

Mt Arthur Coal Extension Project EPBC 2011/5866 and 2014/7377

30 September 2026



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Introduction

Hunter Valley Energy Coal Pty Ltd (ACN 062 894 464) (HVEC) operates the Mt Arthur Coal complex, which consists of approved open cut and underground mining operations, a rail loop and associated rail loading facilities. The operations are located in the Upper Hunter Valley, NSW approximately five kilometres south west of Muswellbrook.

This report has been prepared to address the following conditions in the two approvals issued under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC), held by HVEC:

- Condition 14 of EPBC 2011/5866; and
- Condition 18 of EPBC 2014/7377.

Description of activities

EPBC No.	Project name	Approval holder ACN or ABN	Approved action	Location	Person accepting responsibility for the report	Dates for the reporting period of the report	Date of preparation of the report
2011/5866	Mt Arthur Coal Extension Project	ACN 062 894 464	The development of five new open cut extension areas to uncover additional coal reserves on the existing Mt Arthur Coal Complex	Muswellbrook, NSW	James Nixon	1 July 2025 to 30 June 2026	30 September 2026
2014/7377	Mt Arthur Coal open cut modification	ACN 062 894 464	The continuation of the open cut mining operations of approximately 128 million tonnes of ROM Coal within HVEC's existing mining tenements and application area – ML1487, ML 1358, ML 1548, Sublease CL 229, ML 1655 and ML 1739	Muswellbrook, NSW	James Nixon	1 July 2025 to 30 June 2026	30 September 2026

Compliance Table

In accordance with Condition 14 of EPBC 2011/5866 and Condition 18 of EPBC 2014/7377 this report provides an update of HVEC's compliance against the relevant approval conditions.

Approval EPBC 2011/5866:

Condition Number	Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments	
EPBC Approval No. 2011/5866				
5866	1	The person taking the action must not clear more than 693.8 ha of the EPBC-listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community (147.8 ha of woodland and 546 ha derived native grassland) within the proposed action areas of the Mt Arthur coal complex (shown in Appendix 1).	Compliant	A total area of 385.96 ha has been cleared to end of the reporting period, which includes: 87.56 ha of the EPBC listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland 298.40 ha of the EPBC listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland Derived Native Grassland
5866	2	The person taking the action must not clear more than 362.7 ha of woodland providing suitable habitat for the EPBC listed Regent Honeyeater and Swift Parrot within the proposed action areas of the Mt Arthur coal complex (shown in Appendix 1). Woodland that provides suitable habitat for these species on this site includes the box-ironbark dominated woodlands and the remaining woodland and forest vegetation types present on the proposed action areas.	Compliant	A total area of 258.60 ha of woodland providing suitable habitat for the EPBC listed Regent Honeyeater and Swift Parrot has been cleared to end of the reporting period.
5866	3	The person taking the action must register a legally binding conservation covenant over the conservation and offset areas identified in Table 1 (and shown in Appendix 2a and 2b) by 30	Compliant	All conservation areas and offsets were registered on title before 30 December 2017.

Condition Number	Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
	December 2017. The mechanism must provide enduring protection for no less than: a) 707.7 ha of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community (Box Gum Woodland); and b) 738.7 ha of suitable habitat for <i>Anthochaera phrygia</i> (Regent Honeyeater) and <i>Lathamus discolor</i> (Swift Parrot). <i>Note: Offsetting requirements for Regent Honeyeater and Swift Parrot habitat may be accommodated within the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community components if this habitat is verified as present and includes specific habitat requirements for each of these species in accordance with the Department's listing advice, conservation advice and/or recovery plans.</i>		
5866	4	Compliant	Progressive regeneration of woodland and forest communities at Mt Arthur Coal commenced in the mid-1990s. Rehabilitation activities are as per those reported in the Annual Review, published to the BHP Regulatory web page. BHP Environment Regulatory information
5866	5	Compliant	HVEC submitted the Biodiversity Management Plan (BioMP) to the Minister for approval on 28 June 2013. The BioMP was approved by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) on 12 August 2014.

Condition Number		Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
		protection of a minimum of 707.7 ha of Box Gum Woodland and a minimum of 738.7 ha of suitable habitat for Regent Honeyeater and Swift Parrot. The approved BioMP must be implemented.		The BioMP was revised and approved by both the DP&E, on 22 May 2019, and the DCCEE, on 5 June 2019. The BioMP is currently under review and is due to be submitted on the 30 September 2026 to DCCEE. Consultation was completed with DCCEE representatives on the 20 th August 2026.
5866	6	The BioMP must describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site and with local and regional corridors, existing conservation areas and existing biodiversity commitments at Mt Arthur Coal.	Compliant	DCCEE has reviewed the BioMP and found that it meets the requirements of Condition 6. The BioMP was approved by the DCCEE on 5 June 2019. The BioMP is currently under review and is due to be submitted on the 30 September 2026 to DCCEE. Consultation was completed with DCCEE representatives on the 20 th August 2026.
5866	7	The BioMP must include, but not be limited to, the following information: a) a text description and map to clearly define the location, boundaries and size of the conservation and offset areas and the regeneration area and rehabilitation corridors. This must be accompanied with the offset attributes and a shape file; b) details of the mechanisms, legal instrument, steps and timing for registering a legally binding conservation covenant that provides enduring protection over each nominated conservation and offset area; c) a detailed description of the current condition of the extant vegetation of each conservation and offset area	Compliant	Previously, the DCCEE have reviewed the BioMP and found that it meets the requirements of Condition 6. The revised BioMP was approved by the DCCEE on 5 June 2019. The management actions undertaken within the rehabilitation corridors and their outcomes are presented in the Annual Review published on BHP Regulatory web page. The assessment of management actions undertaken within the offset areas are presented in the Conservation Agreement Monitoring attached to this report.

Condition Number	Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
	prior to any management activities. This will provide a baseline description of the vegetation condition for the purpose of monitoring; d) details of vegetation communities to be re-established to achieve the 500 ha regeneration area and 1415 ha of rehabilitated corridors: i. timing of progressive regeneration; ii. criteria to determine success of re-establishment of the Box Gum Woodland and other woodland and forest communities; iii. documentation including mapping of current environmental values relevant to MNES of the area; iv. 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 and the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community; and the source and provenance of the seed and/or seedlings which will be used. e) details of measures to offset the impacts to the MNES described in conditions 3 and 4 including: i. details of management actions that will improve the condition of a minimum of 707.7 ha within the conservation and offset areas and 299.2 ha regeneration area to 'state 1' consistent with the state and transition model for Box Gum Woodland (Rawlings		

Condition Number	Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
	et al, 2010) and listing advice for the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community; ii. management schedules for all conservation and offset areas, the regeneration area and the rehabilitation corridors identifying targeted actions for specific areas to protect and enhance the extent and condition of habitat values of the offset areas, a map showing areas to be managed; iii. type of actions for each conservation and offset area, the regeneration area and rehabilitation corridors and details of methods to be used; iv. timing of management actions for each area; v. performance criteria for each action; vi. a detailed monitoring plan for each action including, but not limited to, control sites, periodic ecological surveys to be undertaken by a qualified ecologist, as agreed to in writing by the Minister, and consistent with survey guidelines for nationally threatened species and communities, to assess the success of the management actions measured against identified milestones and objectives; vii. contingency measures to be implemented if performance criteria are not met; viii. a process to report, to the Department, the progress of management actions undertaken in the conservation and offset areas, regeneration area and rehabilitation		

Condition Number		Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
		corridors and the outcome of those actions, including identifying any need for improved management and actions to undertake such improvement; and ix. details of the various parties responsible for management, monitoring and implementing the management activities, including their position or status as a separate contractor.		
5866	8	Where strategic grazing is proposed as a management tool, the person undertaking the action must provide, as part of the BioMP identified in condition 5, details of the proposed grazing activities for each management area. This must include: a) objectives b) details of the grazing methods to be used c) timing including seasons in which grazing will occur, period of grazing and rest period d) stocking rate per season e) monitoring of impacts of grazing including any changes in the condition of vegetation, habitat and weed density.	Compliant	The approved BioMP details proposed grazing activities. This is covered in Section 11.1 of the BioMP. No grazing activities were undertaken during the reporting year.
5866	9	Grazing activities must be undertaken in accordance with the guidelines for strategic grazing (Rawlings et al, 2010) and managed so that for each management unit at least 70% of the sward meets a minimum height of 10cm.	Not Applicable	No grazing activities were undertaken during the reporting year.
5866	10	If the person undertaking the action proposes to undertake any action within the conservation and offset areas and regeneration area, other than those management activities related to	Compliant	Only activities relating to offset management were undertaken in the offset areas.

Condition Number		Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
		managing the conservation and offset areas and regeneration area, or as set out in the conditions, approval must be obtained, in writing from the Minister. In seeking the Minister's approval the person undertaking the action must provide a detailed assessment of the area where the action is proposed to take place and an assessment of all associated adverse impacts on MNES. If the Minister agrees to the action within the conservation or offset area, the area identified for the action may be excised from the proposed conservation and offset areas and alternative offsets may be required in relation to the impact on MNES.		
5866	11	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 proponent 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	Records of data collected from conservation and offset area surveys during the reporting period are maintained by Mt Arthur Coal. No requests for survey data were made by the DCCEEW during the reporting period.
5866	12	Within 14 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Compliant	HVEC commenced the action on 21 May 2012 and advised the DCCEEW of the commencement of the action on 31 May 2012. Notification was made via a letter issued to Ms Adrienne Lea at the DCCEEW.
5866	13	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement	Compliant	Accurate records substantiating all activities associated with or relevant to the conditions of approval are maintained by

Condition Number		Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
		the Biodiversity Offset Strategy and the Biodiversity Management Plan 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 in accordance with section 458 of the EPBC Act, or 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.		HVEC. No requests for records of activities were made by the DCCEEW during the reporting period.
5866	14	Within three (3) months of the end of each Financial Year (30 June - 1 July) after the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval, including implementation of any management plans and strategies as specified in the conditions. Documentary evidence providing proof of the date of publication and non- compliance with any conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain on the website for the period this approval has effect. The approval holder may cease preparing and publishing compliance reports required by this condition with written agreement of the Minister to do so.	Compliant	All Annual Compliance Reports are published on the BHP website in September of each year: BHP Environment Regulatory information
5866	15	If the person taking the action wishes to carry out any activity otherwise than in accordance with the Biodiversity Offset Strategy and the Biodiversity Management Plan 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 Biodiversity Offset Strategy and the Biodiversity Management Plan. The varied activity shall not commence until the Minister has approved the varied plan in writing. The Minister will not approve a varied plan unless the revised plan would	Compliant	No varied activities are applicable for the 2025-2026 reporting period.

Condition Number		Condition	Compliant/ Non-Compliant/ Not Triggered	Evidence/Comments
		result in an equivalent or improved environmental outcome over time. If the Minister approves the revised Biodiversity Offset Strategy and the Biodiversity Management Plan, that Biodiversity Offset Strategy and the Biodiversity Management Plan, must be implemented in place of the Biodiversity Offset Strategy and the Biodiversity Management Plan, originally approved.		
5866	16	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and communities and listed migratory species to do so, the Minister may request that the person taking the action make specified revisions to the Biodiversity Offset Strategy and the Biodiversity Management Plan, specified in the conditions and submit the revised Biodiversity Offset Strategy and the Biodiversity Management Plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved Biodiversity Offset Strategy and the Biodiversity Management Plan must be implemented. Unless the Minister has approved the revised Biodiversity Offset Strategy and the Biodiversity Management Plan then the person taking the action must continue to implement the Biodiversity Offset Strategy and the Biodiversity Management Plan originally approved, as specified in the conditions.	Not triggered	No request was received from the Minister to make specified revisions to the BioMP during the reporting year.
5866	17	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.	Compliant	The approved BioMP is published on the BHP company website BHP Environment Regulatory information

Approval 2014/7377:

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377	1	The person taking the action must not clear more than 58.4 ha (within modification areas A-E shown in Appendix A) of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC) listed White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community.	Compliant	Total area of EPBC-listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community cleared to the end of the reporting period is 36.14 ha.
7377	2	The person taking the action must not clear more than 53.4 ha (within modification areas A-E shown in Appendix A) of woodland that provides suitable habitat for the Regent Honeyeater (<i>Anthochaera phrygia</i>), Swift Parrot (<i>Lathamus discolor</i>) and Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>). Woodland that provides suitable habitat for these species on this site includes the box-ironbark dominated woodlands and the remaining woodland and forest vegetation types present on the referred areas.	Compliant	A total area of 36.26 ha of suitable habitat was cleared by the end of the reporting period.
7377	3	The person taking the action must compensate for the loss of 58.4 ha of the White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically Endangered Ecological Community and 53.4 hectares of native woodland which provides foraging and nesting habitat for the Regent Honeyeater (<i>Anthochaera phrygia</i>), Swift Parrot (<i>Lathamus discolor</i>) and Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>) by: a) securing the following offsets, prior to commencement of the action, through a legally binding conservation covenant over the conservation and offset areas:	Compliant	Saddlers Creek Conservation Area and Middle Deep Creek Offset were registered on title on 21 June 2017 and 20 February 2017 respectively.

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
		i. 131 ha expansion of the Saddlers Creek Conservation area located approximately 1 km south of the proposed action area; and ii. 410 ha expansion of the Middle Deep Creek Offset area located approximately 70 km north of the Action area.		
7377	4	The person taking the action must submit to the Department, for approval by the Minister, a revised Biodiversity Management Plan (BioMP) for the project by 30 June 2017. The BioMP must reflect the proposed Mt Arthur Coal Complex Biodiversity Offset Strategy as generally described in the Preliminary Documentation for EPBC 2011/5866, and include the additional offsets which are described in the Preliminary Documentation for EPBC 2014/7377. The Preliminary Documentation states: a) the following offsets will be secured to compensate for the removal of the 58.4 ha of Box Gum Woodland CEEC and 53.4 ha of foraging habitat: i. a 410 ha expansion of the existing Middle Deep Creek offset area located approximately 70 km north of the Action area; and ii. a 131 ha expansion of the existing Saddlers Creek offset area located approximately 1 km south of the Action area.	Compliant	A revised Biodiversity Management Plan (BioMP) was submitted to the Department of Energy and the Environment (DOEE, now the Department of Agriculture, Water and the Environment) for approval on 29 June 2017. The current and approved BioMP is under review and is due to be submitted on the 30 September 2026. Consultation was completed with DCCEEW representatives on the 20th August 2026.
7377	5	The BioMP must describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site and with local and regional corridors, existing conservation areas and existing biodiversity commitments at the Mt Arthur Coal mine.	Compliant	The Department has reviewed the BioMP and found that it meets the requirements of Condition 6. The revised BioMP was approved by DCCEEW on 5 June 2019.

Condition Number	Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377 6	The revised BioMP must include the additional offsets for the proposed action described in EPBC 2014/7377 and follow the requirements for the BioMP outlined in the conditions in EPBC 2011/5866 described below: a) a text description and map to clearly define the location and boundaries of the conservation and offset areas and regeneration areas. This must be accompanied with the offset attributes and a shape file; b) details of the mechanisms, legal instrument, steps and timing for registering a legally binding conservation covenant that provides enduring protection over each nominated conservation and offset area; c) a detailed description of the current condition of the extant vegetation of each conservation and offset area identified in the Preliminary Documentation for EPBC 2014/7377 prior to any management activities. This will provide a baseline description of the vegetation condition of the additional offset areas for the purpose of monitoring; d) details of measures to offset the impacts to the MNES described in condition 2 and 3 including: i. details of management actions that will improve the condition of a minimum of 541 ha within the offset areas; ii. management schedules for the offset areas identifying targeted actions for specific areas to protect and enhance the extent and condition of habitat values of the offset areas, a map showing areas to be managed;	Compliant	The DCCEEW has reviewed the BioMP and found that it meets the requirements of Condition 6. The revised Biodiversity Management Plan was approved by the DCCEEW on 5 June 2019. The Biodiversity Management Plan is currently under review and will be submitted on the 30 September 2026. Consultation was completed with DCCEEW representatives on the 20th August 2026. The management actions undertaken within the rehabilitation corridors and their outcomes are presented in the Annual Review published on BHP Regulatory web page. The assessment of management actions undertaken within the offset areas are presented in the Conservation Agreement Monitoring attached to this report.

Condition Number	Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
	iii. type of management actions for each offset area and details of methods to be used; iv. timing of management actions for each offset area; v. performance criteria for each action; vi. a detailed monitoring plan for each action including, but not limited to: ~ control sites; and ~ periodic ecological surveys to be undertaken by a qualified ecologist, as agreed to in writing by the Minister, and consistent with survey guidelines for nationally threatened species and communities, to assess the success of the management actions measured against identified milestones and objectives; vii. contingency measures to be implemented if performance criteria are not met; viii. a process to report, to the Department, the progress of management actions undertaken in offset areas and the outcome of those actions, including identifying any need for improved management and actions to undertake such improvement; and ix. details of the various parties responsible for management, monitoring and implementing the management activities, including their position or status as a separate contractor.		

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377	7	Where strategic grazing is proposed as a management tool, the person undertaking the action must provide, as part of the BioMP identified in condition 5, details of the proposed grazing activities for each management area. This must include: a) objectives; b) details of the grazing methods to be used; c) timing including seasons in which grazing will occur, period of grazing and rest period; d) stocking rate per season; and e) monitoring of impacts of grazing including any changes in the condition of vegetation, habitat and weed density.	Compliant	Refer to the response provided for condition 8 of 2011/5866.
7377	8	Grazing activities must be undertaken in accordance with the guidelines for strategic grazing in A Guide to Managing Box Gum Grassy Woodlands, Kimberlie Rawlings, David Freudenberger and David Carr, Department of Environment, Water, Heritage and the Arts, Canberra, 2010.	Not Applicable	Refer to the response provided for condition 9 of 2011/5866.
7377	9	If the person undertaking the action proposes to undertake any action within the offset areas, other than those management activities related to managing the offset areas, or as set out in the conditions, approval must be obtained, in writing from the Minister. In seeking the Minister's approval the person undertaking the action must provide a detailed assessment of the area where the action is proposed to take place and an assessment of all associated adverse impacts on MNES. If the Minister agrees to the action within the offset area, the area identified for the action must be excised from the proposed offset	Compliant	Only activities relating to offset management were undertaken in the offset areas.

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
		areas and alternative offsets secured in relation to the impact on MNES.		
7377	10	The person taking the action may choose to revise a management plan approved by the Minister without submitting it for approval under s.143A of the EPBC Act, if the taking of the action in accordance with the revised management plan would not be likely to have a new or increased impact on a protected matter under the conditions of this approval. If the person taking the action makes this choice, they must: a) notify the Department in writing that the approved management plan has been revised and provide the Department with an electronic copy of the revised management plan; b) implement the revised management plan from the date that it is submitted to the Department; and c) for the life of this approval, maintain a record of the reasons the person taking the action considers that taking the action in accordance with the revised management plan would not be likely to have a new or increased impact on a protected matter under the conditions of this approval.	Compliant	Refer to the response provided for condition 15 of 2011/5866.
7377	11	The person taking the action may revoke its choice under Condition 10 at any time by notice to the Department. If the person taking the action revokes the choice to implement a revised management plan, without approval under Section 143A of the EPBC Act, the management plan approved by the Minister must be implemented.	Not triggered	Noted.

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377	12	Condition 10 does not apply if the revisions to the approved management plan include changes to offsets provided under the management plan in relation to a matter protected by a controlling provision for the action, unless otherwise agreed in writing by the Minister. This does not otherwise limit the circumstances in which the taking of the action in accordance with a revised management plan would, or would not, be likely to have new or increased impacts.	Not triggered	Noted.
7377	13	If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised management plan would be likely to have a new or increased impact on a protected matter by the conditions of this approval, then: a) condition 10 does not apply, or ceases to apply, in relation to the revised management plan; and b) the person taking the action must implement the previous management plan most recently approved by the Minister. To avoid any doubt, this condition does not affect any operation of conditions 10, 11 and 12 in the period before the day the notice is given. At the time of giving the notice the Minister may also notify that for a specified period of time that Condition 10 does not apply for one or more specified plans required under the approval.	Not triggered.	No notice provided by the Minister.

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377	14	If, at any time after 5 years from the date of this 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.	Compliant	The action commenced during November 2017.
7377	15	Within 30 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Compliant	Refer to EPBC report dated 28 September 2018.
7377	16	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans, referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved by the Minister or being submitted under Condition 10a.	Compliant	Refer to the response provided for condition 17 of 2011/5866.
7377	17	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Offset Strategy and Biodiversity Offset Management Plan 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 in accordance with section 458 of the EPBC Act, or 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.	Compliant	Refer to the response provided for condition 13 of 2011/5866.

Condition Number		Condition	Compliant/ Non Compliant/ Not Triggered	Evidence/Comments
7377	18	Within three months of the end of each Financial Year (1 July - 30 June) after the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management 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. Reports must remain on the website for the period this approval has effect. The approval holder may cease preparing and publishing compliance reports required by this condition with written agreement of the Minister to do so.	Compliant	Refer to the response provided for condition 14 of 2011/5866.
7377	19	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	No notice provided by the Minister.

New environmental risks

No new environmental risks from the Project were identified during the reporting period.

Approval was received for the Mt Arthur Coal MOD 2 on 16 April 2025.

The consent and associated reports and assessments can be found on the BHP website.

Declaration of accuracys

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.



Signed:

Full name (please print): **James Nixon**

Position (please print): **Superintendent Environment**

Organisation (please print including ABN/ACN if applicable): **Hunter Valley Energy Coal Limited (ACN 062894464)**

Date: **30 September 2026**



Mt Arthur Conservation Agreement Monitoring

Ecological Monitoring

Mt Arthur Coal / NSW Energy Coal

Thomas Mitchell Drive, Muswellbrook, NSW 2333

Prepared by:

SLR Consulting Australia Pty Ltd

SLR Project No.: 630.032382.00003

Client Reference No.: 630.032383.00003 R03 V01

23 December 2025

Revision: 01

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	23 December 2025	MP	GK	MP
	Click to enter a date.			
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	Click to enter a date.			

Basis of Report

This report has been prepared by SLR Consulting Australia Pty LTd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mt Arthur Coal / NSW Energy Coal (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Executive Summary

SLR was engaged by Mount Arthur Coal to undertake ecological monitoring surveys at a total of 43 monitoring sites within six conservation areas to meet monitoring requirements identified in the Conservation Agreement (CA) for each conservation area. Ecological monitoring surveys were undertaken within all six conservation areas in October - November 2025.

The purpose of this report is to present the findings of the monitoring surveys of the six conservation areas undertaken in 2025, in accordance with Annexure D of each conservation area's CA. This report does not include the presentation of floristic biometric attribute data utilising the Biodiversity Assessment Method as this information is only required to be presented every other year (biennially) as per each CA. Photographs and opportunistic observations identified in Annexure D, Table 3 of each conservation area's CA were collected.

The results of the monitoring surveys for each conservation area are provided in the following appendices:

- Appendix A - Roxburgh Road Offset Conservation Area;
- Appendix B - Saddlers Creek Offset Conservation Area;
- Appendix C - Mount Arthur Offset Conservation Area;
- Appendix D - Thomas Mitchell Drive On-site Offset Conservation Area;
- Appendix E - Thomas Mitchell Drive Off-site Offset Conservation Area; and
- Appendix F – Middle Deep Creek and Oakvale Offset Conservation Area.

Supporting figures for each conservation area are provided at the end of this report.



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Appendices

Appendix A Roxburgh Road Offset

- A.1 Description and Monitoring Photographs
 - A.1.1RX1: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter
 - A.1.2RX2: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter
- A.2 Walk-Through Assessment
- A.3 Recommendations
- A.4 Datasheets

Appendix B Saddlers Creek Offset

- B.1 Description and Monitoring Photographs
 - B.1.1SC1: PCT 116 Weeping Myall – Coobah – Scrub Wilga shrubland of the Hunter Valley
 - B.1.2SC2: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter
 - B.1.3SC3: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter
 - B.1.4SC4: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley
 - B.1.5SC5: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley
 - B.1.6PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley
 - B.1.7SC7: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley
 - B.1.8SC8: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley
 - B.1.9SC9: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley
 - B.1.10 SC10: PCT 1737 Typha rushland



B.1.11 SC11: PCT 1737 Typha rushland

B.2 Walk-Through Assessment

B.3 Recommendations

B.4 Datasheets

Appendix C Mt Arthur Offset

C.1 Description and Monitoring Photographs

C.1.1MA1: PCT 1543 Rusty Fig - Native Quince - Native Olive dry rainforest of the Central Hunter Valley

C.1.2MA2: PCT 1586 White Box - Sticky Daisy Bush - Bead Bush shrubby woodland with semi - evergreen vine thicket elements of the Central Hunter Valley

C.1.3MA3: PCT 1586 White Box - Sticky Daisy Bush - Bead Bush shrubby woodland with semi - evergreen vine thicket elements of the Central Hunter Valley

C.1.4MA4: PCT 1604 Narrow-leaved Ironbark - Grey Box - Spotted Gum shrub - grass open forest of the central and lower Hunter

C.1.5MA5: PCT 1604 Narrow-leaved Ironbark - Grey Box - Spotted Gum shrub - grass open forest of the central and lower Hunter

C.1.6MA6: PCT 1606 White Box - Narrow-leaved Ironbark - Blakely's Red Gum shrubby open forest of the central and upper Hunter

C.1.7MA7: PCT 1606 White Box - Narrow-leaved Ironbark - Blakely's Red Gum shrubby open forest of the central and upper Hunter

C.1.8MA8: PCT 1608 Grey Box - Grey Gum - Rough-barked Apple - Blakely's Red Gum grassy open forest of the central Hunter

C.1.9MA9: PCT 1608 Grey Box - Grey Gum - Rough-barked Apple - Blakely's Red Gum grassy open forest of the central Hunter

C.1.10 MA10: PCT 1654 Narrow-leaved Ironbark - Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley

C.1.11 MA11: PCT 1654 Narrow-leaved Ironbark - Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley

C.1.12 MA12: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

C.1.13 MA13: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

C.1.14 MA14: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

C.2 Walk-Through Assessment

C.3 Recommendations

C.4 Datasheets

Appendix D Thomas Mitchell Drive On-site Offset

D.1 Description and Monitoring Photographs

D.1.1TMON1: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter



D.1.2TMON2: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

D.1.3TMON3: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

D.1.4TMON4: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

D.2 Walk-Through Assessment

D.3 Recommendations

D.4 Datasheets

Appendix E Thomas Mitchell Drive Off-Site Offset

E.1 Description and Monitoring Photographs

E.1.1TMOF1: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

E.1.2TMOF2: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

E.1.3TMOF3: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

E.1.4TMOF4: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

E.1.5TMOF5: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

E.1.6TMOF6: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

E.2 Walk-Through Assessment

E.3 Recommendations

E.4 Datasheets

Appendix F Middle Deep Creek and Oakvale Offset

F.1 Description and Monitoring Photographs

F.1.1MDC1: PCT 281 Rough-Barked Apple - Red Gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion

F.1.2MDC2: PCT 618 White Box x Grey Box - Red Gum - Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley

F.1.3MDC3: PCT 1684 Silvertop Stringybark - Rough-barked Apple - Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment

F.1.4MDC4: PCT 1684 Silvertop Stringybark - Rough-barked Apple - Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment

F.1.5MDC5: PCT 281 Rough-Barked Apple - Red Gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion

F.1.6MDC6: PCT 618 White Box x Grey Box - Red Gum - Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley

F.2 Walk-Through Assessment



F.3 Recommendations

F.4 Datasheets

Figures

Figure 1. Roxburgh Road Offset Conservation Area

Figure 2. Saddlers Creek Offset Conservation Area

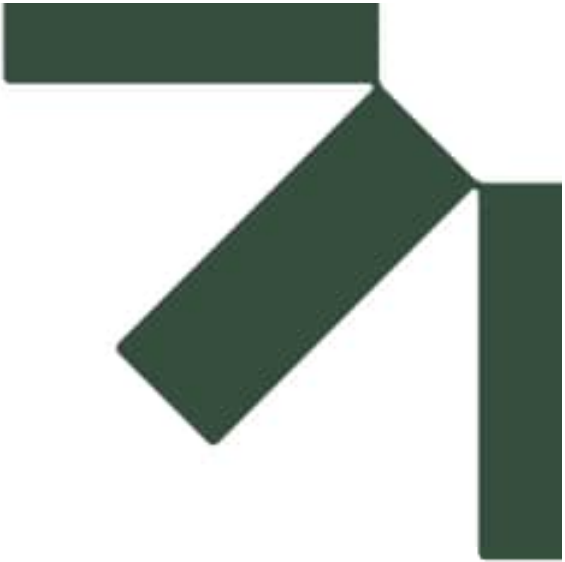
Figure 3. Mt Arthur Offset Conservation Area

Figure 4. Thomas Mitchell Drive Onsite Offset Conservation Area

Figure 5. Thomas Mitchell Drive Offsite Offset Conservation Area

Figure 6. Middle Deep Creek and Oakvale Offset Conservation Area





Appendix A Roxburgh Road Offset

Conservation Area

Mt Arthur Coal / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025

A.1 Description and Monitoring Photographs

A.1.1 RX1: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site RX1 is located in an area of Plant Community Type (PCT) 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter, and is dominated by a canopy of *Eucalyptus crebra* with *Allocasuarina littoralis* also present. The shrub layer is dominated by *Acacia paradoxa*, with *Notelaea microcarpa*, *Solanum cinereum* and *Eremophila debilis* also present. Native groundcovers included *Lomandra filiformis*, *Austrostipa scabra*, *Austrostipa verticillata*, *Chloris ventricosa* and *Microaleana stipoides*. Weed coverage is very low and includes scattered *Senecio madagascariensis* and *Lycium ferocissimum*.



North



East



South



West



A.1.2 RX2: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site RX2 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter in derived native grassland (DNG) form. It contains the regenerating canopy species *Eucalyptus crebra*, *Eucalyptus blakelyi* and *Brachychiton populneus*. Native shrubs includes *Eremophila debilis* and *Solanum cinereum*. The most prevalent native groundcovers include *Austrostipa verticillata*, *Geranium solanderi*, *Asperula conferta*, *Lomandra multiflora* and *Aristida ramose*.

Weed coverage is moderate, with *Verbena quadrangularis*, *Gomphocarpus fruticosus* and *Senecio madagascariensis* being the most prevalent.



North



East



South



West



A.2 Walk-Through Assessment

Overall, the Roxburgh Road Offset Conservation Area is considered to be in moderate to good condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 1 and Table 2):

- Easily accessible access tracks;
- No signs of rubbish dumping, however some wire fencing was recorded (refer to Figure label 450 in Table 1 and Figure 1);
- Natural regeneration of canopy species within grassland areas adjoining intact woodland; and
- Substantial weed infestations of *Verbena bonariensis*, *Carthamus lanatus*, *Gomphocarpus fruticosus*, *Hyparrhenia hirta*, *Echium plantagineum*, *Galenia pubescens* and *Hypericum gramineum* within open areas.

Opportunistic observations made while walking/driving through the conservation area are identified in Figure 1 and Table 1 below.

Table 1: Opportunistic Observations

Figure Label	Observation Type	Species/Notes
185	Canopy Regeneration	<i>Eucalyptus crebra</i>
421	Weed Infestation	<i>Verbena bonariensis</i>
422	Weed Infestation	<i>Verbena bonariensis</i>
423	Weed Infestation	<i>Verbena bonariensis</i>
424	Weed Infestation	<i>Hyparrhenia hirta</i>
425	Weed Infestation	<i>Verbena bonariensis</i>
426	Weed Infestation	<i>Verbena bonariensis</i>
427	Weed Infestation	<i>Verbena bonariensis</i>
428	Weed Infestation	<i>Verbena bonariensis</i>
429	Weed Infestation	<i>Verbena bonariensis</i> , <i>Hypericum perforatum</i>
430	Weed Infestation	<i>Verbena bonariensis</i>
431	Weed Infestation	<i>Verbena bonariensis</i>
432	Weed Infestation	<i>Verbena bonariensis</i> , <i>Carthamus lanatus</i>
433	Weed Infestation	<i>Gomphocarpus fruticosus</i>
434	Weed Infestation	<i>Gomphocarpus fruticosus</i>
435	Weed Infestation	<i>Carthamus lanatus</i>
436	Weed Infestation	<i>Gomphocarpus fruticosus</i>
437	Weed Infestation	<i>Carthamus lanatus</i>
438	Weed Infestation	<i>Carthamus lanatus</i>
439	Weed Infestation	<i>Verbena bonariensis</i> , <i>Carthamus lanatus</i>
440	Weed Infestation	<i>Verbena bonariensis</i>



Figure Label	Observation Type	Species/Notes
441	Weed Infestation	<i>Verbena bonariensis</i>
442	Weed Infestation	<i>Verbena bonariensis</i>
443	Weed Infestation	<i>Verbena bonariensis</i>
444	Weed Infestation	<i>Verbena bonariensis</i>
445	Weed Infestation	<i>Verbena bonariensis</i>
446	Weed Infestation	<i>Verbena bonariensis</i>
447	Weed Infestation	<i>Verbena bonariensis</i> , <i>Gomphocarpus fruticosus</i>
448	Weed Infestation	<i>Echium plantagineum</i> , <i>Galenia pubescens</i>
449	Weed Infestation	<i>Verbena bonariensis</i>
450	Debris	Fencing wire



A.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Carthamus lanatus*, *Hypericum perforatum*, *Hyparrhenia hirta*, *Senecio madagascariensis*) as a priority, as well as all other management actions identified in the CA. Although large infestations of weeds not classified as high threat exotics were observed, targeted control of these species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of these species in the long-term is to undertake additional plantings of appropriate canopy species (i.e. plant the same species as nearby woodland) in open-grassland areas as the prevalence of these weeds observed within wooded areas was very low (i.e. conditions under canopy trees is not conducive for the substantial growth of the weed species observed in the conservation area). Any plantings should be made within open areas that do not contain large amounts of natural regeneration.

Prior to undertaking any slashing works, any naturally regenerating or planted eucalypts should be clearly demarcated to ensure that individuals aren't accidentally removed during the slashing works. Further to this, slashing works should be undertaken prior to the flowering of the most problematic weeds (e.g. *Carthamus lanatus*), to ensure they do not set seed.

Any tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings' chances of survival (i.e. reduce competition from surrounding environmental weeds).

A.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	RX 1	Date	7/10/25
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Vegetation Community	1691
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1. Site Photo(s) Taken	7482-7485
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2. Floristic BioMetric attributes

Native cover	119.7
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Overstorey:	59.3
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Midstorey:	—
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Groundcover(grass):	27.6
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Groundcover (shrub):	10.4
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Groundcover (other):	7.3
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Native species richness:	50
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Proportion of canopy species regenerating	100
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Exotic cover	7.1
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Number of trees with hollows	0
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Total length of fallen logs	11
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3. Opportunistic observations	GPS coordinates	Photo number	Observations
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Natural regeneration of disturbed areas			no disturbed areas
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Threatened species sightings			n.i
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Fire event/fuel			moderate
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Weeds			Flowerweed present
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Pest animals			n.i
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Visitor impact/vehicles			n.i
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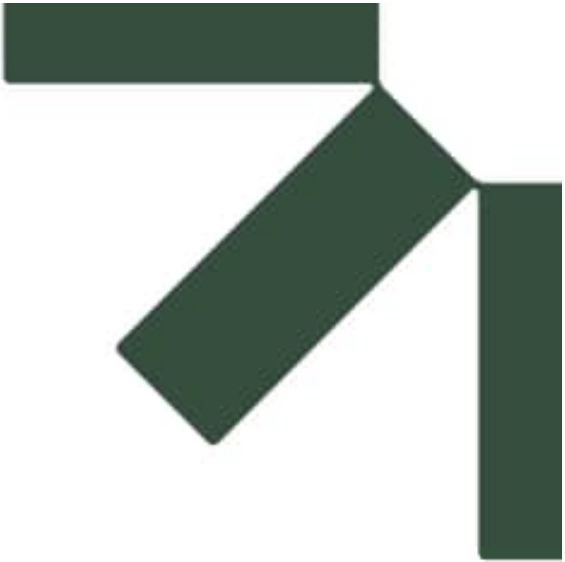
Rubbish dumping			n.i
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*Refer to monitoring letter and figure

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	Rx2	Date	7/10/25
Vegetation Community	1691		
1. Site Photo(s) Taken	7477 - 7486		
2. Floristic BioMetric attributes			
Native cover	70.8		
Overstorey:	—		
Midstorey:	0.7 - regrowth		
Groundcover (grass):	41.2		
Groundcover (shrub):	0.7		
Groundcover (other):	28.2 28.2		
Native species richness:	29		
Proportion of canopy species regenerating	100%		
Exotic cover	55.9		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			Natural regen E. critter in and around plot
Threatened species sightings	✓	—	—
Fire event/fuel			moderate fuel load
Weeds			See map
Pest animals			n.i
Visitor impact/vehicles			n.i
Rubbish dumping			n.i

* Refer to monitoring letter and figures.



Appendix B Saddlers Creek Offset

Conservation Area

Mt Arthur Coal / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025

B.1 Description and Monitoring Photographs

B.1.1 SC1: PCT 116 Weeping Myall – Coobah – Scrub Wilga shrubland of the Hunter Valley

Monitoring site SC1 is located an area of PCT 116 Weeping Myall – Coobah – Scrub Wilga shrubland of the Hunter Valley, and is dominated by a canopy of *Acacia pendula*. The shrub layer includes *Maireana microphylla*, *Sclerolaena birchii*, *Solanum cinereum* and *Eremophila debilis*. The most prevalent native groundcovers are *Austrostipa verticillata*, *Einadia trigonos*, *Senecio quadridentatus*, *Dichondra repens* and *Convolvulus erubescens*.

Weed cover is very high with the ground layer dominated by *Galenia pubescens*, *Bromus catharticus* and *Senecio madagascariensis*.



North



East



South



West



B.1.2 SC2: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site SC2 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey box grassy woodland of the central and upper Hunter in DNG form. No native canopy species are present and the shrub layer is limited to scattered *Eremophila debilis*. The most prevalent native groundcover species present include *Senecio quadridentatus*, *Dichanthium sericeum*, *Cymbopogon refractus*, *Dichondra repens* and *Austrostipa scabra*.

Weed cover is high and includes *Eragrostis curvula*, *Hypericum perforatum*, *Bromus hordeaceus* and *Carthamus lanatus*.



North



East



South



West



B.1.3 SC3: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site SC3 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey box grassy woodland of the central and upper Hunter, and is dominated by a canopy of *Eucalyptus albens* x *moluccana* and a few scattered *Brachytchiton populneus*. The shrub layer includes *Bursaria spinosa*, *Cassinia quinifaria*, *Acacia falcata*, *Dodonaea viscosa* and *Maireana microphylla*. The most prevalent native groundcovers are *Aristida ramosa*, *Austrostipa scabra*, *Austrostipa verticillata*, *Clematis glycinoides* and *Dianella prunina*.

Weed cover is very low with *Chloris gayana*, *Bryophyllum delagoense* and *Lycium ferocissimum* occurring as small, scattered patches throughout.



North



East



South



West



B.1.4 SC4: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

Monitoring site SC4 is located in an area of PCT 1692 Bull Oak grassy woodland of the central Hunter Valley, and is dominated by a canopy of *Allocasuarina luehmannii* and a shrub layer of *Eremophila debilis*. The most prevalent native groundcovers include *Aristida ramosa*, *Microlaena stipoides*, *Maireana enghylaenoides*, *Einadia nutans* and *Sporobolus creber*.

Weed cover is high with *Bryophyllum delagoense* (Mother-of-millions) dominating the ground layer. *Opuntia stricta* and *Senecio madagascariensis* were also recorded.



North



East



South



West



B.1.5 SC5: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

Monitoring site SC5 is located in area of PCT 1692 Bull Oak grassy woodland of the central Hunter Valley in DNG form. It contains no canopy species. Native shrubs include *Eremophila debilis*, *Dodonaea viscosa*, *Maireana microphylla* and *Solanum cinereum*. The most prevalent native groundcovers include *Austrostipa scabra*, *Chloris ventricosa* *Aristida ramosa*, *Dichanthium sericeum* and *Sida hackettiana*.

Weed cover is high and includes *Eragrostis curvula*, *Gomphocarpus fruticosus*, *Hypericum perforatum*, *Hyparrhenia hirta* and *Carthamus lanatus*.



North



East



South



West



B.1.6 PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

Monitoring site SC6 is located in an area of PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley, and is dominated by a canopy of *Casuarina glauca* (Swamp Oak), and a shrub layer comprised of a single *Notelaea microcarpa*. The most prevalent native groundcovers include *Austrostipa verticillata*, *Microlaena stipoides*, *Chloris ventricosa*, *Senecio quadridentatus* and *Einadia trigonos*.

Weed cover is high and includes *Bromus catharticus*, *Galenia pubescens* and *Galium aparine*, with scattered patches of *Lycium ferocissimum* and *Carthamus lanatus*.



North



East



South



West



B.1.7 SC7: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

Monitoring site SC7 is located in an area of PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley, and is dominated by a canopy of *Casuarina glauca* and a native shrub layer of *Teucrium junceum*. The most prevalent native groundcovers include *Austrostipa verticillata*, *Microlaena stipoides*, *Plectranthus parviflorus*, *Einadia trigonos* and *Lachnagrosits filiformis*.

Weed cover is high with high occurrences of *Bromus catharticus* and *Sida rhombifolia*, as well as scattered patches of *Lycium ferocissimum* and *Galium aparine*.



North



East



South



West



B.1.8 SC8: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

Monitoring site SC8 is located in an area of PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley in DNG form. No canopy or shrub layer is present. Native groundcovers include *Juncus continuus*, *Cymbopogon refractus*, *Austrostipa verticillata*, *Asperula conferta* and *Geranium solanderi*.

Weed cover is very high and includes *Eragrostis curvula*, *Paspalum dilatatum* and *Lolium perenne*.



North



East



South



West



B.1.9 SC9: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

Monitoring site SC9 is located in an area of PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley, and is dominated by a canopy of *Eucalyptus albens* x *moluccana*. Native shrubs include *Bursaria spinosa*, *Solanum cinereum*, *Notelaea macrocarpa* and *Eremophila debilis*. The most prevalent native groundcovers include *Austrostipa scabra*, *Cymbopogon refractus*, *Chloris ventricosa*, *Aristida ramosa* and *Dichondra repens*.

Weed cover is very low and includes scattered occurrences of *Hyparrhenia hirta*, *Briza minor* and *Lolium perenne*.



North



East



South



West



B.1.10 SC10: PCT 1737 Typha rushland

Monitoring site SC10 is located an area of PCT 1737 Typha rushland, and is dominated by *Juncus acutus* (Sharp Rush), but also includes the natives *Dichelachne micrantha*, *Panicum effusum*, *Phragmites australis* and *Hypericum japonicum*.

Weed cover is very high and includes *Juncus acutus* dominating the creek line, as well as *Eragrostis curvula* and *Plantagao lanceolata*.



North



East



South



West



B.1.11 SC11: PCT 1737 *Typha* rushland

Monitoring site SC11 is located in an area of PCT 1737 *Typha* rushland, and is dominated by *Juncus acutus* (Sharp Rush) within the creek line itself, but includes the regenerating canopy species *Eucalyptus melliodora* and *Brachychiton populneus* in more elevated areas. No shrub layer is present. The most prevalent native groundcover species include *Phragmites australis*, *Dichelachne micrantha*, *Asperula conferta*, *Dichondra repens* and *Glycine tabacina*.

Weed cover is very high and includes *Juncus acutus* dominating the creek line. Other weeds present in high numbers include *Bromus hordeaceus*, *Eragrostis curvula* and *Cirsium vulgare*.



North



East



South



West



B.2 Walk-Through Assessment

Overall, the Saddlers Creek Offset Conservation Area is considered to be in moderate to good condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 2 and Table 2):

- Signs of feral animals (in relatively low numbers), including the European Rabbit (*Oryctolagus cuniculus*), Feral Pig (*Sus scrofa*), and Feral Cat (*Felis catus*);
- No signs of rubbish dumping;
- Natural regeneration of canopy species, including areas of *Acacia pendula* (Weeping Myall) previously burned; and
- Substantial weed infestations of *Bryophyllum delagoense* (Mother-of-millions), *Hypericum perforatum* (St. John's Wort), *Carthamus lanatus* (Saffron Thistle), *Gomphocarpus fruticosus* (Narrow-leaved Cotton Bush), *Bromus molliformis* (Soft Brome), *Cirsium vulgare* (Spear Thistle), *Verbena bonariensis* (Purpletop), *Galenia pubescens* (Galenia), *Paspalum dilatatum* (Paspalum), *Juncus acutus* (Sharp Rush), and *Hyparrhenia hirta* (Coolatai Grass).

With the exception of *Bryophyllum delagoense* (Mother-of-millions), weed infestations recorded were largely restricted to open grassland areas that have a high soil seed bank of exotic species as a result of historical agricultural practices.

Table 2: Opportunistic observations

Figure Label	Observation Type	Species/Notes
5	Plantings	<i>Eucalyptus</i> spp.
31	Canopy Regeneration	<i>Eucalyptus albens</i> x <i>moluccana</i> and <i>Eucalyptus blakelyi</i>
32	Plantings	<i>Eucalyptus</i> spp.
47	Mature Plantings	<i>Eucalyptus</i> spp.
59	Plantings	<i>Eucalyptus</i> spp.
61	Canopy Regeneration	<i>Eucalyptus</i> spp.
70	Canopy Regeneration	<i>Eucalyptus</i> spp.
84	<i>Acacia pendula</i>	Endangered population - BC Act, regrowth patch, previously burned
88	Mature Plantings	<i>Eucalyptus</i> spp.
95	Canopy Regeneration	<i>Eucalyptus</i> spp.
96	Plantings	<i>Eucalyptus</i> spp.
97	Canopy Regeneration	<i>Eucalyptus</i> spp.
117	<i>Acacia pendula</i>	Regrowth
123	Plantings	<i>Eucalyptus</i> spp.
125	<i>Acacia pendula</i>	Endangered population - BC Act
151	Plantings	<i>Eucalyptus</i> spp.



Figure Label	Observation Type	Species/Notes
167	Mature Plantings	<i>Eucalyptus</i> spp.
173	Acacia pendula	Endangered population - BC Act, regrowth
209	Plantings	<i>Eucalyptus</i> spp.
210	Mature Plantings	<i>Eucalyptus</i> spp.
211	Plantings	<i>Eucalyptus</i> spp.
285	Weed Infestation	<i>Plantago lanceolata</i> / <i>Verbena bonariensis</i> / <i>Cirsium vulgare</i>
286	Weed Infestation	<i>Galenia pubescens</i>
287	Weed Infestation	<i>Galenia pubescens</i>
288	Weed Infestation	<i>Plantago lanceolata</i>
289	Weed Infestation	<i>Galenia pubescens</i> / <i>Pavona hastata</i> / <i>Cirsium vulgare</i>
290	Weed Infestation	<i>Cirsium vulgare</i>
291	Weed Infestation	<i>Paspalum dilatatum</i> , <i>Bromus molliformis</i> , <i>Cirsium vulgare</i> , <i>Verbena bonariensis</i>
292	Weed Infestation	<i>Hypericum perforatum</i> / <i>Paspalum dilatatum</i>
293	Feral Animal	Feral Cat X1
294	Weed Infestation	<i>Hypericum perforatum</i> / <i>Verbena bonariensis</i>
295	Weed Infestation	<i>Carthamus lanatus</i>
296	Weed Infestation	<i>Hyparrhenia hirta</i>
297	Weed Infestation	<i>Gomphocarpus fruticosus</i> / <i>Hyparrhenia hirta</i> / <i>Hypericum perforatum</i>
298	Weed Infestation	<i>Bryophyllum delagoense</i> - Previously Sprayed
299	Weed Infestation	<i>Lycium ferossimum</i>
300	Weed Infestation	<i>Bryophyllum delagoense</i> / <i>Lycium ferossimum</i>
301	Feral Animal	Feral Pig Disturbance
302	Weed Infestation	<i>Lycium ferossimum</i>
303	Weed Infestation	<i>Verbena bonariensis</i>
304	Weed Infestation	<i>Pavona hastata</i>
305	Weed Infestation	<i>Hypericum perforatum</i> / <i>Verbena bonariensis</i>
306	Weed Infestation	<i>Lycium ferossimum</i> / <i>Galenia pubescens</i>
307	Weed Infestation	<i>Galenia pubescens</i> / <i>Feral Pig Disturbance</i>
308	Weed Infestation	<i>Lycium ferossimum</i>
309	Weed Infestation	<i>Lycium ferossimum</i>
310	Weed Infestation	<i>Lycium ferossimum</i>
311	Weed Infestation	<i>Lycium ferossimum</i>
312	Feral Animal	Feral Pig Disturbance
313	Weed Infestation	<i>Galenia pubescens</i>



Figure Label	Observation Type	Species/Notes
314	Weed Infestation	<i>Gomphocarpus fruticosus</i> / <i>Carthamus lanatus</i> / <i>Hypericum perforatum</i>
315	Weed Infestation	<i>Galenia pubescens</i>
316	Weed Infestation	<i>Hypericum perforatum</i>
317	Weed Infestation/Feral Animal	<i>Galenia pubescens</i> /Feral Pig Disturbance
318	Weed Infestation	<i>Paspalum dilatatum</i>
319	Canopy Dieback	<i>Casuarina glauca</i> canopy dieback
320	Weed Infestation	<i>Paspalum dilatatum</i>
321	Weed Infestation	<i>Cirsium vulgare</i>
322	Weed Infestation	<i>Paspalum dilatatum</i>
323	Feral Animal	Feral Pig Disturbance
324	Weed Infestation	<i>Galenia pubescens</i>
325	Feral Animal	Feral Rabbit Scats
326	Weed Infestation	<i>Hypericum perforatum</i>
327	Weed Infestation	<i>Gomphocarpus fruticosus</i> / <i>Hypericum perforatum</i>
328	Weed Infestation	<i>Hypericum perforatum</i>
329	Plantings	Plantings
331	Plantings	Plantings

B.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Bryophyllum delagoense*, *Carthamus lanatus*, *Hypericum perforatum*, *Galenia pubescens*, *Juncus acutus*) as a priority, as well as all other management actions identified in the CA. Although large infestations of exotic species not classified as high threat exotics were observed within open areas, targeted control of these species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of these species in the long-term is to undertake additional plantings of appropriate canopy (i.e. plant the same species as nearby woodland) in open-grassland areas as the prevalence of these weeds within wooded areas is very low (i.e. conditions under canopy trees is not conducive for the substantial growth of weed species observed in the conservation area). Any plantings should be made within open areas that do not contain large amounts of natural regeneration. It is noted that substantial plantings have already occurred to address previous recommendations made.

Any additional tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings chances of survival (i.e. reduce competition from surrounding environmental weeds).

Prior to undertaking any slashing works, any naturally regenerating or planted eucalypts should be clearly demarcated to ensure that individuals aren't accidentally removed during



the slashing works. Further to this, slashing works should be undertaken prior to the flowering of the most problematic weeds, to ensure they do not set seed.

It is also recommended that targeted feral animal control be implemented at the feral animal observation locations identified in Figure 2 to minimise their spread to additional areas of the conservation area.

B.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	561	Date	22/10/2025
Vegetation Community	116		
1. Site Photo(s) Taken	7626-7629		
2. Floristic BioMetric attributes			
Native cover	47.8		
Overstorey:	—		
Midstorey:	20.0		
Groundcover(grass):	20.2		
Groundcover (shrub):	6.2		
Groundcover (other):	1.4		
Native species richness:	12		
Proportion of canopy species regenerating	100		
Exotic cover	65.3		
Number of trees with hollows	0		
Total length of fallen logs	65.2		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and figures
Threatened species sightings			
Fire event/fuel			
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

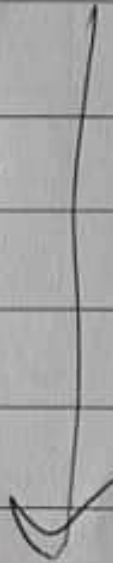
ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	SCZ	Date	22/10/25
Vegetation Community	1691		
1. Site Photo(s) Taken	7601 - 7604		
2. Floristic BioMetric attributes			
Native cover	51.4		
Overstorey:	0		
Midstorey:	-		
Groundcover(grass):	17.8		
Groundcover (shrub):	0.3		
Groundcover (other):	33.3		
Native species richness:	26		
Proportion of canopy species regenerating	NA		
Exotic cover	58.9		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See Monday letter & figures
Threatened species sightings			
Fire event/fuel			Low
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

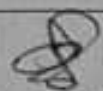
Monitoring Data Sheet				
Monitoring Point Number	SC3	Date	22/10/25	
Vegetation Community	1691			
1. Site Photo(s) Taken	7616-7619			
2. Floristic BioMetric attributes				
Native cover:	51.5			
Overstorey:	25.6			
Midstorey:	—			
Groundcover(grass):	21			
Groundcover (shrub):	1.9			
Groundcover (other):	3			
Native species richness:	35			
Proportion of canopy species regenerating	100			
Exotic cover	2.9			
Number of trees with hollows	1			
Total length of fallen logs	22.5			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter & figures	
Threatened species sightings				
Fire event/fuel				moderate
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

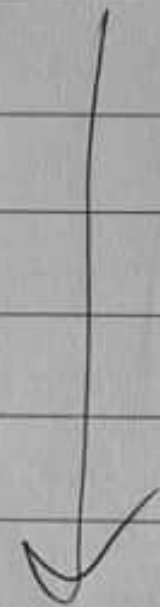
Monitoring Data Sheet			
Monitoring Point Number	564	Date	22/10/25
Vegetation Community	1692		
1. Site Photo(s) Taken	7611-7614		
2. Floristic BioMetric attributes			
Native cover	51.8		
Overstorey:	50		
Midstorey:	-		
Groundcover(grass):	0.6		
Groundcover (shrub):	0.2		
Groundcover (other):	1		
Native species richness:	15		
Proportion of canopy species regenerating	100		
Exotic cover	50.4		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter & figures
Threatened species sightings			
Fire event/fuel		Low-Med	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

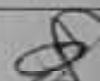
ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	SCS	Date	22/10/25
Vegetation Community	1692		
1. Site Photo(s) Taken	7606 - 7609		
2. Floristic BioMetric attributes			
Native cover	53.3		
Overstorey:	0		
Midstorey:	-		
Groundcover (grass):	41.5		
Groundcover (shrub):	1.7		
Groundcover (other):	10.1		
Native species richness:	27		
Proportion of canopy species regenerating	to NA		
Exotic cover	47.4		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter & figures
Threatened species sightings			
Fire event/fuel		None	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	SC6	Date	22/10/25
Vegetation Community	1731		
1. Site Photo(s) Taken	7631-7634		
2. Floristic BioMetric attributes			
Native cover	31.4		
Overstorey:	20.1		
Midstorey:	—		
Groundcover(grass):	10.6		
Groundcover (shrub):	0		
Groundcover (other):	0.7		
Native species richness:	11		
Proportion of canopy species regenerating	100		
Exotic cover	113.5		
Number of trees with hollows	1		
Total length of fallen logs	53		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitory letter & figures
Threatened species sightings			
Fire event/fuel		moderate	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	567	Date	22/10/25
Vegetation Community	1731		
1. Site Photo(s) Taken	7621-7625		
2. Floristic BioMetric attributes			
Native cover		60.5	
Overstorey:		50	
Midstorey:		-	
Groundcover (grass):		6.3	
Groundcover (shrub):		0.5	
Groundcover (other):		3.7	
Native species richness:		41	
Proportion of canopy species regenerating		100	
Exotic cover		62.7	
Number of trees with hollows		1	
Total length of fallen logs		12	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and figures
Threatened species sightings			
Fire event/fuel			Moderate
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	SC8	Date	22/10/25
Vegetation Community	42		
1. Site Photo(s) Taken	7593 - 7596		
2. Floristic BioMetric attributes			
Native cover	2.2		
Overstorey:	0		
Midstorey:	0		
Groundcover(grass):	1.4		
Groundcover (shrub):	0		
Groundcover (other):	0.8		
Native species richness:	11		
Proportion of canopy species regenerating	MA		
Exotic cover	92.7		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and figures
Threatened species sightings			
Fire event/fuel		moderate	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	SC9	Date	22/10/25
Vegetation Community	42		
1. Site Photo(s) Taken	7639 - 7642		
2. Floristic BioMetric attributes			
Native cover	57.9		
Overstorey:	30.1		
Midstorey:	-		
Groundcover(grass):	23.6		
Groundcover (shrub):	0.7		
Groundcover (other):	3.5		
Native species richness:	36		
Proportion of canopy species regenerating	100		
Exotic cover	1.9		
Number of trees with hollows	0		
Total length of fallen logs	15.8		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and figures
Threatened species sightings			
Fire event/fuel			moderate
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

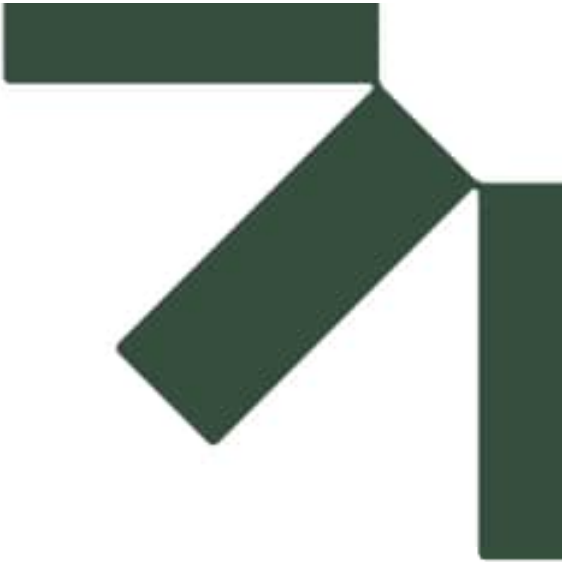
ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	SC10	Date	20/10/25	
Vegetation Community	1737			
1. Site Photo(s) Taken	7584 - 7587			
2. Floristic BioMetric attributes				
Native cover	21			
Overstorey:	0			
Midstorey:	0			
Groundcover(grass):	20.7			
Groundcover (shrub):	0			
Groundcover (other):	0.3			
Native species richness:	5			
Proportion of canopy species regenerating	0			
Exotic cover	77			
Number of trees with hollows	0			
Total length of fallen logs	0			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter and figures	
Threatened species sightings				
Fire event/fuel				low
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	SC11	Date	22/10/2025	
Vegetation Community	1737			
1. Site Photo(s) Taken	7589-7592			
2. Floristic BioMetric attributes				
Native cover	14.9			
Overstorey:	14.9 -			
Midstorey:	4.1			
Groundcover(grass):	10.2			
Groundcover (shrub):	0			
Groundcover (other):	0.6			
Native species richness:	9			
Proportion of canopy species regenerating	100			
Exotic cover	94.8			
Number of trees with hollows	0			
Total length of fallen logs	4			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See montary letter efigures	
Threatened species sightings				
Fire event/fuel				madeah
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				



Appendix C Mt Arthur Offset

Conservation Area

Mt Arthur Coal / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025

C.1 Description and Monitoring Photographs

C.1.1 MA1: PCT 1543 Rusty Fig - Native Quince - Native Olive dry rainforest of the Central Hunter Valley

Monitoring site MA1 is located in an area of PCT 1543 Rusty Fig – Native Quince – Native Olive dry rainforest of the Central Hunter Valley, and is dominated by a canopy of *Ficus rubiginosa*, with *Clerodendrum tomentosum* and *Angophora floribunda* also present. Native shrubs include *Teucrium junceum*, *Solanum brownii* and *Breynia oblongifolia*. The most prevalent native groundcovers include *Cissus antarctica*, *Oplismenus imbecillis*, *Celastrus australis*, *Adiantum aethiopicum* and *Microlaena stipoides*. Weed cover is very low and includes only low numbers of *Parietaria judaica*.



North



East



South



West



C.1.2 MA2: PCT 1586 White Box -Sticky Daisy Bush - Bead Bush shrubby woodland with semi - evergreen vine thicket elements of the Central Hunter Valley

Monitoring site MA2 is located in an area of PCT 1586 White Box – Sticky Daisy Bush – Bead Bush shrubby woodland with semi – evergreen vine thicket elements of the Central Hunter Valley. Tree species recorded was limited to *Notelaea macrocarpa*. Shrub species present include *Teucrium junceum*, *Acacia decora*, *Dodonaea viscosa*, *Solanum brownii* and *Solanum cinereum*. The most prevalent native groundcovers include *Austrostipa scabra*, *Chloris ventricosa*, *Themeda australis*, *Rytidosperma pallidum* and *Aristida ramosa*.

Weed cover is very low with minor occurrences of *Senecio madagascariensis*, *Gomphocarpus fruticosus* and *Bidens pilosa* recorded.



North



East



South



West



C.1.3 MA3: PCT 1586 White Box -Sticky Daisy Bush - Bead Bush shrubby woodland with semi - evergreen vine thicket elements of the Central Hunter Valley

Monitoring site MA3 is located in an area of White Box – Sticky Daisy Bush – Bead Bush shrubby woodland with semi – evergreen vine thicket elements of the Central Hunter Valley and includes the canopy species *Eucalyptus albens* x *moluccana*. Native small trees/shrubs include *Notelaea microcarpa*, *Acacia implexa*, *Teucrium junceum*, *Bursaria spinosa* and *Cassinia sifton*. The most prevalent native groundcovers include *Poa sieberiana*, *Austrostipa scabra*, *Lomandra filiformis*, *Aristida ramosa* and *Dichondra repens*.

Weed cover is very low with minor occurrences of *Bromus hordeaceus*, *Plantago lanceolata* and *Senecio madagascariensis* recorded.



North



East



South



West



C.1.4 MA4: PCT 1604 Narrow-leaved Ironbark -Grey Box - Spotted Gum shrub - grass open forest of the central and lower Hunter

Monitoring site MA4 is located in an area of PCT 1604 Narrow-leaved Ironbark – Grey Box – Spotted Gum shrub – grass open forest of the central and lower Hunter and is dominated by a canopy of *Corymbia maculata* and *Brachychiton populneus* also present. Native shrubs include *Notelaea microcarpa*, *Myoporum montanum*, *Teucrium junceum*, *Maireana microcarpa* and *Eremophila debilis*. Native groundcovers include *Austrostipa scabra*, *Lomandra filiformis*, *Rytidosperma pallidum*, *Poa sieberiana* and *Dianella prunina*.

Weed cover is very low with minor occurrences of *Bromus diandrus*, *Oxypetalum coeruleum*, *Lycium ferocissimum* and *Bidens pilosa*.



North



East



South



West



C.1.5 MA5: PCT 1604 Narrow-leaved Ironbark -Grey Box - Spotted Gum shrub - grass open forest of the central and lower Hunter

Monitoring site MA5 is located in an area of PCT 1604 Narrow-leaved Ironbark – Grey Box – Spotted Gum shrub – grass open forest of the central and lower Hunter in DNG form. No canopy species are present. Native shrub species include *Notelaea microcarpa* and *Maireana microphylla* recorded. The most prevalent native understorey species includes *Austrostipa scabra*, *Poa sieberiana*, *Dichelachne micrantha*, *Cymbopogon refractus* and *Aristida ramosa*.

Weed cover is low with *Plantago lanceolata*, *Opuntia stricta* and *Linum monogynum* being the most common.



North



East



South



West



C.1.6 MA6: PCT 1606 White Box - Narrow-leaved Ironbark - Blakely's Red Gum shrubby open forest of the central and upper Hunter

Monitoring site MA6 is located in an area of PCT 1606 White Box - Narrow-leaved Ironbark – Blakely's Red Gum open forest of the central and lower Hunter, and is dominated by a canopy of *Eucalyptus albens* x *moluccana* and *Eucalyptus blakelyi*. Native shrubs include *Teucrium junceum*, *Notelaea microcarpa*, *Olearia elliptica*, *Acacia salicina* and *Cassinia sifton*. The most prevalent native groundcovers include *Rytidosperma setaceum*, *Lomandra filiformis*, *Dichelachne micrantha*, *Austrostipa scabra* and *Poa sieberiana*.

Weed cover is very low with minor occurrences of *Senecio madagascariensis*, *Conyza sumatrensis* and *Sonchus oleraceus*.



North



East



South



West



C.1.7 MA7: PCT 1606 White Box - Narrow-leaved Ironbark - Blakely's Red Gum shrubby open forest of the central and upper Hunter

Monitoring site MA7 is located in an area of PCT 1606 White Box – Narrow-leaved Ironbark – Blakely's Red Gum open forest of the central and lower Hunter in DNG form. No canopy species were recorded. Native shrub species include *Notelaea microcarpa*, *Solanum brownii*, *Maireana microphylla*, *Dodonaea viscosa* and *Teucrium junceum*. The most prevalent native groundcovers include *Poa sieberiana*, *Austrostipa scabra*, *Aristida ramosa*, *Chloris ventricosa* and *Dichondra repens*.

Weed cover is low with *Bromus hordeaceus*, *Sida rhombifolia* and *Aira caryophyllea* recorded.



North



East



South



West



C.1.8 MA8: PCT 1608 Grey Box - Grey Gum - Rough-barked Apple - Blakely's Red Gum grassy open forest of the central Hunter

Monitoring site MA8 is located in an area of PCT 1608 Grey Box – Grey Gum – Rough-barked Apple – Blakely’s Red Gum grassy open forest of the central Hunter and is dominated by a canopy of *Eucalyptus blakelyi* as well as scattered *Casuarina glauca*. Native shrub species present include *Notelaea microcarpa*, *Teucrium junceum*, *Solanum brownii*, *Maireana microphylla* and *Bossiaea heterophylla*. The most prevalent native groundcovers include *Austrostipa scabra*, *Aristida ramosa*, *Lomandra filiformis*, *Chloris ventricosa* and *Dichondra repens*.

Weed cover is very low with minor occurrences of *Senecio madagascariensis*, *Hyparrhenia hirta* and *Bidens pilosa* recorded.



North



East



South



West



C.1.9 MA9: PCT 1608 Grey Box - Grey Gum - Rough-barked Apple - Blakely's Red Gum grassy open forest of the central Hunter

Monitoring site MA9 is located in an area of PCT 1608 Grey Box – Grey Gum – Rough-barked Apple – Blakely's Red Gum grassy open forest of the central Hunter, and is dominated by a canopy of *Angophora floribunda*. Native shrub species include *Notelaea macrocarpa*, *Teucrium junceum*, *Solanum brownii*, *Acacia implexa* and *Eremophila debilis*. (Hickory Wattle). The most prevalent native groundcovers include *Austrostipa scabra*, *Microlaena stipoides*, *Scutellaria humilis*, *Dichondra repens* and *Daucus glochidiatus*.

Weed cover is very low with minor occurrences of *Lysimachia arvensis*, *Bidens pilosa* and *Sonchus asper*.



North



East



South



West



C.1.10 MA10: PCT 1654 Narrow-leaved Ironbark - Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley

Monitoring site MA10 is located in an area of PCT 1654 Narrow-leaved Ironbark – Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley, and is dominated by a canopy of *Callitris endlicheri*, with *Eucalyptus albens* x *moluccana*, *Eucalyptus crebra*, *Eucalyptus blakelyi* and *Brachychiton populneus* also present. Native shrubs include *Notelaea microcarpa*, *Olearia elliptica*, *Teucrium junceum*, *Solanum brownii* and *Myoporum montanum*. The most prevalent native groundcovers include *Aristida ramosa*, *Austrostipa scabra*, *Rytidosperma setaceum*, *Microlaena stipoides* and *Lomandra filiformis*. Weed cover is very low with minor occurrences of *Sonchus asper*, *Senecio madagascariensis* and *Conyza sumatrensis* recorded.



North



East



South



West



C.1.11 MA11: PCT 1654 Narrow-leaved Ironbark - Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley

Monitoring site MA11 is located in an area of PCT 1654 Narrow-leaved Ironbark – Grey Gum shrubby open forest on sandstone ranges of the upper Hunter Valley in DNG form. It comprises the native shrubs *Notelaea macrocarpa*, *Olearia elliptica*, *Teucrium junceum*, *Solanum brownii*, *Bursaria spinosa* and *Solanum cinereum*. The most prevalent native groundcovers include *Aristida ramosa*, *Microlaena stipoides*, *Dichelachne micrantha*, *Poa sieberiana* and *Lomandra filiformis*.

Weed cover is low with *Gomphocarpus fruticosus*, *Lolium perenne* and *Lysimachia arvensis* being the most common.



North



East



South



West



C.1.12 MA12: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site MA12 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter in DNG form. Native shrub/small tree species includes *Acacia salicina*, *Maireana microphylla* and *Solanum brownii*. The most prevalent native groundcovers include *Austrostipa scabra*, *Lomandra filiformis*, *Dichelachne micrantha*, *Aristida ramosa* and *Dichanthium sericeum*.

Weed cover is low with minor occurrences of *Linum monogynum*, *Senecio madagascariensis* and *Gomphocarpus fruticosus*.



North



East



South



West



C.1.13 MA13: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site MA13 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter, and is dominated by a canopy of *Eucalyptus albens* x *moluccana* as well as scattered *Eucalyptus blakelyi*, *Allocasuarina luehmannii* and *Brachychiton populneus*. Native shrubs include *Notelaea macrocarpa*, *Teucrium junceum*, *Acacia decora*, *Dodonaea viscosa* and *Ermophila debilis*. The most prevalent native groundcovers include *Aristida ramosa*, *Poa sieberiana*, *Austrostipa scabra*, *Themeda australis* and *Lomandra multiflora*.

Weed cover is very low with minor occurrences of *Sida rhombifolia*, *Oxalis corniculata* and *Lysimachia arvensis*.



North



East



South



West



C.1.14 MA14: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

Monitoring site MA14 is located in an area of PCT 1692 Bull Oak grassy woodland of the central Hunter Valley, and is dominated by a canopy of *Allocasuarina luehmannii* with *Angophora floribunda* also present. Native shrubs include *Notelaea microcarpa*, *Acacia decora*, *Teucrium junceum*, *Maireana microphylla* and *Eremophila debilis*. The most prevalent native groundcovers include

Rytidosperma pallidum, *Austrostipa scabra*, *Oxytes brachypoda*, *Grona varians* and *Dichondra repens*.

Weed cover is very low with minor occurrences of *Opuntia stricta*, *Hypochaeris radicata* and *Senecio madagascariensis*.



North



East



South



West



C.2 Walk-Through Assessment

Overall, the Mt. Arthur Offset Conservation Area is considered to be in good condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 3 and Table 3):

- Signs of feral animals (in relatively low numbers), including the European Rabbit (*Oryctolagus cuniculus*) and Feral Pig (*Sus scrofa*). The Red Fox (*Vulpes vulpes*) and Feral Dog (*Canis familiaris*) were also recorded just outside of the conservation area, in areas to the west;
- No signs of rubbish dumping; and
- Substantial weed infestations of *Hyparrhenia hirta*, *Gomphocarpus fruticosus*, *Verbena bonariensis*, *Opuntia stricta*, *Carthamus lanatus*, *Galenia pubescens* and *Lycium ferossimum*. at a few locations within open areas.

Table 3: Opportunistic observations

Figure Label	Observation Type	Species/Notes
332	Weed Infestation	<i>Gomphocarpus fruticosus</i> / <i>Hyparrhenia hirta</i>
333	Weed Infestation	<i>Hyparrhenia hirta</i>
342	Feral Animal	Feral Dog Scats
343	Feral Animal	Feral Rabbit Scats
344	Weed Infestation	<i>Gomphocarpus fruticosus</i>
345	Feral Animal	Feral Dogs X3
346	Weed Infestation	<i>Hyparrhenia hirta</i>
347	Weed Infestation	<i>Opuntia stricta</i>
348	Weed Infestation	<i>Opuntia stricta</i>
349	Weed Infestation	<i>Lycium ferossimum</i>
350	Weed Infestation	<i>Lycium ferossimum</i>
351	Weed Infestation	<i>Opuntia stricta</i>
352	Weed Infestation	<i>Carthamus lanatus</i>
353	Weed Infestation	<i>Lycium ferossimum</i>
354	Weed Infestation	<i>Galenia pubescens</i>
355	Weed Infestation	<i>Gomphocarpus fruticosus</i>
356	Weed Infestation	<i>Verbena bonariensis</i> / <i>Gomphocarpus fruticosus</i>
357	Feral Animal	Pig Disturbance
358	Feral Animal	Pigs X4
359	Feral Animal	Pig Disturbance
360	Feral Animal	Feral Fox X1



C.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Hyparrhenia hirta*, *Carthamus lanatus*, *Galenia pubescens* and *Lycium ferossimum*) as a priority, as well as all other management actions identified in the CA. Although infestations of *Verbena bonariensis* and *Gomphocarpus fruticosus* were observed, targeted control of this species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of this weed species, as well as others in the long-term is to undertake additional plantings of appropriate canopy species (i.e. plant the same species as nearby woodland) in open-grassland areas as the prevalence of weeds observed within wooded areas was very low (i.e. conditions under canopy trees is not conducive for the substantial growth of weed species observed in the conservation area). Any plantings should be made within open areas that do not contain large amounts of natural regeneration.

Any tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings' chances of survival (i.e. reduce competition from surrounding environmental weeds).

It is also recommended that targeted feral animal control be implemented at the locations identified in Figure 3 to minimise their spread to additional areas of the conservation area.

C.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

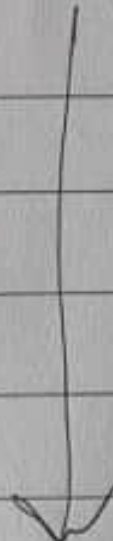
Monitoring Data Sheet			
Monitoring Point Number	MA1	Date	27/10
Vegetation Community	1543		
1. Site Photo(s) Taken	7701-7704		
2. Floristic BioMetric attributes			
Native cover	143.6		
Overstorey:	60		
Midstorey:	0.1		
Groundcover (grass):	10.6		
Groundcover (shrub):	1.5		
Groundcover (other):	65.5 71.5		
Native species richness:	23		
Proportion of canopy species regenerating	100%		
Exotic cover	0.3		
Number of trees with hollows	15.5		
Total length of fallen logs			
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			see monitoring letter & figures
Threatened species sightings			" "
Fire event/fuel			included " "
Weeds			" "
Pest animals			" "
Visitor impact/vehicles			" "
Rubbish dumping			" "

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

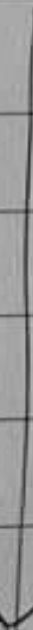
Monitoring Data Sheet

Monitoring Point Number	MAZ	Date	22/10/2025
Vegetation Community	1586		
1. Site Photo(s) Taken	6031-6034		
2. Floristic BioMetric attributes			
Native cover	135.8		
Overstorey:	20		
Midstorey:	—		
Groundcover(grass):	26.4		
Groundcover (shrub):	86.3		
Groundcover (other):	3.1		
Native species richness:	31		
Proportion of canopy species regenerating	100		
Exotic cover	1.2		
Number of trees with hollows	0		
Total length of fallen logs	7.0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter & Figures
Threatened species sightings			
Fire event/fuel		not	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MA3	Date	27/10/25
Vegetation Community	1586		
1. Site Photo(s) Taken	6722 7680-7683		
2. Floristic BioMetric attributes			
Native cover	97.5		
Overstorey:	15.1		
Midstorey:	—		
Groundcover(grass):	36.6		
Groundcover (shrub):	43.1		
Groundcover (other):	2.7		
Native species richness:	35		
Proportion of canopy species regenerating	100		
Exotic cover	1.3		
Number of trees with hollows	0		
Total length of fallen logs	14.3		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter & Figures
Threatened species sightings			
Fire event/fuel		moderate	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

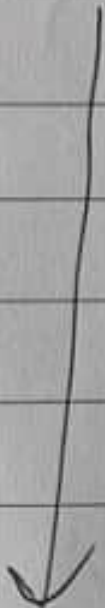
Monitoring Data Sheet			
Monitoring Point Number	MA4	Date	27/10/25
Vegetation Community	1604		
1. Site Photo(s) Taken	7674-7677		
2. Floristic BioMetric attributes			
Native cover	87.1		
Overstorey:	70.5		
Midstorey:	—		
Groundcover(grass):	12		
Groundcover (shrub):	1.9		
Groundcover (other):	2.7		
Native species richness:	35		
Proportion of canopy species regenerating	100		
Exotic cover	1.6		
Number of trees with hollows	0		
Total length of fallen logs	9.5		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See Monitoring letter & figures
Threatened species sightings			
Fire event/fuel		modest	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MAS	Date	27/10/2025
Vegetation Community	1604		
1. Site Photo(s) Taken	7669 - 7672		
2. Floristic BioMetric attributes			
Native cover	48 48		
Overstorey:	0.5		
Midstorey:	0		
Groundcover (grass):	46		
Groundcover (shrub):	0.1		
Groundcover (other):	1.4		
Native species richness:	23		
Proportion of canopy species regenerating	0		
Exotic cover	4		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter & Figures
Threatened species sightings			
Fire event/fuel		low	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			



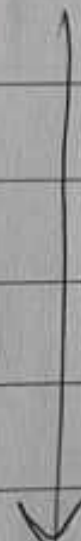
ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MA6	Date	27/10/2025	
Vegetation Community	1606			
1. Site Photo(s) Taken	7692 - 7695			
2. Floristic BioMetric attributes				
Native cover	199.3			
Overstorey:	70.1			
Midstorey:	—			
Groundcover(grass):	67.2			
Groundcover (shrub):	25.9			
Groundcover (other):	36.1			
Native species richness:	53			
Proportion of canopy species regenerating	100			
Exotic cover	0.7			
Number of trees with hollows	0			
Total length of fallen logs	8.5			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter and Figures	
Threatened species sightings				
Fire event/fuel				moderate
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MA7	Date	22/10/25	
Vegetation Community	1606			
1. Site Photo(s) Taken	6037-6040			
2. Floristic BioMetric attributes				
Native cover	107.2			
Overstorey:	0.5			
Midstorey:	—			
Groundcover (grass):	100.4			
Groundcover (shrub):	1.7			
Groundcover (other):	4.6			
Native species richness:	18			
Proportion of canopy species regenerating	NA			
Exotic cover	2.5			
Number of trees with hollows	0			
Total length of fallen logs	0			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See montary letter & Figures	
Threatened species sightings				
Fire event/fuel				low
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MAB	Date	22/10/25
Vegetation Community	1608		
1. Site Photo(s) Taken	7658 - 7661		
2. Floristic BioMetric attributes			
Native cover	156.5		
Overstorey:	50.5		
Midstorey:	-		
Groundcover(grass):	76		
Groundcover (shrub):	25.6		
Groundcover (other):	4.4		
Native species richness:	42		
Proportion of canopy species regenerating	100		
Exotic cover	1.5		
Number of trees with hollows	0		
Total length of fallen logs	0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See Monitoring letter & Figures
Threatened species sightings			
Fire event/fuel		Low	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MA9	Date	22/10/25
Vegetation Community	1608		
1. Site Photo(s) Taken	7644-7647		
2. Floristic BioMetric attributes			
Native cover	133.4		
Overstorey:	30.5		
Midstorey:	—		
Groundcover(grass):	52.2		
Groundcover (shrub):	31.6		
Groundcover (other):	19.1		
Native species richness:	37		
Proportion of canopy species regenerating	100		
Exotic cover	0.9		
Number of trees with hollows	4		
Total length of fallen logs	10.8		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter a Figures
Threatened species sightings			
Fire event/fuel			
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	MA10	Date	27/10/2025
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Vegetation Community	1654
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1. Site Photo(s) Taken	7706-7709
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2. Floristic BioMetric attributes

Native cover	199.4
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Overstorey:	85.0
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Midstorey:	—
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Groundcover(grass):	90.1
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Groundcover (shrub):	20
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Groundcover (other):	4.3
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Native species richness:	52
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Proportion of canopy species regenerating	100
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Exotic cover	1.1
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Number of trees with hollows	0
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Total length of fallen logs	27.5
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3. Opportunistic observations	GPS coordinates	Photo number	Observations
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Natural regeneration of disturbed areas			See Monitoring letter & figures
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Threatened species sightings			
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Fire event/fuel			made
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Weeds			
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Pest animals			
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Visitor impact/vehicles			
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Rubbish dumping			
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ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MA11	Date	27/10/25	
Vegetation Community	1654			
1. Site Photo(s) Taken	7696-7699			
2. Floristic BioMetric attributes				
Native cover	125.6			
Overstorey:	10			
Midstorey:	-			
Groundcover (grass):	101.5			
Groundcover (shrub):	8.5			
Groundcover (other):	5.6			
Native species richness:	44			
Proportion of canopy species regenerating	100			
Exotic cover	8.3			
Number of trees with hollows	0			
Total length of fallen logs	0			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			Refer to monitoring letter & figures	
Threatened species sightings				
Fire event/fuel				Low
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

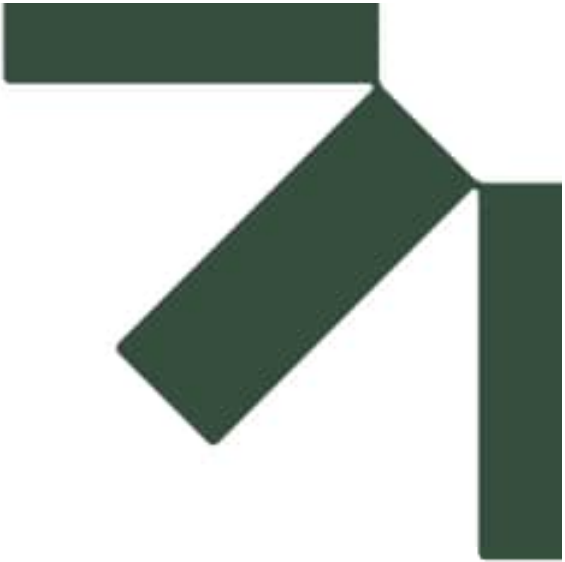
Monitoring Data Sheet			
Monitoring Point Number	MA12		Date
Vegetation Community	1691		
1. Site Photo(s) Taken	76641-7667		
2. Floristic BioMetric attributes			
Native cover	88.4		
Overslorey:	5		
Midstorey:	-		
Groundcover(grass):	77.1		
Groundcover (shrub):	1.5		
Groundcover (other):	4.8		
Native species richness:	37		
Proportion of canopy species regenerating	100		
Exotic cover	5.6		
Number of trees with hollows	0		
Total length of fallen logs	1.5		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and Figures
Threatened species sightings			
Fire event/fuel			low
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MA13	Date	27/10/25
Vegetation Community	1691		
1. Site Photo(s) Taken	1691 7653-7656		
2. Floristic BioMetric attributes			
Native cover	129.1		
Overstorey:	61.8		
Midstorey:	—		
Groundcover(grass):	57.6		
Groundcover (shrub):	6.3		
Groundcover (other):	3.4		
Native species richness:	43		
Proportion of canopy species regenerating	100		
Exotic cover	0.4		
Number of trees with hollows	1		
Total length of fallen logs	13.8		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			see monitoring letter & figures
Threatened species sightings			
Fire event/fuel		mod	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MA14	Date	22/10/2025	
Vegetation Community	1692			
1. Site Photo(s) Taken	6101 - 6104			
2. Floristic BioMetric attributes				
Native cover	81.2			
Overstorey:	75.5			
Midstorey:	-			
Groundcover (grass):	2.2			
Groundcover (shrub):	2.0			
Groundcover (other)	1.5			
Native species richness:	26			
Proportion of canopy species regenerating	100			
Exotic cover	0.4			
Number of trees with hollows	2			
Total length of fallen logs	25			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter & Figures	
Threatened species sightings				
Fire event/fuel				marked
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				



Appendix D Thomas Mitchell Drive On-site Offset

Conservation Area

Mt Arthur / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025

D.1 Description and Monitoring Photographs

D.1.1 TMON1: PCT 1691 Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter

Monitoring site TMON1 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter (DNG), and includes isolated canopy species of *Eucalyptus albens x moluccana*. No native shrubs were recorded. The most prevalent native groundcovers include *Sporobolus creber*, *Aristida ramosa*, *Poa sieberiana*, *Linum marginale* and *Geranium solanderi*. Weed cover is moderate with the most commonly occurring species being *Verbena bonariensis*, *Carthamus lanatus* and *Plantago lanceolata*.



North



East



South



West



D.1.2 TMON2: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

Monitoring site TMON2 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter, and is dominated by a canopy of *Eucalyptus blakelyi* as well as scattered occurrences of *Eucalyptus albens* x *moluccana*. Native shrubs include *Acacia falcata*, *Teucrium junceum*, *Solanum brownii*, *Eremophila debilis* and *Cassinia quinquefaria*. The most prevalent native groundcovers include *Austrostipa scabra*, *Aristida ramosa*, *Poa sieberiana*, *Lomandra filiformis* and *Cynodon dactylon*.

Weed cover is low and includes *Hypochaeris radicata*, *Eragrostis curvula* and *Bryophyllum delagoense*.



North



East



South



West



D.1.3 TMON3: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

Monitoring site TMON3 is located an area of PCT 1692 Bull Oak grassy woodland of the central Hunter Valley in DNG form. The native canopy includes scattered *Allocasuarina luehmannii* and *Angophora floribunda*. Native shrubs include *Acacia decora*. The most prevalent native groundcovers include *Lomandra filiformis*, *Chrysocephalum apiculatum*, *Cymbopogon refractus*, *Goodenia pinnatifida* and *Eragrostis brownii*.

Weed cover is very high and includes *Vulpia bromoides*, *Eragrostis curvula* and *Briza minor*.



North



East



South



West



D.1.4 TMON4: PCT 1692 Bull Oak grassy woodland of the central Hunter Valley

Monitoring site TMON4 is located in an area of PCT 1692 Bull Oak grassy woodland of the central Hunter Valley, and is dominated by a canopy of *Allocasuarina luehmannii*. The area has been previously mulched resulting in a significant thinning of the canopy. Native shrubs include *Acacia salicina*, *Sclerolaena birchii*, *Enchylaena tomentosa*, *Maireana microphylla* and *Solanum brownii*. The most prevalent native groundcovers include *Austrostipa scabra*, *Aristida vagans*, *Calotis cuneifolia*, *Cymbopogon refractus* and *Senecio quadridentatus*.

Weed cover is moderate and includes *Senecio madagascariensis*, *Phytolacca octandra* and *Cirsium vulgare*.



North



East



South



West



D.2 Walk-Through Assessment

Overall, the Thomas Mitchell Drive On-site Conservation Area is considered to be in moderate condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 4 and Table 4):

- No signs of rubbish dumping or feral animals;
- Slashed access tracks;
- Natural regeneration of canopy species;
- Significant planting of canopy species;
- Presence of *Acacia pendula* (Weeping Myall);
- Presence of the threatened species *Diuris tricolor* within new areas not previously recorded; and
- Substantial weed infestations of *Hyparrhenia hirta*, *Bryophyllum delagoense*, *Lycium ferossimum*, *Acacia saligna*, *Hypericum perforatum*, *Verbena bonariensis*, *Carthamus lanatus*, *Echium plantagineum* and *Cortaderia selloana*.

Weed infestations recorded were largely restricted to open grassland areas and included the environmental weeds listed above and in Table 4. Their prevalence is considered to be a result of high levels of seed in the soils as a result of historical agricultural land uses, and not management within the conservation area. Significant plantings and slashing was observed within the conservation area.

Table 4: Opportunistic Observations

Figure Label	Observation Type	Species/Notes
50	Threatened Population	Endangered population - BC Act
72	Canopy Regeneration	<i>Allocasuarina luehmannii</i> and <i>Eucalyptus blakelyi</i>
94	Threatened Population	Endangered population - BC Act
112	Threatened Population	Endangered population - BC Act
120	Plantings	<i>Eucalyptus</i> spp.
131	Plantings	<i>Eucalyptus</i> spp.
145	Plantings	<i>Eucalyptus</i> spp.
175	Plantings	<i>Eucalyptus</i> spp.
205	Plantings	<i>Eucalyptus</i> spp.
217	Plantings	<i>Eucalyptus</i> spp.
219	Threatened Population	Endangered population - BC Act
272	Weed Infestation	<i>Bryophyllum delagoense</i>
273	Weed Infestation	<i>Lycium ferossimum</i>
274	Weed Infestation	<i>Acacia saligna</i>
275	Threatened Species	<i>Diuris tricolor</i> x1
276	Threatened Species	<i>Diuris tricolor</i> x4
277	Threatened Species	<i>Diuris tricolor</i> x1



Figure Label	Observation Type	Species/Notes
278	Threatened Species	<i>Diuris tricolor</i> x5
279	Threatened Species	<i>Diuris tricolor</i> x3
280	Threatened Species	<i>Diuris tricolor</i> x3
281	Threatened Species	<i>Diuris tricolor</i> x1
282	Threatened Species	<i>Diuris tricolor</i> x1
283	Weed Infestation	<i>Lycium ferossimum</i>
284	Weed Infestation	<i>Lycium ferossimum</i>
334	Weed Infestation	<i>Verbena bonariensis</i> / <i>Carthamus lanatus</i>
335	Weed Infestation	<i>Verbena bonariensis</i>
336	Weed Infestation	<i>Verbena bonariensis</i> / <i>Carthamus lanatus</i>
337	Weed Infestation	<i>Lycium ferossimum</i> / <i>Carthamus lanatus</i>
338	Weed Infestation	<i>Verbena bonariensis</i> / <i>Carthamus lanatus</i>
339	Weed Infestation	<i>Carthamus lanatus</i>
340	Weed Infestation	<i>Lycium ferossimum</i>
341	Weed Infestation	<i>Hypericum perforatum</i> / <i>Carthamus lanatus</i> / <i>Echium plantagineum</i>
361	Weed Infestation	<i>Cortaderia selloana</i>
362	Weed Infestation	<i>Cortaderia selloana</i>
451	Weed Infestation	<i>Hyparrhenia hirta</i>
452	Weed Infestation	<i>Hyparrhenia hirta</i>
453	Weed Infestation	<i>Hyparrhenia hirta</i>

D.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Hypericum perforatum*, *Hyparrhenia hirta*, *Bryophyllum delagense*, *Carthamus lanatus*, *Lycium ferossimum*, *Cortaderia selloana*) as a priority, as well as all other management actions identified in the CA. It is noted that the conservation area contains a known population of the threatened species *Diuris tricolor*, with new individuals recorded within areas not previously identified. The known occurrences of this species were thought to have been well documented through ongoing monitoring surveys; however, additional records beyond the previously known extent means that the species may be more widely distributed than originally thought. It is recommended that further monitoring surveys include areas beyond the previously known distribution of the species within the CA to get a more accurate distribution of the species' extent and to better inform future management. No weed spraying within 200m of any previously mapped occurrences of the species should occur. Further to this, any slashing undertaken within, or nearby mapped occurrences of the species should be undertaken outside of the species' flowering period (September to October).



Although large infestations of weeds not classified as high threat exotics were observed, targeted control of these species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of these species (as well as other species) in the long-term is to undertake additional plantings of appropriate canopy species (i.e. plant the same species as nearby woodland) in open-grassland areas as the prevalence of weeds observed within wooded areas was very low (i.e. conditions under canopy trees is not conducive for the substantial growth of weed species observed in the conservation area). Any plantings should be made within open areas that do not contain large amounts of natural regeneration.

Any additional tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings chances of survival (i.e. reduce competition from surrounding environmental weeds).

Prior to undertaking any slashing works, any naturally regenerating or planted eucalypts should be clearly demarcated to ensure that individuals aren't accidentally removed during the slashing works. Further to this, slashing works should be undertaken prior to the flowering of the most problematic weeds, to ensure they do not set seed.

D.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	THON1		Date
Vegetation Community		1691	
1. Site Photo(s) Taken		7579 - 7582	
2. Floristic BioMetric attributes			
Native cover		8.8	
Overstorey:		-	
Midstorey:		6	
Groundcover(grass):		2.3	
Groundcover (shrub):		0	
Groundcover (other):		0.5	
Native species richness:		9	
Proportion of canopy species regenerating		0	
Exotic cover		37.8	
Number of trees with hollows		0	
Total length of fallen logs		1	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			see monitoring letter and figure
Threatened species sightings			
Fire event/fuel			
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	TMOB2		Date	10/10/25
Vegetation Community	1691			
1. Site Photo(s) Taken	7529-7532			
2. Floristic BioMetric attributes				
Native cover	66.5			
Overstorey:	35.1			
Midstorey:	-			
Groundcover(grass):	27.8			
Groundcover (shrub):	1.0			
Groundcover (other):	2.5			
Native species richness:	30			
Proportion of canopy species regenerating	100			
Exotic cover	5.5			
Number of trees with hollows	0			
Total length of fallen logs	15			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			nil	
Threatened species sightings			Ducis tricolor in surrounds	
Fire event/fuel			moderate	
Weeds			Mother-of-millions in plot	
Pest animals			nil	
Visitor impact/vehicles			nil	
Rubbish dumping			nil	

* see 1st letter + figures

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	TM003		Date	10/10/25
Vegetation Community	1692			
1. Site Photo(s) Taken	7541 - 7544			
2. Floristic BioMetric attributes				
Native cover	24.4			
Overstorey:	-			
Midstorey:	5.1			
Groundcover (grass):	12.1			
Groundcover (shrub):	0.3			
Groundcover (other):	6.9			
Native species richness:	18			
Proportion of canopy species regenerating	0			
Exotic cover	96.7			
Number of trees with hollows	0			
Total length of fallen logs	0			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			- yes - see map	
Threatened species sightings			Dingo tracker in surrounds. Not previously recorded in area - see map	
Fire event/fuel			low	
Weeds			see mapping	
Pest animals			- no	
Visitor impact/vehicles			- nil	
Rubbish dumping			- nil	

see monitoring
with figures

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	TH004	Date	10/10/28
Vegetation Community		1692	
1. Site Photo(s) Taken	7535-7538		
2. Floristic BioMetric attributes			
Native cover		53.2	
Overstorey:		30.3	
Midstorey:		-	
Groundcover(grass):		12.8	
Groundcover (shrub):		1.5	
Groundcover (other):		8.6	
Native species richness:		2.5	
Proportion of canopy species regenerating		106	
Exotic cover		24.2	
Number of trees with hollows		0	
Total length of fallen logs		33.3	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			n.i. yes, disturbance regenerating in previously cleared areas
Threatened species sightings			n.i.
Fire event/fuel			moderate
Weeds			various yes - see nippy
Pest animals			n.i.
Visitor impact/vehicles			n.i.
Rubbish dumping			n.i.

See

See monitoring 1st & 2nd August

Appendix E Thomas Mitchell Drive Off-Site Offset

Conservation Area

Mt Arthur / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025



E.1 Description and Monitoring Photographs

E.1.1 TMOF1: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

Monitoring site TMOF1 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter in DNG form. It includes canopy and shrub species planted greater than five years ago and includes *Eucalyptus blakelyi* and *Eucalyptus crebra*. Native shrubs include *Acacia salicina*. The most prevalent native groundcovers include *Poa sieberiana*, *Austrostipa scabra*, *Chrysocephalum semipapposum*, *Lomandra filiformis* and *Geranium solanderi*.

Weed cover is moderate to high with *Plantago lanceolata* being the most prevalent along with scattered occurrences of *Hypericum perforatum*, *Hyparrhenia hirta* and *Senecio madagascariensis* recorded.



North



East



South



West



E.1.2 TMOF2: PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter

Monitoring site TMOF2 is located in an area of PCT 1691 Narrow-leaved Ironbark – Grey Box grassy woodland of the central and upper Hunter, and is dominated by a canopy of *Eucalyptus crebra* with the native shrub *Eremophila debilis* recorded. The most prevalent native groundcovers include *Austrostipa scabra*, *Wahlenbergia planiflora*, *Dichondra repens*, *Poa sieberiana* and *Cotula australis*.

Weed cover is low with minor occurrences of *Lolium perenne*, *Aira caryophyllea* and *Hypochaeris radicata* being most common.



North



East



South



West



E.1.3 TMOF3: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

Monitoring site TMOF3 is located in an area of PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley and is dominated by a canopy of *Casuarina glauca*. No shrub layer is present. The only native groundcovers recorded include *Austrostipa verticillata* and *Lobelia purpurascens*.

Weed cover is very high with *Bromus catharticus*, *Galium aparine* and *Rapistrum rugosum* being most common.



North



East



South



West



E.1.4 TMOF4: PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley

Monitoring site TMOF4 is located in an area of PCT 1731 Swamp Oak – Weeping Grass grassy riparian forest of the Hunter Valley, and is dominated by a canopy of *Casuarina glauca*, with the native shrub *Maireana microphylla* also recorded. The most prevalent native groundcovers include *Austrostipa verticillata*, *Cyperus gracilis*, *Dichondra sp.* Inglewood and *Senecio quadridentatus*.

Weed cover is very high with significant infestations *Ehrharta erecta*, *Cirsium vulgare* and *Sonchus asper*. Areas of dense *Lycium ferocissimum* have been treated, but living individuals were still recorded.



North



East



South



West



E.1.5 TMOF5: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

Monitoring site TMOF5 is located in an area of PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley, and is dominated by a canopy of *Eucalyptus tereticornis* as well as scattered *Eucalyptus crebra*. Native shrubs include *Notelaea microcarpa*, *Cassinia Sifton*, *Eremophila debilis* and *Santalum obtusifolium*. The most common native groundcovers include *Austrostipa scabra*, *Sporobolus creber*, *Microlaena stipoides*, *Lomandra glauca* and *Dichondra repens*.

Weed cover is moderate with *Lolium perenne* being the most common, with scattered occurrences of *Briza minor* and *Bromus hordeaceus*.



North



East



South



West



E.1.6 TMOF6: PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley

Monitoring site TMOF6 is located in an area of PCT 42 River Red Gum / River Oak riparian woodland wetland in the Hunter Valley, and is dominated by a canopy of *Eucalyptus blakelyi*. Native shrubs include *Acacia salicina*, *Eremophila debilis* and *Maireana microphylla*. The most prevalent native groundcovers include *Austrostipa verticillata*, *Dichondra repens*, *Geranium solanderi*, *Einadia trigonos* and *Glycine tabacina*.

Weed cover is very high with a high infestation of *Galenia pubescens*, with *Secale cereale* and *Bromus catharticus* also present.



North



East



South



West



E.2 Walk-Through Assessment

Overall, the Thomas Mitchell Drive Off-site Offset Conservation Area is considered to be in moderate to good condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 5 and Table 5):

- Signs of feral animals limited to the presence of the European Rabbit (*Oryctolagus cuniculus*);
- No signs of rubbish dumping;
- Recently slashed access tracks;
- Previous treatment of *Lycium ferocissimum* around monitoring point TMOF4;
- Substantial plantings of canopy species throughout previously cleared areas;
- Substantial areas of natural regeneration of canopy species within previously cleared areas; and
- Weed infestations of *Hypericum perforatum*, *Galenia pubescens*, *Carthamus lanatus*, *Verbena bonariensis*, *Opuntia aurantiaca*, *Acacia saligna*, *Pavona hastata*, *Cirsium vulgare*, *Gomphocarpus fruticosus* and *Lycium ferocissimum*.

With the exception of *Lycium ferocissimum*, *Opuntia aurantiaca* and *Galenia pubescens* within some woodland areas, weed infestations recorded were largely restricted to open grassland areas that have a high soil seed bank of exotic species as a result of historical agricultural practices.

Table 5: Opportunistic observations

Figure Label	Observation Type	Species/Notes
6	Canopy Regeneration	<i>Eucalyptus crebra</i>
22	Plantings	<i>Eucalyptus</i> spp.
28	Canopy Regeneration	<i>Eucalyptus crebra</i>
33	Plantings	<i>Eucalyptus</i> spp.
40	Canopy Regeneration	<i>Eucalyptus crebra</i>
41	Canopy Regeneration	<i>Eucalyptus crebra</i>
42	Canopy Regeneration	<i>Eucalyptus crebra</i>
44	Canopy Regeneration	<i>Eucalyptus crebra</i>
48	Plantings	<i>Eucalyptus</i> spp.
58	Canopy Regeneration	<i>Eucalyptus blakelyi</i>
64	Canopy Regeneration	<i>Eucalyptus crebra</i> and <i>Eucalyptus blakelyi</i>
65	Plantings	<i>Eucalyptus</i> spp.
74	Plantings	<i>Eucalyptus</i> spp.
75	Canopy Regeneration	<i>Eucalyptus</i> spp.
92	Canopy Regeneration	<i>Eucalyptus crebra</i>
113	Canopy Regeneration	<i>Eucalyptus</i> spp.
118	Plantings	<i>Eucalyptus</i> spp.
124	Canopy Regeneration	<i>Eucalyptus crebra</i>



Figure Label	Observation Type	Species/Notes
137	Plantings	<i>Eucalyptus</i> spp.
140	Canopy Regeneration	<i>Eucalyptus blakelyi</i> and <i>Eucalyptus albens x moluccana</i>
165	Plantings	<i>Eucalyptus</i> spp.
168	Mature Plantings	<i>Eucalyptus albens x moluccana</i> , <i>Eucalyptus crebra</i> and <i>Eucalyptus blakelyi</i>
189	Plantings	<i>Eucalyptus</i> spp.
192	Canopy Regeneration	<i>Eucalyptus crebra</i>
198	Canopy Regeneration	<i>Eucalyptus crebra</i> and <i>Eucalyptus blakelyi</i>
200	Canopy Regeneration	<i>Casurina glauca</i> and <i>Eucalyptus blakelyi</i>
216	Canopy Regeneration	<i>Eucalyptus</i> spp.
223	Canopy Regeneration	<i>Eucalyptus</i> spp.
225	Weed Infestation	<i>Hypericum perforatum</i>
226	Weed Infestation	<i>Verbena bonariensis</i>
227	Weed Infestation	<i>Verbena bonariensis</i>
228	Weed Infestation	<i>Verbena bonariensis</i>
229	Weed Infestation	<i>Verbena bonariensis</i>
230	Weed Infestation	<i>Verbena bonariensis</i>
231	Weed Infestation	<i>Lycium ferossimum</i>
232	Weed Infestation	<i>Opuntia aurantiaca</i>
233	Weed Infestation	<i>Acacia saligna</i>
234	Weed Infestation	<i>Verbena bonariensis</i>
235	Weed Infestation	<i>Carthamus lanatus</i>
236	Weed Infestation	<i>Verbena bonariensis</i>
237	Weed Infestation	<i>Verbena bonariensis</i>
238	Weed Infestation	<i>Verbena bonariensis</i>
239	Weed Infestation	<i>Galenia pubescens</i>
240	Weed Infestation	<i>Verbena bonariensis</i>
241	Weed Infestation	<i>Verbena bonariensis</i>
242	Weed Infestation	<i>Verbena bonariensis</i>
243	Weed Infestation	<i>Verbena bonariensis</i>
244	Weed Infestation	<i>Galenia pubescens</i>
245	Weed Infestation	<i>Galenia pubescens</i>
246	Weed Infestation	<i>Galenia pubescens</i>
247	Weed Infestation	<i>Galenia pubescens</i>
248	Weed Infestation	<i>Verbena bonariensis</i>



Figure Label	Observation Type	Species/Notes
249	Weed Infestation	<i>Galenia pubescens</i>
250	Feral Animal	Feral Rabbit Warren
251	Weed Infestation	<i>Verbena bonariensis</i>
252	Weed Infestation	<i>Verbena bonariensis</i>
253	Weed Infestation	<i>Verbena bonariensis</i>
254	Weed Infestation	<i>Lycium ferossimum</i>
255	Weed Infestation	<i>Verbena bonariensis</i>
256	Weed Infestation	<i>Carthamus lanatus</i>
257	Weed Infestation	<i>Verbena bonariensis</i>
258	Weed Infestation	<i>Verbena bonariensis</i>
259	Weed Infestation	<i>Lycium ferossimum</i> / <i>Galenia pubescens</i>
260	Weed Infestation	<i>Lycium ferossimum</i> / <i>Galenia pubescens</i>
261	Weed Infestation	<i>Lycium ferossimum</i> / <i>Galenia pubescens</i>
262	Weed Infestation	<i>Lycium ferossimum</i>
263	Weed Infestation	<i>Lycium ferossimum</i>
264	Weed Infestation	<i>Galenia pubescens</i>
265	Feral Animal	Feral Rabbit Warren
266	Feral Animal	Feral Rabbit X1
267	Weed Infestation	<i>Pavona hastata</i>
268	Weed Infestation	<i>Galenia pubescens</i>
269	Weed Infestation	<i>Galenia pubescens</i>
270	Weed Infestation	<i>Galenia pubescens</i>
271	Weed Infestation	<i>Verbena bonariensis</i>
417	Feral Animal	Feral Rabbits X2
418	Weed Infestation	<i>Galenia pubescens</i>
419	Weed Infestation	<i>Cirsium vulgare</i>
420	Weed Infestation	<i>Gomphocarpus fruticosus</i>



E.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Lycium ferocissimum*, *Hypericum perforatum*, *Galenia pubescens*, *Carthamus lanatus*) as a priority, as well as all other management actions identified in the CA. Although large infestations of environmental weeds not classified as high threat exotics were observed, targeted control of these species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of these species in the long-term is to undertake additional plantings of appropriate canopy species (i.e. plant the same species as nearby woodland) in open-grassland areas as the prevalence of these weeds within wooded areas is very low (i.e. conditions under canopy trees is not conducive for the weed species recorded). Any plantings should be made within open areas that do not contain large amounts of natural regeneration.

Any additional tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings chances of survival (i.e. reduce competition from surrounding environmental weeds).

Prior to undertaking any slashing works, any naturally regenerating or planted eucalypts should be clearly demarcated to ensure that individuals aren't accidentally removed during the slashing works. Further to this, slashing works should be undertaken prior to the flowering of the most problematic weeds, to ensure they do not set seed.

It is also recommended that targeted feral animal control be implemented at the locations identified in Figure 5 to minimise their spread to additional areas of the conservation area.

E.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	TMOF1	Date	9/10/25
Vegetation Community	1691		
1. Site Photo(s) Taken	7497- 7500		
2. Floristic BioMetric attributes			
Native cover	75.2		
Overstorey:	44.8 0		
Midstorey:	14.5		
Groundcover (grass):	52.5		
Groundcover (shrub):	0		
Groundcover (other):	8.1		
Native species richness:	28		
Proportion of canopy species regenerating	0		
Exotic cover	40.3		
Number of trees with hollows	0		
Total length of fallen logs	3.5		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			Yes + plantings in and around plot
Threatened species sightings			nil
Fire event/fuel			Low - moderate
Weeds			St. Johns Wort, Plantago lanceolata, Ground + Opuntia scattered throughout
Pest animals			nil
Visitor impact/vehicles			nil
Rubbish dumping			nil

refer to
monitoring
letter

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	TMOFZ		Date	9/10/25
Vegetation Community	1691			
1. Site Photo(s) Taken	7512-7515			
2. Floristic BioMetric attributes				
Native cover		61.1		
Overstorey:		20.1		
Midstorey:		-		
Groundcover(grass):		26.6		
Groundcover (shrub):		0.2		
Groundcover (other):		14.2		
Native species richness:		28		
Proportion of canopy species regenerating		100		
Exotic cover		4.8		
Number of trees with hollows		0		
Total length of fallen logs		11		
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			nil	
Threatened species sightings			nil	
Fire event/fuel			low-moderate	
Weeds			Fireweed	
Pest animals			nil	
Visitor impact/vehicles			nil	
Rubbish dumping			nil	

refer to monitoring letter

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	THOF3		Date	9/10/25
Vegetation Community	1731			
1. Site Photo(s) Taken	7518 - 7521			
2. Floristic BioMetric attributes				
Native cover	20.1			
Overstorey:	15			
Midstorey:	-			
Groundcover(grass):	5			
Groundcover (shrub):	0			
Groundcover (other):	0.1			
Native species richness:	3			
Proportion of canopy species regenerating	100			
Exotic cover	117			
Number of trees with hollows	2			
Total length of fallen logs	25			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			regeneration around recent trees see mapping	
Threatened species sightings			nil	
Fire event/fuel			low	
Weeds			Pisonia hirsuta - see map	
Pest animals			rabbits seen - see mapping	
Visitor impact/vehicles			n.l	
Rubbish dumping			n.l	

Refer to monitoring letter

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	THOF4		Date
Vegetation Community		1731	
1. Site Photo(s) Taken	7507 - 7510		
2. Floristic BioMetric attributes			
Native cover		45.7	
Overstorey:		40	
Midstorey:		—	
Groundcover(grass):		5.1	
Groundcover (shrub):		.4	
Groundcover (other):		0.2	
Native species richness:		6	
Proportion of canopy species regenerating		100	
Exotic cover		95.6	
Number of trees with hollows		1	
Total length of fallen logs		6.8	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			high Natural regen of surrounds
Threatened species sightings			—
Fire event/fuel			Low
Weeds			Galenia pubescens, Sorbus asper, Cirsium vulgare
Pest animals			rabbit warren
Visitor impact/vehicles			n.i
Rubbish dumping			n.i

refer
managing
left for

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	THOFS		Date 9/10/25
Vegetation Community	42		
1. Site Photo(s) Taken	7523 - 7526		
2. Floristic BioMetric attributes			
Native cover		45.7	
Overstorey:		30.1	
Midstorey:		—	
Groundcover (grass):		12.3	
Groundcover (shrub):		0.6	
Groundcover (other):		2.6	
Native species richness:		26	
Proportion of canopy species regenerating		100	
Exotic cover		25.5	
Number of trees with hollows		0	
Total length of fallen logs		49.5	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			regeneration adjacent to access tracks
Threatened species sightings			—
Fire event/fuel			moderate
Weeds			- See Mapping
Pest animals			n.i
Visitor impact/vehicles			n.i
Rubbish dumping			n.i

ref to monitoring letter

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet

Monitoring Point Number	TMOFF6	Date	9/10/25
Vegetation Community	42		
1. Site Photo(s) Taken	7502-7505		
2. Floristic BioMetric attributes			
Native cover		33.2	
Overstorey:		30.5	
Midstorey:		—	
Groundcover (grass):		0.7	
Groundcover (shrub):		0.3	
Groundcover (other):		1.7	
Native species richness:		15	
Proportion of canopy species regenerating		100	
Exotic cover		58.5	
Number of trees with hollows		2	
Total length of fallen logs		34.3	
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			—
Threatened species sightings			—
Fire event/fuel			Moderate
Weeds			Galena pubescens infestation, regrowth Boronia
Pest animals			rabbit warren in plot
Visitor impact/vehicles			—
Rubbish dumping			—

Refer
to
monitoring
letter

Appendix F Middle Deep Creek and Oakvale Offset

Conservation Area

Mt Arthur / NSW Energy Coal

SLR Project No.: 630.032382.00003

23 December 2025



F.1 Description and Monitoring Photographs

F.1.1 MDC1: PCT 281 Rough-Barked Apple - Red Gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion

Monitoring site MDC1 is located an area of PCT 281 Rough-barked Apple – Red Gum – Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion, and is dominated by a canopy of *Eucalyptus blakelyi*, *Eucalyptus melliodora* and *Angophora floribunda*. Native shrubs are limited to *Olearia elliptica*. Common native groundcover species includes *Dichelachne micrantha*, *Microlaena stipoides*, *Poa Labillardierei* var. *labillardierei*, and *Senecio hispidulus* var. *dissectus*.

Weed cover is moderate and includes *Lolium perenne*, *Trifolium campestre* and *Trifolium arvense*.



North



East



South



West



F.1.2 MDC2: PCT 618 White Box x Grey Box - Red Gum - Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley

Monitoring site MDC2 is located in an area of PCT 618 White Box x Grey Box – Red Gum – Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley, and is dominated by a canopy of *Eucalyptus albens* and *Eucalyptus blakelyi*. The shrub layer includes regrowth canopy species as well as *Cassinia quinquefaria*, *Bursaria spinosa* and *Olearia elliptica*. Common native groundcovers include *Aristida ramosa*, *Bothriochloa decipiens*, *Microlaena stipoides*, *Dichelachne micrantha* and *Poa sieberiana*.

Weed cover is moderate and includes *Lolium perenne*, *Trifolium campestre* and *Bromus molliformis*.



North



East



South



West



F.1.3 MDC3: PCT 1684 Silvertop Stringybark - Rough-barked Apple - Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment

Monitoring site MDC3 is located in an area of PCT 1684 Silvertop Stringybark – Rough-barked Apple – Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment, and is dominated by a canopy of *Eucalyptus albens* x *moluccana* with *Eucalyptus laevopinea* and *Eucalyptus nortonii* also present. The midstory/shrub layer includes regrowth canopy species as well as *Notelaea microcarpa*, *Cassinia quinquefaria*, *Bursaria spinosa* and *Olearia elliptica*. Common native groundcover species include *Poa sieberiana*, *Microlaena stipoides*, *Rytidosperma racemosum*, *Dichelachne micrantha* and *Aristida ramosa*.

Weed cover is low to moderate and includes *Lolium perenne*, *Rosa rubiginosa* and *Petrorhagia dubia*.



North



East



South



West



F.1.4 MDC4: PCT 1684 Silvertop Stringybark - Rough-barked Apple - Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment

Monitoring site MDC4 is located in an area of PCT 1684 Silvertop Stringybark – Rough-barked Apple – Bundy open forest of the Liverpool Ranges and Northern Tablelands escarpment in DNG form. No canopy or shrub species are present. Common groundcover species present include *Bothriochloa decipiens*, *Microlaena stipoides*, *Hydrocotyle laxiflora*, *Senecio quadridentatus* and *Lobelia concolor*.

Weed cover is very high with the most common exotics being *Lolium perenne*, *Bromus molliformis* and *Torilis nodosa*



North



East



South



West



F.1.5 MDC5: PCT 281 Rough-Barked Apple - Red Gum - Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion

Monitoring site MDC5 is located in an area of PCT 281 Rough-barked Apple – Red Gum – Yellow Box woodland on alluvial clay to loam soils on valley flats in the northern NSW South Western Slopes Bioregion and Brigalow Belt South Bioregion, and is dominated by a canopy of *Eucalyptus melliodora* and *Eucalyptus blakelyi*. The midstorey/shrub layer includes regrowth canopy species as well as *Notelaea microcarpa*, *Solanum cinereum* and *Bursaria spinosa*. Common native groundcovers include *Dichelachne micrantha*, *Poa sieberiana*, *Austrostipa verticillata*, *Cynoglossum australe* and *Dichondra repens*.

Weed cover is high and includes *Lolium perenne*, *Cirsium vulgare* and *Bromus catharticus*.



North



East



South



West



F.1.6 MDC6: PCT 618 White Box x Grey Box - Red Gum - Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley

Monitoring site MDC6 is located in an area of PCT 618 White Box x Grey Box – Red Gum – Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley in DNG form. No canopy or shrub species are present. Common native groundcovers include *Aristida ramosa*, *Dichelachne micrantha*, *Microlaena stipoides*, *Poa sieberiana* and *Senecio quadridentatus*.

Weed cover is moderate to high and includes *Lolium perenne*, *Bromus molliformis* and *Hypericum perforatum*.



North



East



South



West



F.2 Walk-Through Assessment

Overall, the Middle Deep Creek and Oakvale Offset Conservation Area is considered to be in moderate to good condition. Opportunistic observations made while walking/driving through the conservation area identified the following (refer to Figure 6 and Table 6):

- Signs of feral animals the Feral Pig (*Sus scrofa*) at one location, as well as feral deer in relatively high numbers recorded at five separate locations;
- No signs of rubbish dumping;
- Presence of *Cymbidium canaliculatum* (Tiger Orchid) that is listed as an endangered population under the NSW Biodiversity Conservation Act 2016 (BC Act) at two separate locations;
- Presence of two Little Lorikeets (*Glossopsitta pusilla*) that is listed as Vulnerable under the BC Act;
- Evidence of plantings of canopy species within open areas;
- Natural regeneration of native canopy species around remnant woodland areas; and
- Weed infestations of *Hypericum perforatum*, *Verbena bonariensis*, *Silybium mauritianum*, *Rapistrum rugosum*, *Tagetes minuta*, *Plantago lanceolata*, *Lolium perenne*, *Carthamus lanatus*, *Gomphocarpus fruticosus* and *Carduus pycnocephalus*.

Table 6: Opportunistic observations

Figure Label	Observation Type	Species/Notes
363	Weed Infestation	<i>Carthamus lanatus</i>
364	Weed Infestation	<i>Hypericum perforatum</i>
365	Weed Infestation	<i>Silybium mauritianum</i> / <i>Carthamus lanatus</i> / <i>Gomphocarpus fruticosus</i>
366	Weed Infestation	<i>Hypericum perforatum</i>
367	Weed Infestation	<i>Hypericum perforatum</i> / <i>Silybium mauritianum</i>
368	Weed Infestation	<i>Hypericum perforatum</i>
369	Weed Infestation	<i>Silybium mauritianum</i> / <i>Carduus pycnocephalus</i>
370	Weed Infestation	<i>Hypericum perforatum</i>
371	Weed Infestation	<i>Carduus pycnocephalus</i>
372	Weed Infestation	<i>Hypericum perforatum</i>
373	Weed Infestation	<i>Hypericum perforatum</i> / <i>Gomphocarpus fruticosus</i>
374	Weed Infestation	<i>Hypericum perforatum</i>
375	Weed Infestation	<i>Hypericum perforatum</i>
376	Weed Infestation	<i>Hypericum perforatum</i>
377	Weed Infestation	<i>Hypericum perforatum</i>
378	Weed Infestation	<i>Hypericum perforatum</i>
379	Weed Infestation	<i>Silybium mauritianum</i>



Figure Label	Observation Type	Species/Notes
380	Weed Infestation	<i>Hypericum perforatum</i> / <i>Cirsium vulgare</i>
381	Threatened Species	Little Lorikeet X 2
382	Weed Infestation	<i>Hypericum perforatum</i>
383	Weed Infestation	<i>Hypericum perforatum</i>
384	Weed Infestation	<i>Hypericum perforatum</i>
385	Weed Infestation	<i>Hypericum perforatum</i>
386	Weed Infestation	<i>Hypericum perforatum</i>
387	Weed Infestation	<i>Hypericum perforatum</i>
388	Weed Infestation	<i>Hypericum perforatum</i>
389	Feral Animal	Feral Deer X2
390	Weed Infestation	<i>Hypericum perforatum</i>
391	Weed Infestation	<i>Plantago lanceolata</i> / <i>Lolium perenne</i>
392	Feral Animal	Feral Deer >10
393	Plantings	<i>Eucalyptus</i> spp.
394	Weed Infestation	<i>Tagetes minuta</i>
395	Weed Infestation	<i>Carthamus lanatus</i>
396	Weed Infestation	<i>Carthamus lanatus</i> /Plantings
397	Weed Infestation	<i>Carthamus lanatus</i>
398	Weed Infestation	<i>Verbena bonariensis</i>
399	Feral Animal	Feral Deer X5
400	Feral Animal	Feral Pig X1
401	Weed Infestation	<i>Hypericum perforatum</i>
402	Weed Infestation	<i>Hypericum perforatum</i>
403	Weed Infestation	<i>Hypericum perforatum</i>
404	Weed Infestation	<i>Hypericum perforatum</i>
405	Feral Animal	Feral Deer X1
406	Feral Animal	Feral Deer X1
407	Weed Infestation	<i>Hypericum perforatum</i>
408	Weed Infestation	<i>Hypericum perforatum</i>
409	Weed Infestation	<i>Silybium mauritianum</i> / <i>Rapistrum rugosum</i>
410	Weed Infestation	<i>Hypericum perforatum</i>
411	Weed Infestation	<i>Hypericum perforatum</i>
412	Weed Infestation	<i>Silybium mauritianum</i>
413	Weed Infestation	<i>Hypericum perforatum</i>



Figure Label	Observation Type	Species/Notes
414	Weed Infestation	<i>Hypericum perforatum</i>
415	Weed Infestation	<i>Verbena bonariensis</i> / <i>Hypericum perforatum</i>
416	Weed Infestation	<i>Carthamus lanatus</i>

F.3 Recommendations

Recommendations include continued weed management targeting any high threat exotics (e.g. *Hypericum perforatum*, *Carthamus lanatus*) as a priority, as well as all other management actions identified in the CA. Although large infestations of weeds not classified as high threat exotics were observed, targeted spraying of these species is not considered to be economical or that beneficial as a result of the likely high soil seed bank of these species already present. Therefore, it is recommended that the best way to reduce coverage of these species in the long-term is to slash these species prior to flowering and setting seed when they are observed in large numbers. Further to this, it is recommended that additional plantings of appropriate canopy (i.e. plant the same species as nearby woodland) in open-grassland areas be undertaken as the prevalence of weeds within wooded areas is relatively low (i.e. conditions under canopy trees is not conducive for the substantial growth of weed species observed in the conservation area). Any plantings should be made within open areas that do not contain large amounts of natural regeneration.

Any additional tree plantings made within open areas should be protected with tree guards and the surrounding exotic vegetation routinely targeted through spot-spraying to increase plantings chances of survival (i.e. reduce competition from surrounding environmental weeds).

Prior to undertaking any slashing works, any naturally regenerating or planted eucalypts should be clearly demarcated to ensure that individuals are not accidentally removed during the slashing works.

It is also recommended that targeted feral animal control feral deer species be intensified further to what is currently being implemented to reduce numbers and minimise their spread to additional areas of the conservation area.

F.4 Datasheets



ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MD01	Date	11/11/25
Vegetation Community	281		
1. Site Photo(s) Taken	7821 - 7824		
2. Floristic BioMetric attributes			
Native cover	154.6		
Overstorey:	45.3		
Midstorey:	-		
Groundcover(grass):	75.8		
Groundcover (shrub):	0.3		
Groundcover (other):	33.2		
Native species richness:	42		
Proportion of canopy species regenerating	100		
Exotic cover	31.3		
Number of trees with hollows	0		
Total length of fallen logs	48		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter + figures
Threatened species sightings			
Fire event/fuel			High
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MDC2	Date	1/11/2025
Vegetation Community	618		
1. Site Photo(s) Taken	7814-7817		
2. Floristic BioMetric attributes			
Native cover	172.5		
Overstorey:	35		
Midstorey:	35		
Groundcover(grass):	112.6		
Groundcover (shrub):	15.5		
Groundcover (other):	9.4		
Native species richness:	45		
Proportion of canopy species regenerating	100		
Exotic cover	14.7		
Number of trees with hollows	0		
Total length of fallen logs	74.5		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			Refer to monitoring letter & figure
Threatened species sightings			
Fire event/fuel		high	
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MDC3		Date	11/11/25
Vegetation Community	1684			
1. Site Photo(s) Taken	7793-7796			
2. Floristic BioMetric attributes				
Native cover	150.8			
Overstorey:	51			
Midstorey:	—			
Groundcover (grass):	87.7			
Groundcover (shrub):	6			
Groundcover (other):	6.1			
Native species richness:	40			
Proportion of canopy species regenerating	100			
Exotic cover	12.3			
Number of trees with hollows	1			
Total length of fallen logs	67.5			
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter and figures	
Threatened species sightings				
Fire event/fuel				high
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MDC4		Date
Vegetation Community	1684		
1. Site Photo(s) Taken	7707-7710		
2. Floristic BioMetric attributes			
Native cover	56		
Overstorey:	0		
Midstorey:	0		
Groundcover(grass):	35.4		
Groundcover (shrub):	0		
Groundcover (other):	14.6		
Native species richness:	19		
Proportion of canopy species regenerating	NA		
Exotic cover	63.5		
Number of trees with hollows	0		
Total length of fallen logs	3		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			See monitoring letter and figures
Threatened species sightings			
Fire event/fuel			low
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet			
Monitoring Point Number	MDCS		Date
Vegetation Community	281		
1. Site Photo(s) Taken	0046-0049		
2. Floristic BioMetric attributes			
Native cover	75.3		
Overstorey:	51.0		
Midstorey:	—		
Groundcover (grass):	12.8		
Groundcover (shrub):	1		
Groundcover (other):	10.5		
Native species richness:	29		
Proportion of canopy species regenerating	100		
Exotic cover	58.3		
Number of trees with hollows	0		
Total length of fallen logs	55		
3. Opportunistic observations	GPS coordinates	Photo number	Observations
Natural regeneration of disturbed areas			Sec monitoring letter + figures
Threatened species sightings			
Fire event/fuel			medium high
Weeds			
Pest animals			
Visitor impact/vehicles			
Rubbish dumping			

ANNEXURE D TABLE 3 - MONITORING DATA SHEET

Monitoring Data Sheet				
Monitoring Point Number	MDC6		Date	
Vegetation Community		618		
1. Site Photo(s) Taken	7008 - 7011			
2. Floristic BioMetric attributes				
Native cover		89.3		
Overstorey:		0		
Midstorey:		0		
Groundcover (grass):		72		
Groundcover (shrub):		0		
Groundcover (other):		17.3		
Native species richness:		23		
Proportion of canopy species regenerating		NA		
Exotic cover		37.6		
Number of trees with hollows		0		
Total length of fallen logs		0		
3. Opportunistic observations	GPS coordinates	Photo number	Observations	
Natural regeneration of disturbed areas			See monitoring letter and figures	
Threatened species sightings				
Fire event/fuel				Low
Weeds				
Pest animals				
Visitor impact/vehicles				
Rubbish dumping				

Figures



FIGURE 1

LEGEND

- Roxburgh Offset Area
- Conservation Agreement
- Monitoring Plots
- Canopy Regeneration
- Carthamus lanatus
- Echium plantagineum,
- Galenia pubescens
- Fencing wire
- Gomphocarpus fruticosus
- Hyphanternia hirta
- Verbena bonariensis
- Verbena bonariensis,
- Carthamus lanatus
- Verbena bonariensis,
- Gomphocarpus fruticosus
- Verbena bonariensis,
- Hypericum perforatum



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Project Number: 630,032392,00003
Date Drawn: 18-Dec-2025
Drawn by: JL



FIGURE 2

- LEGEND**
- Saddlers Creek Conservation Area
 - Conservation Agreement Monitoring Plots
 - Acacia pendula
 - Canopy Regeneration
 - Mature Plantings
 - Plantings
 - Bryophyllum delagoense - Previously Sprayed
 - Bryophyllum delagoense/ Lycium ferossimum
 - Carthamus lanatus
 - Casuarina glauca canopy dieback
 - Cirsium vulgare
 - Feral Cat X1
 - Feral Pig Disturbance
 - Feral Rabbit Scats
 - Galenia pubescens/Feral Pig Disturbance
 - Galenia pubescens/Pavona hastata/Cirsium vulgare
 - Gomphocarpus fruticosus/ Carthamus lanatus/ Hypericum perforatum
 - Gomphocarpus fruticosus/ Hyparrhenia hirta/Hypericum perforatum
 - Gomphocarpus fruticosus/ Hypericum perforatum
 - Hyparrhenia hirta
 - Hypericum perforatum
 - Hypericum perforatum/ Paspalum dilatatum
 - Hypericum perforatum/ Verbena bonariensis
 - Lycium ferossimum
 - Lycium ferossimum/Galenia pubescens
 - Paspalum dilatatum
 - Pavona hastata
 - Plantago lanceolata
 - Plantago lanceolata/Verbena bonariensis/Cirsium vulgare

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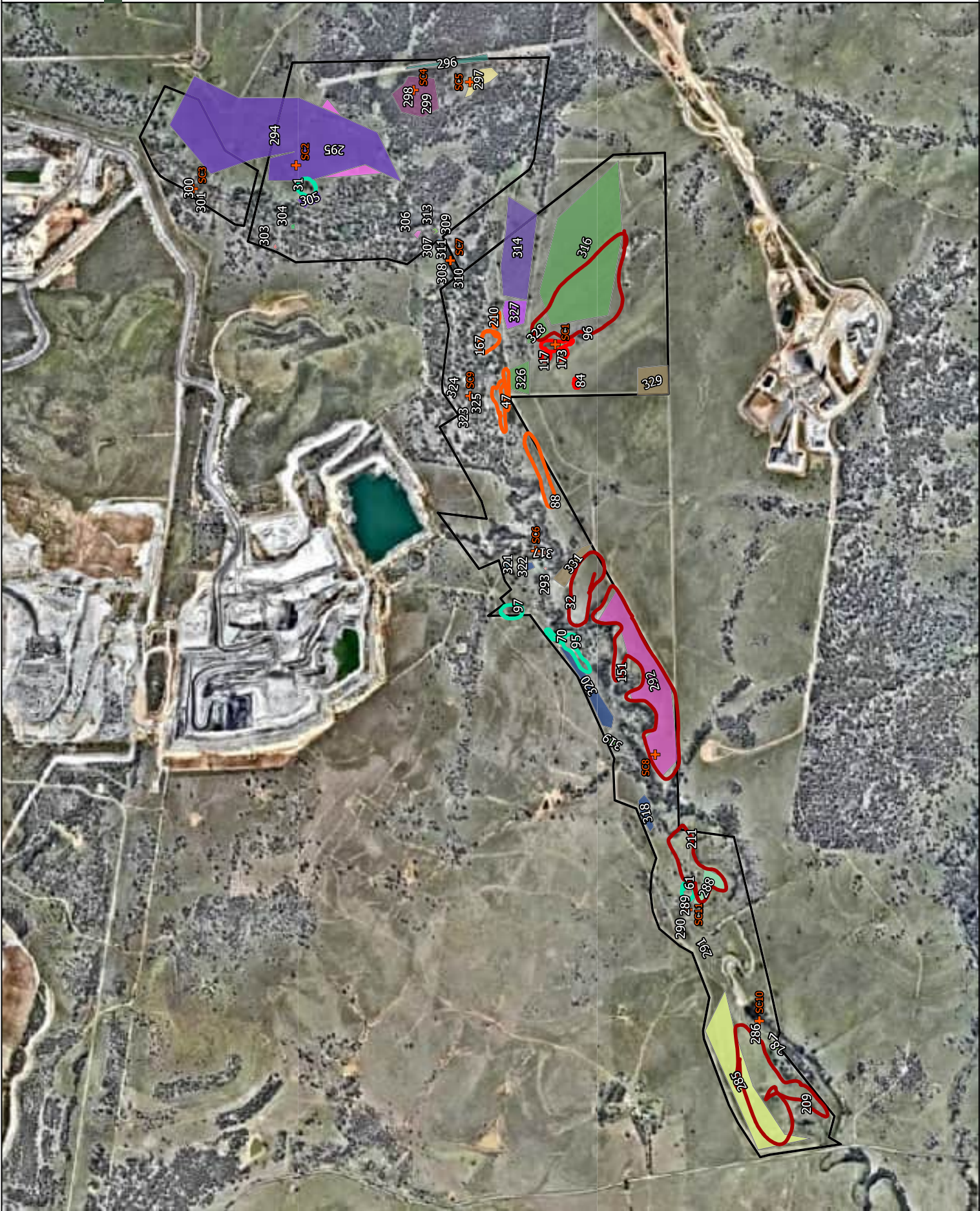


FIGURE 3

- LEGEND**
- MT Arthur Conservation Area
 - Conservation Agreement
 - Monitoring Plots
 - Carthamus lanatus
 - Feral Dog Scats
 - Feral Dogs X3
 - Feral Fox X1
 - Feral Rabbit Scats
 - Galenia pubescens
 - Gomphocarpus fruticosus
 - Gomphocarpus fruticosus/
 - Hyparrhenia hirta
 - Hyparrhenia hirta
 - Lycium ferossimum
 - Opuntia stricta
 - Pig Disturbance
 - Pig X4
 - Verbena bonariensis/
 - Gomphocarpus fruticosus



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Project Number: 630,032392,00003

Date Drawn: 18-Dec-2025

Drawn by: JL



LEGEND

- Thomas Mitchell Drive On-site Offset Area
- Consent Agreement Monitoring Plots
- Acacia pendula
- Canopy Regeneration
- Plantings
- Acacia saligna
- Bryophyllum delagoense
- Carthamus lanatus
- Cortaderia selapana
- Hyphantnia hirta
- Hypericum perforatum/
Hypericum lanatus/Echium plantagineum
- Lycium ferossimum
- Lycium ferossimum/
Carthamus lanatus
- Verbenia bonariensis
- Verbenia bonariensis/
Carthamus lanatus
- Dunis tricolor

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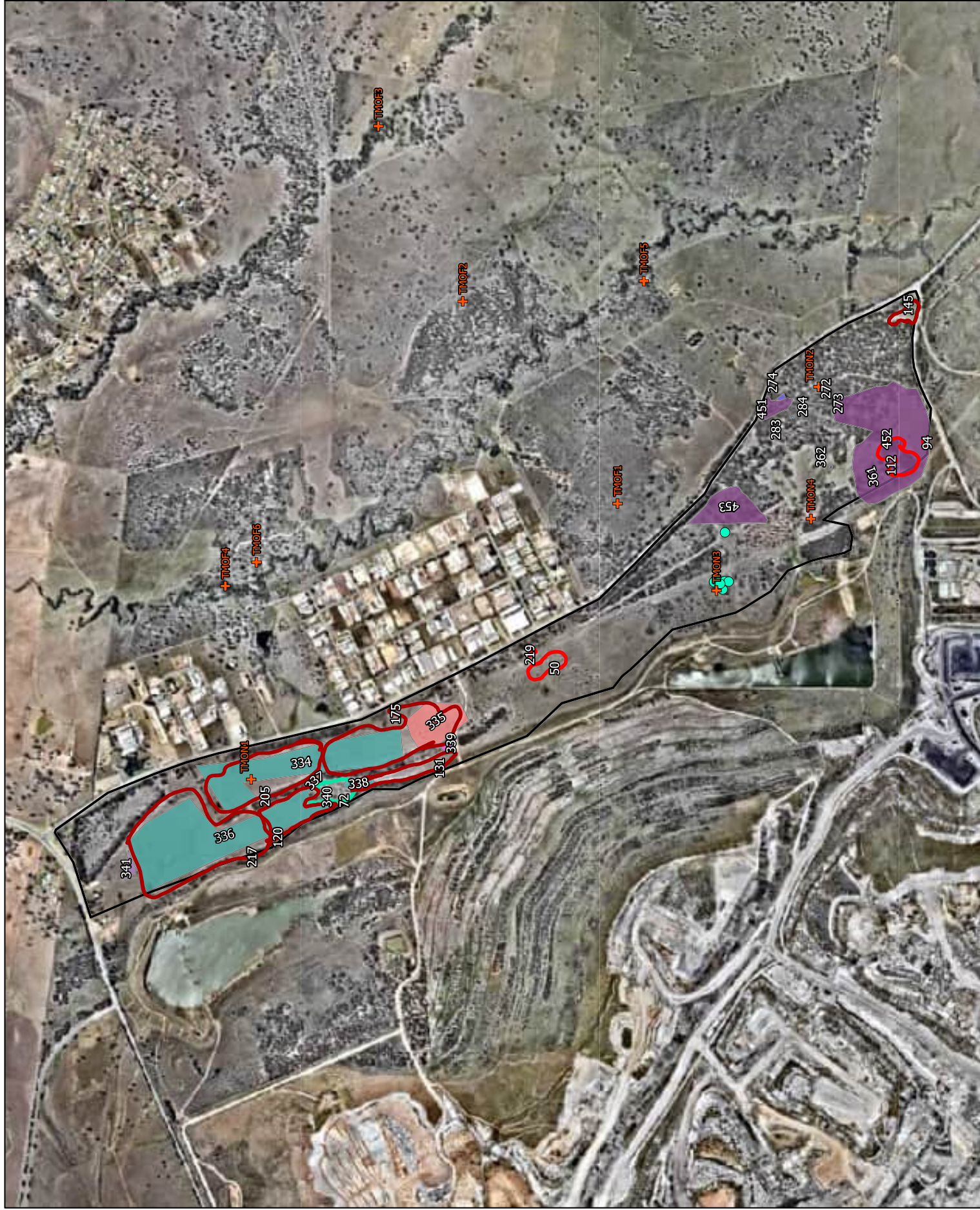
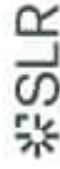
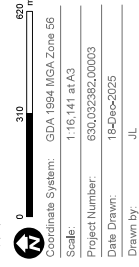


FIGURE 5

LEGEND

- Thomas Mitchell Drive Off-site Offset Area
- Conservation Agreement
- Monitoring Plots
- Canopy Regeneration
- Mature Plantings
- Plantings
- Acacia saligna
- Carthamus lanatus
- Cirsium vulgare
- Feral Rabbit Warren
- Feral Rabbit X1
- Feral Rabbits X2
- Galenia pubescens
- Gomphocarpus fruticosus
- Hypericum perforatum
- Lycium ferossimum
- Lycium ferossimum/Galenia pubescens
- Opuntia aurantiaca
- Pavonia hastata
- Verbena bonariensis

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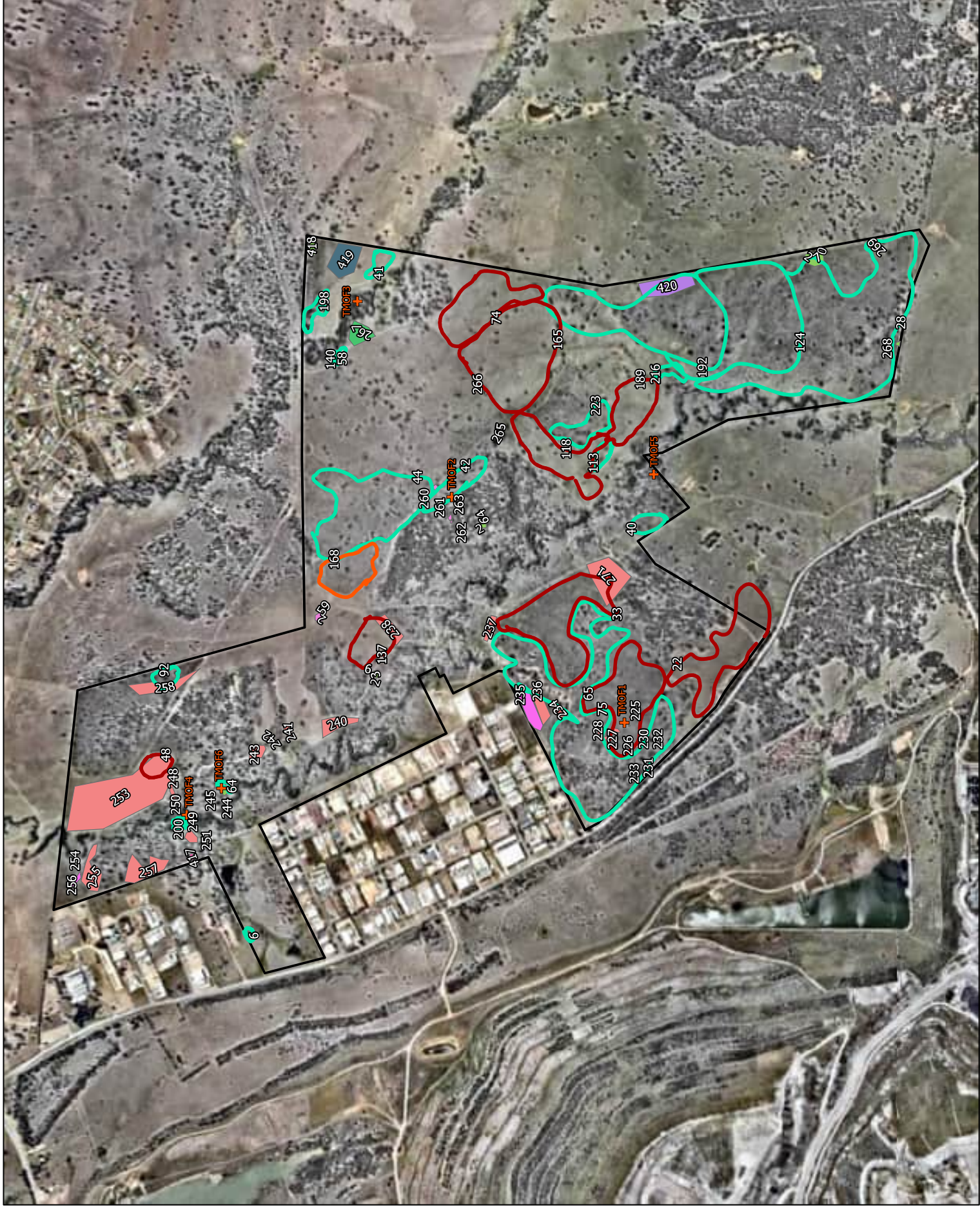
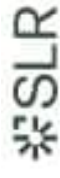


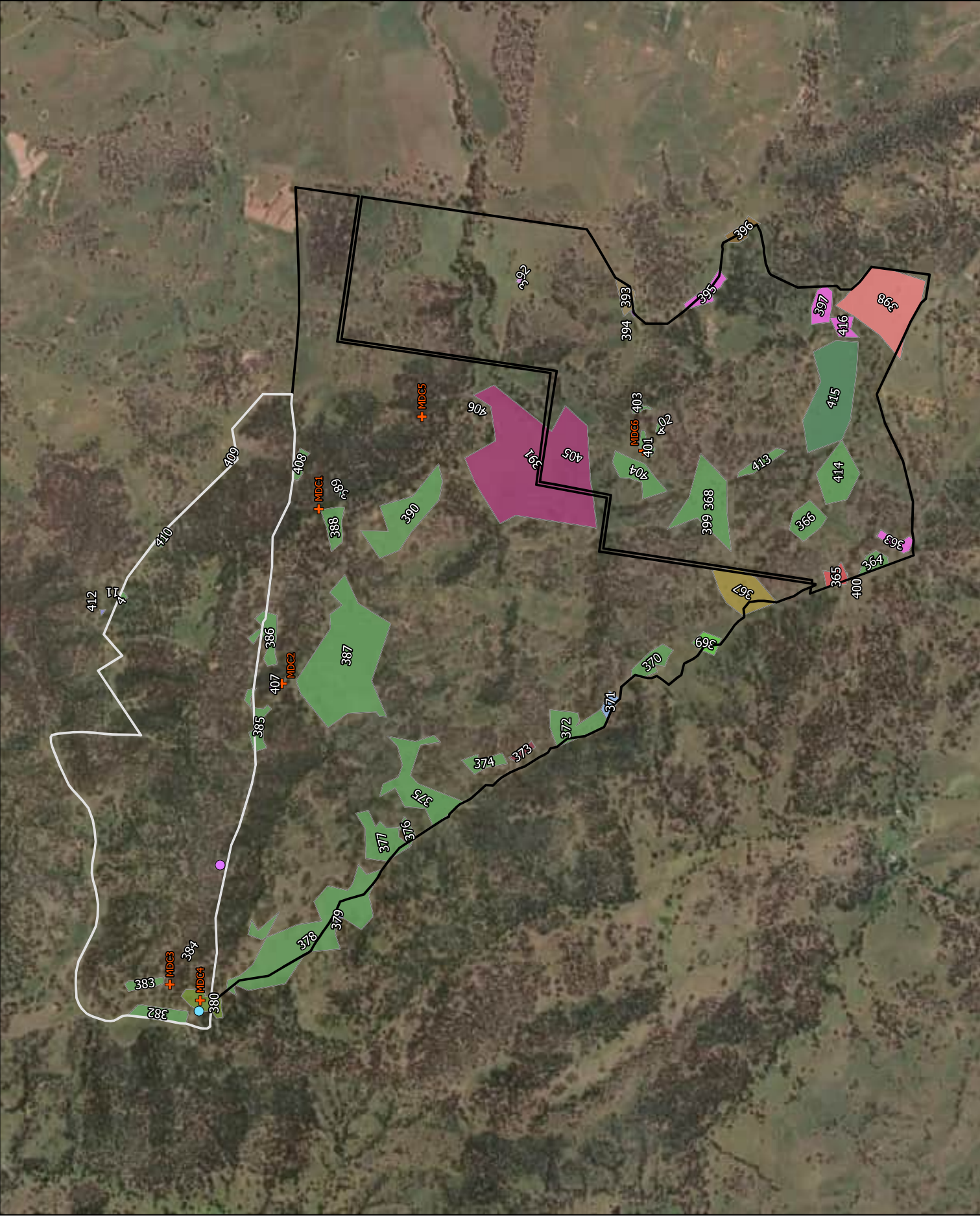
FIGURE 6

LEGEND

- Oakvale Offset Area
- Timor Offset Area
- Conservation Agreement
- Monitoring Plots
- Cymbidium canaliculatum
- Little Lorikeet
- Carduus pycnocephalus
- Carthamus lanatus
- Carthamus lanatus/Plantings
- Feral Deer >10
- Feral Deer X1
- Feral Deer X2
- Feral Deer X5
- Feral Pig X1
- Hypericum perforatum
- Hypericum perforatum/
- Cirsium vulgare
- Hypericum perforatum/
- Gomphocarpus fruticosus
- Hypericum perforatum/
- Silbium mauritanium
- Plantago lanceolata/Lolium
- perenne
- Plantings
- Silbium mauritanium
- Silbium mauritanium/
- Carduus pycnocephalus
- Silbium mauritanium/
- Carthamus lanatus/
- Gomphocarpus fruticosus
- Silbium mauritanium/
- Rapistrum rugosum
- Tagetes minuta
- Verbena bonariensis
- Hypericum perforatum

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Date Drawn:	18-Dec-2025
Drawn by:	JL



If you have any questions or require further information, please don't hesitate to contact me in our Sydney office on 0439 000 922.

Sincerely,



Mikael Peck, Principal Ecologist
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Making Sustainability Happen