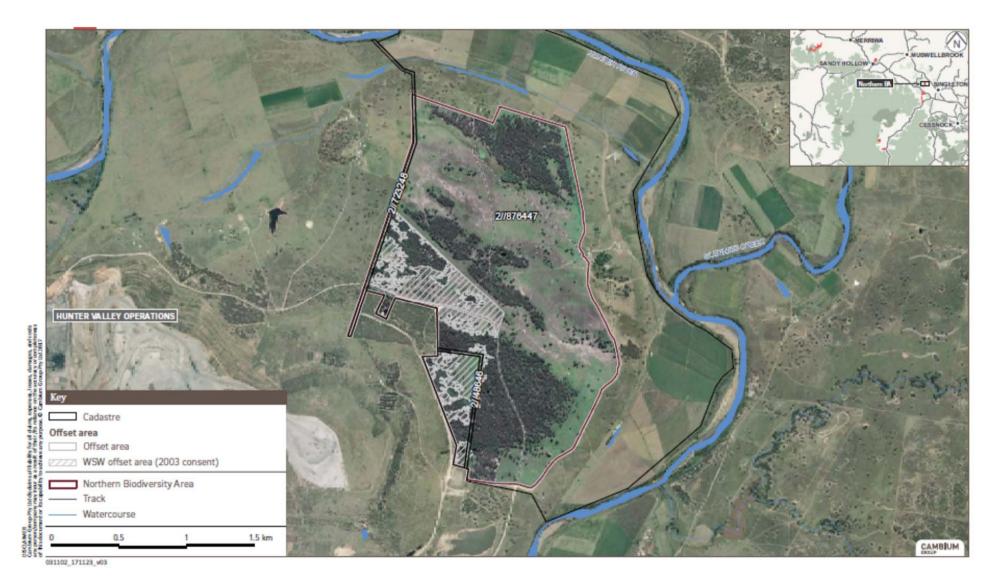


FIGURE 3 NORTHERN BIODIVERSITY AREA

#### 3 SUMMARY OF ACTIVITIES – 2017

Table 2 provides a summary of the activities undertaken during the reporting period (year 1) and the progress in attaining the Performance Criteria for the key Conservation Management Strategies in the management plans.

### 3.1 Summary of climatic conditions

The following figures show the monthly actual rainfall compared to the long term mean for the Northern BA and Southern BA for the reporting period. In 2017, rainfall was below the long term mean during most months with the exception of well above rainfall in March and October. The low rainfall was a significant factor in the survival of tubestock planted in 2017.

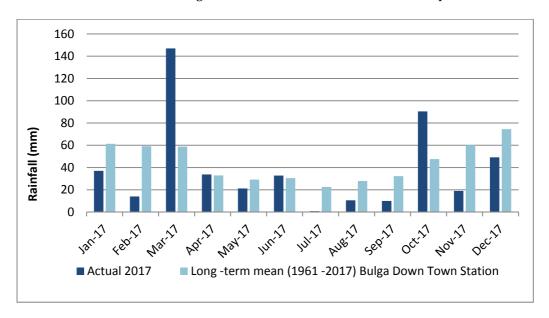


FIGURE 4 MONTHLY RAINFALL - NORTHERN BA

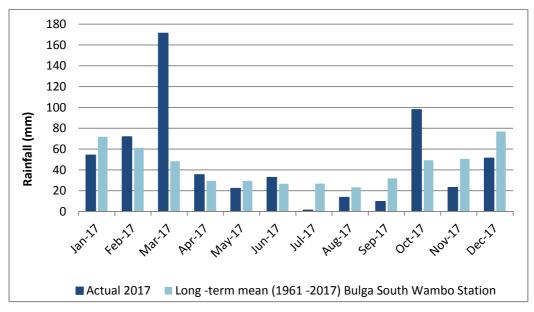


FIGURE 5 MONTHLY RAINFALL -SOUTHERN BA

Table 2 Summary of progress against Performance Criteria (PC)

0ha)			
Collection of seed. Plant propagation. Tubestock planted.	Ecological monitoring completed	Ecological monitoring demonstrates a trajectory toward the reference site or the benchmark values for HU872 for all	In 2018, planting works to restore Warkworth Sands Woodland will
Completed survival assessment.		(the average of all plots).	14ha to be planted.
Seed collection undertaken.			Collection of seed and plant propagation
1 ha of WSW Tubestock planted in the Southern BA.			Ecological monitoring completed
g (240ha)			
Collection of seed. Plant propagation. Tubestock planted.	Ecological monitoring completed.	Ecological monitoring demonstrates a trajectory toward the reference site or the NSW Biometric HU817 for all attributes measured over three consecutive assessments (the average	In 2018, restoration activities will include planting 118ha of Central Hunter Grey Box – Irophark
Completed survival assessment.		of all plots).	Woodland in the Southern BA.
Restoration activities also included planting Central Hunter Grey Box – Ironbark Woodland in 89 ha of the Southern BA with			Collection of seed and plant propagation
The site preparation for these sites included ripping by dozer and weed control. To mimic nature the tree species were planted at a spacing of 5 -10m and shrubs species planted in clumps as commonly found with understory species within this vegetation			Ecological monitoring completed
type. All plants were watered, fertilised and protected with a tree guard.			
ha)			
Collection of seed. Plant propagation. Tubestock planted.		Survival assessment greater than 70%	In 2018, restoration activities will include planting 11ha of River Oak Forest in the Southern BA
Completed survival assessment.  Seed collection was undertaken by			Collection of seed and plant propagation
			Ecological monitoring completed
. , , , , , , , , , , , , , , , , , , ,			
	Collection of seed. Plant propagation. Tubestock planted.  Completed survival assessment.  Seed collection undertaken.  1 ha of WSW Tubestock planted in the Southern BA.  (240ha)  Collection of seed. Plant propagation. Tubestock planted.  Completed survival assessment.  Restoration activities also included planting Central Hunter Grey Box – Ironbark Woodland in 89 ha of the Southern BA with over 13,000 seedlings planted into rip lines. The site preparation for these sites included ripping by dozer and weed control. To mimic nature the tree species were planted at a spacing of 5 -10m and shrubs species planted in clumps as commonly found with understory species within this vegetation type. All plants were watered, fertilised and protected with a tree guard.  Completed survival assessment.  Seed collection was undertaken by contractors in the Southern BAs during 2017, focussing on the WSW and Ironbark vegetation community. Tube stock for future plantings is currently being propagated from	Collection of seed. Plant propagation. Tubestock planted. Completed survival assessment.  Seed collection undertaken. 1 ha of WSW Tubestock planted in the Southern BA.  (240ha)  Collection of seed. Plant propagation. Tubestock planted. Completed survival assessment.  Restoration activities also included planting Central Hunter Grey Box – Ironbark Woodland in 89 ha of the Southern BA with over 13,000 seedlings planted into rip lines. The site preparation for these sites included ripping by dozer and weed control. To mimic nature the tree species were planted at a spacing of 5 - 10m and shrubs species planted in clumps as commonly found with understory species within this vegetation type. All plants were watered, fertilised and protected with a tree guard.  Completed survival assessment.  Seed collection was undertaken by contractors in the Southern BAs during 2017, focussing on the WSW and Ironbark vegetation community. Tube stock for future plantings is currently being propagated from	Collection of seed. Plant propagation. Tubestock planted. Completed survival assessment.  Ecological monitoring completed  Ecological monitoring demonstrates a trajectory toward the reference site or the benchmark values for HU872 for all attributes measured over the three consecutive assessments (the average of all plots).  Seed collection undertaken. 1 ha of WSW Tubestock planted in the Southern BA.  Callocition of seed. Plant propagation. Tubestock planted.  Completed survival assessment.  Restoration activities also included planting Central Hunter Grey Box – Ironbark Woodland in 89 ha of the Southern BA with over 13,000 seedlings planted into np lines. The site preparation for these sites included ripping by dozer and weed control. To milmo nature the tree species were planted at a patiented in clumps as commonly found with understory species within this vegetation type. All plants were watered, fertilised and protected with a tree guard.  Survival assessment  Seed collection was undertaken by contractors in the Southern BA suting 2017, focusing on the WSW and Ironbark vegetation community. Tube stock for future plantings is currently being propagated from

Conservation Actions	Year 1 to Year 5 (2017 is Year 1)	Year 6 to Year 10	Completion Criteria	Actions 2018
PC	Collection of seed. Plant propagation. Tubestock planted.	Ecological monitoring completed.	Ecological monitoring demonstrates a trajectory toward the reference site or the benchmark values for HU872 for all	Collection of seed and plant propagation
	Completed survival assessment.		attributes measured over three consecutive assessments (the average of all plots).	e Ecological monitoring completed
				Maintenance of planting areas.
Activity / Progress	Work commenced in 2014 to restore over 80 hectares of Warkworth Sands Woodland, this involved the planting of seedlings and the relocation of sand salvaged ahead of mining activities.  In 2017, planting works continued in the Northern Biodiversity Area, with over 10,800 seedlings planted. Topsoil from ahead of mining operations at MTW was salvaged and hauled to the Biodiversity Area prior to planting commencing. In total there were 44 patches established, ten received 50mm of topsoil over the patch, two received 50mm of topsoil over the patch and ten received no topsoil. The team dug holes for each seedling, either by hand or auger, into 50x50m patches. All plants were watered, fertilised and protected with a tree guard.			
Northern BA CHGBIW planting (	(23ha)			
PC	Collection of seed. Plant propagation. Tubestock planted. Completed survival assessment.	Ecological monitoring completed.	Ecological monitoring demonstrates a trajectory toward the reference site or the NSW Biometric HU817 for all three attributes measured over three consecutive assessments (the average of all plots).	Collection of seed and plant propagation  Ecological monitoring completed  Maintenance of planting areas.
Activity / Progress	Restoration activities in 2017 included planting CHGBIW into a small area of the Northern BA.			maintenance of planting areas.
PASSIVE RESTORATION  Weed control and monitoring				

At least two weed control events each year			
Plans and other weeds recorded from monitoring activities.  All actions recorded in Annual Report.  Complete Rapid Condition Assessment and Property Inspections.  Weed control programme completed by Toolijooa Environmental Restoration Pty Ltd	Complete Rapid Condition Assessment and Property	Ecological monitoring data indicates a trajectory for reduction in exotic plant cover over three consecutive assessments.	Control noxious species and stop weeds spreading into previously un infested areas.
throughout the year. Annual Weed Control Plan completed.			
species listed in Table 20 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all	in Table 17 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works	No observed vertebrate pest or damage.  Ecological monitoring demonstrates a trajectory to benchmark values for all attributes measured over three consecutive assessments (the average of all plots).	Vertebrate pest management including 1080 ground baiting programmes scheduled for autumn and spring to target wild dogs and foxes.
Vertebrate Pest programme undertaken by Rural and Environmental Management Pty Ltd across the Southern and Norther BA.			
Three 1080 ground baiting programmes were undertaken targeting wild dogs and foxes. Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken throughout the year.			
Boundary fences maintained.			Undertake Property Inspections.  Maintain boundary fences.  Rapid Condition Assessment
•			
	All actions recorded in Annual Report.  Complete Rapid Condition Assessment and Property Inspections.  Weed control programme completed by Toolijooa Environmental Restoration Pty Ltd throughout the year. Annual Weed Control Plan completed.  At least two control events each year for species listed in Table 20 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works completed and actions for next year.  Vertebrate Pest programme undertaken by Rural and Environmental Management Pty Ltd across the Southern and Norther BA.  Three 1080 ground baiting programmes were undertaken targeting wild dogs and foxes. Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken throughout the year.  Grazing is conducted in accordance with the Management Programmes maintained.  Complete Rapid Condition Assessment and Programmes and Programmes in SBA5 to exclude	All actions recorded in Annual Report.  Complete Rapid Condition Assessment and Property Inspections.  Weed control programme completed by Toolijooa Environmental Restoration Pty Ltd throughout the year. Annual Weed Control Plan completed.  At least two control events each year for species listed in Table 20 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works completed and actions for next year.  Vertebrate Pest programme undertaken by Rural and Environmental Management Pty Ltd across the Southern and Norther BA.  Three 1080 ground baiting programmes were undertaken targeting wild dogs and foxes. Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken throughout the year.  At least one control events each year for species listed in Table 17 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works completed and actions for next year.  Vertebrate Pest programme undertaken by Rural and Environmental Management Pty Ltd across the Southern and Norther BA.  Three 1080 ground baiting programmes were undertaken targeting wild dogs and foxes. Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken throughout the year.	All actions recorded in Annual Report. Complete Rapid Condition Assessment and Property Inspections.  Weed control programme completed by Toolijooa Environmental Restoration Pty Ltd throughout the year. Annual Weed Control Ptlan completed.  At least two control events each year for species listed in Table 20 of Management Plans, and any other species recorded from monitoring activities.  Active participation in programme coordinated by Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works completed and actions for next year.  Vertebrate Pest programme undertaken by Rural and Environmental Management Pty Ltd across the Southern and Norther BA.  Three 1080 ground baiting programmes were undertaken targeting wild oldgs and foxes. Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken in the Management Plan.  Boundary fences maintained.  Complete Rapid Condition Assessment and Property Inspections.  At least one control events each year for species listed in Table 17 of Management Plans, and any other species Instend from monitoring activities.  At least one control events each year for species listed in Table 17 of Management Plans, and any other species Instend from monitoring activities.  Active participation in programme coordinated by Active participation in programme coordinated by HLLS, this may include local control actions.  Complete biannual inspection and report all works completed and actions for next year.  Vertebrate Pest programme undertaken by Rural and Environmental Management Ply Ltd across the Southern and Norther BA.  Three 1080 ground baiting programmes were undertaken targeting wild oldgs and foxes.  Rabbit poisoning undertaken in planting areas Shooting of vertebrate pests undertaken throughout the year.  Grazing is conducted in accordance with the Management Plan.  Boundary fences maintained.  Complete Rapid Condition Assessment and Property Inspections.

Conservation Actions	Year 1 to Year 5 (2017 is Year 1)	Year 6 to Year 10	Completion Criteria	Actions 2018
PC	Actions implemented.	Actions implemented.	All required actions of BFMP have been implemented.	Review BFMP.
	Review and revise if required.	Review and revise if required.	BFMP has been reviewed annually and revised if required.	
	Complete Rapid Condition Assessment and Property Inspections.	Complete Rapid Condition Assessment and Property Inspections.		
		Completed ecological fire management plan for MZ1, MZ3, MZ5, MZ7, MZ8 and MZ9.		_
Activity / Progress	BFMP reviewed and updated.			
	Slashing of fire breaks was undertaken on th Southern BA.	e		
Infrastructure Improvements an	d monitoring			
PC	Completed GDP for all infrastructure improve	ment actions.		Maintain boundary fences.
	Maintenance of tracks and fences completed	at least every 3 years.		Undertake Property Inspections.
	Property Inspections undertaken.			
Activity / Progress	GDP completed for new boundary fence at S	outhern and Northern BAs in 2017.	-	
	Boundary fences maintained and Property In	spections undertaken.		
Erosion monitoring inspections	and reports			
PC	Complete Rapid Condition Assessment and	Property Inspections		Rapid Condition Assessment
Activity / Progress	Rapid Condition Assessment and Property Ir	spections undertaken	-	Property Inspections
	No significant erosion issues identified at eith	er BA		
Dam conversion and rehabilitat	ion and monitoring			
PC	Prepare dam conversion plan.	Observed natural flow regime and no erosion.	All works completed.	Dam conversion plan.
	Dam conversion complete and rehabilitation has stabilised the site.	Property inspections.		
	Property inspections.			_
Activity / Progress	Property inspections undertaken.			_
Natural Regeneration and moni	toring			

Conservation Actions	Year 1 to Year 5 (2017 is Year 1) Year 6 to Year 10	Completion Criteria	Actions 2018						
PC	Annual weed control, vertebrate pest and fire management actions implemented as per managemen plans.	benchmark values for all attributes measured over three	Undertake Property Inspections.  Rapid Condition Assessment						
	Complete Rapid Condition Assessment and Property Inspections.								
Activity / Progress	All actions implemented in 2017 as per management plans.		_						
	Rapid Condition Assessment and Property Inspections undertaken.								
Controlled Activities									
PC	No reported incidents of prohibited actions undertaken Yancoal, contractors, consultants or other ago	ents of Yancoal.							
	Any clearing of vegetation reported in Annual Report.								
	Signage and locks (where required) maintained.								
	Complete risk assessment for any recreation activities.								
	All occupants of residents compliant with requirements of the MP.								
	No Cultural Heritage sites knowingly disturbed and any protective barricading maintained.								
	Damaged and unwanted fences removed.								
	All Property Inspections completed.								
Activity / Progress	Trespassing and illegal tree clearing and timber getting within the Southern Biodiversity Area resulte	d in felling approximately 40 full sized trees and 100 small tree	es. Undertake Property Inspections.						
Activity / 1 Togress	This unauthorised activity was reported to both Department of Environment and Energy and Department of Planning and Environment in October 2017.								
	Internal fences and waste were removed from the Southern BA areas to be planted in 2018 and se	ections of boundary fence at the Northern BA were repaired a	nd						
	replaced where needed.								
	New Biodiversity Area signs were installed and monthly property inspections were undertaken								

#### 4 MONITORING ACTIVITIES

The following table provides a summary of the monitoring activities undertaken as detailed in the MP. Monitoring reports and results are available on the Biodiversity Offset Portal.

Table 3 Monitoring Activity Summary

Monitoring	2017	Date/s	Completed by
Bird Assemblage	N/A	August 2016, next due July – August 2018	Niche Environment and Heritage
Habitat Restoration	N/A	November 2016, next due September – November 2018	Niche Environment and Heritage
Rapid Condition Assessment	Х	November 2017, next due September – November 2018	Advisor – Land Management
Property Inspection	Χ	April/November 2017, next due April/November 2018	Advisor – Land Management

#### 4.1 Bird assemblages monitoring

Bird Assemblage monitoring was not required to be undertaken during 2017. The results from the 2016 Bird Assemblage monitoring were presented in the 2016 Annual Report for Local Offsets.

#### 4.2 Habitat restoration monitoring

Habitat Restoration monitoring was not required to be undertaken during 2017. The results from the last round of Habitat Restoration monitoring conducted in 2016 were presented in the 2016 Annual Report for Local Offsets.

# 5 PROGRESS IN ATTAINING CONSERVATION OBJECTIVES AGAINST KEY PERFORMANCE INDICATORS

The primary conservation objectives for the local offset areas (including the Putty Road Offset) are to:

- enhance biodiversity values across the BAs;
- protect the WSW Offset Area and Putty Road Offset Area under a legally binding conservation covenant;
- increase the condition of WSW and Ironbark EECs and observe a transition from grassland to woodland;
- enhance habitat and foraging opportunities for the woodland birds; and
- contribute to and enhance the existing network of protected vegetation within the Hunter Valley.

Table 4 indicates the progress in attainment of the long-term conservation objectives, the ecological monitoring data supports the continued implementation of the conservation management strategies.

#### **6 ADAPTIVE MANAGEMENT**

Environmental risks that have been identified during the reporting period include trespassing and illegal tree clearing and timber getting within the Southern Biodiversity Area. Yancoal has undertaken the following actions to prevent a continuation of this activity:

- Security has been increased in these areas including installation of security cameras to attempt to identify trespassers;
- Unknown locks have been removed from access gates; and
- Access gates have had higher strength chain installed to make cutting more difficult.

Table 4 Local Offset Areas Biodiversity Values and Key Performance Indicators

Area	Biodiversity Value	Description and baseline metric	KPI	Progress comment
Southern BA	Ironbark Woodland	Total area: 446.7ha RCA Average Health rating 18.1/20 (MZ1)	Extent and condition of woodland over 10 years.	RCA results: 2014 – 18/20 2015 – 18/20 2016 – 18/20 2017 – 18.5/20 Area and health maintained.
	Ironbark Grassland	Total area: 258.4ha	Transition of grassland to woodland.	2016 monitoring supports continued implementation of the conservation management strategies.
	wsw	Total area: 137ha RCA Average Health rating17.2 /20 (MZ3)	Extent and condition of woodland over 10 years.	RCA results:  2014 – 16/20  2015 – 18/20  2016 – 17/20  2017 – 18/20  Area and health maintained.
	WS Grassland	Total area:40.3ha	Transition of grassland to woodland.	
	Hunter Lowland Red Gum Forest	Total area: 32.4ha RCA Average Health rating 18.5/20 (MZ5)	Extent and condition over 10 years.	RCA results:  2014 – 17/20  2015 – 19/20  2016 – 19/20  2017 – 19/20  Area and health maintained.
	Fauna Habitat	Low potential habitat	Observe maintenance or increase habitat condition rating over 10 years	2016 monitoring supports continued implementation of the conservation management strategies.
Northern BA	Ironbark Woodland	Total area: 103.6ha RCA Average Health rating 18.8/20 (MZ1)	Extent and condition of woodland over 10 years.	RCA results:  2014 – 18/20  2015 – 18.5/20  2016 – 19.5/20  2017 – 19.5/20  Area and health maintained.

Ironbark Grassland	Total area: 23.1ha	Transition of grassland to woodland.	
wsw	Total area: 19.5ha RCA Average Health rating 18.3/20 (MZ3)	Maintain woodland extent over 10 years.	RCA results: 2014 – 17.5/20 2015 – 18/20 2016 – 19/20 2017 – 19/20 Area and health maintained.
WS Grassland	Total area: 194.5	Transition of grassland to woodland	2016 monitoring supports continued implementation of the conservation management strategies.
Fauna Habitat		Observe maintenance or increase habitat condition rating over 10 years	2016 monitoring supports continued implementation of the conservation management strategies.

YANCOAL AUSTRALIA LTD PAGE 17 OF 17

## ATTACHMENT C: EPBC 2009/5081 Compliance Register (Condition 17)

Condition	Documents	Date due (as per Approval)	Date submitted	Date approved	Date Plan on website	Date DoEE notified	Date review due
2	Putty Road Offset Management Plan	13-Apr-14	14-Apr-14	04-Jul-14	31-Jul-14	31-Jul-14	within 12 months of the approval of the Phase 2 Offset (refer Condition 5)
5	Southern BA Management Plan	17-Feb-2017	15-Feb-2017 14-Dec-2017 (revised version)	16-Feb- 2018	Waiting for DP&E approval	N/A	N/A
6	Re-Establishment Management Plan	03-Feb-15	02-Feb-15	Not yet received	N/A	N/A	within 12 months of the Commencement of Construction of Phase 2
7	Southern, Northern, Putty, Seven Oaks and North Rothbury Biodiversity Area Management Plans	17-Feb-2017	15-Feb-2017 14-Dec-2017 (revised versions)	16-Feb- 2018	Waiting for DP&E approval	N/A	N/A
	Condon View Biodiversity Area Management Plan	17-Feb-2017	15-Feb-2017 10-Oct-2017	Not yet received	N/A	N/A	N/A
8	Water Management Plan reports	03-Aug-14	15-Sep-14 (following approval by NSW regulator 10-Sep- 14)	N/A	15-Sep-14	15-Sep-14	N/A

EPBC Annual Compliance Report

11	Mine Site Rehabilitation Plan (Phase 1)	03-Feb-15	02-Feb-15	Not yet received	N/A	N/A	within 12 months of the Commencement of Construction of Phase 2
	Mine Site Rehabilitation Plan (Phase 2)	17-Feb-2017	15-Feb-2017	Not yet received	N/A	N/A	N/A
12	Mine Closure Plan	6 months prior to mine closure	N/A	N/A	N/A	N/A	N/A
15	Compliance Report	3/05/2015 (and annually thereafter)	28/04/2015	N/A	28/04/201 5	28/04/2015	03-May-16
		3/05/2016	3/05/2016	N/A	3/05/2016	3/05/2016	03-May-17
		3/05/2017	01/06/2017	N/A	10/06/201 7	01/06/2017	03-May 18
		3/05/2018	3/05/2018	N/A	3/05/2018	3/05/2018	03-May 19

EPBC Annual Compliance Report