

HUNTER VALLEY OPERATIONS

EPBC 2016-7640 ANNUAL COMPLIANCE 2024

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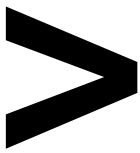
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31/01/2025

REVIEW

OWNER

Environment and Community Coordinator



Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. 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) Michael Lloyd

Position (please print) Environment & Community Coordinator

Organisation (please print including ABN/ACN if applicable)

HV Operations Pty Limited (ABN 76 606 478 399)

Date 31 January 2025



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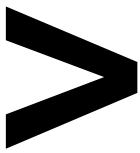
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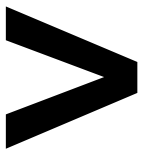
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1 | INTRODUCTION

This annual compliance report has been prepared in accordance with the Annual Compliance Report Guidelines (Commonwealth of Australia 2023) and addresses Hunter Valley Operations (HVO) compliance with the conditions of the EPBC 2016/7640 approval. The period covered by this report is for the calendar year 2024. For ease of reporting, HVO transitioned the reporting year from the November to October period to the calendar year with the January 2021 extended report submission.

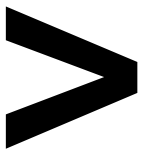
As a result, this report covers the period 1 January 2024 to 31 December 2024 (the reporting period).

1.1 | BACKGROUND

Hunter Valley Operations is located at Lemington, approximately 24 kilometres northwest of Singleton in the Hunter Valley, NSW. The Commonwealth Minister for the Environment, under provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), issued approval EPBC 2016/7640 for the continuation of open cut coal mining operations, within the HVO mine complex, in areas that were previously approved by the State after the commencement of the EPBC Act 1999. Approval was granted on 10 October 2016 and the action commenced on 1 November 2016.

The EPBC 2016/7640 approval (last modified in August 2017), requires various offsets to be established as a result of the impacts upon Matters of National Environmental Significance (MNES). The offsets are required in respect of the following protected matters:

- Central Hunter Valley Eucalypt Forest (CHVEF) - 61ha;
- Swift Parrot (*Lathamus discolor*) foraging habitat – 68.1ha;
- Regent Honeyeater (*Anthochaera phrygia*) breeding and foraging habitat – 68.4ha; and
- Green and Golden Bell Frog (*Litoria aurea*) breeding (2.6ha) and foraging habitat (102.7ha).

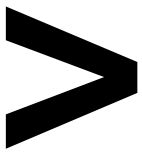


The Offset Strategy (Biodiversity Offset Strategy – State Approved Mining (EPBC2016/7640)), approved by the Minister on 23 October 2017, details the offset areas that are to be secured and managed in relation to this approval. The offset areas are summarised below as the:

- Wandewoi Biodiversity Area (BA) – To offset approximately 63% of the action’s impacts on Central Hunter Valley Eucalypt Forest (CHVEF) and 100% of the action’s impacts on the Swift Parrot.
- Mitchelhill BA - To offset the residual 37% of the action’s impacts on CHVEF and 53.9% of the Regent Honeyeater impacts.
- Condon View BA - To offset the remaining 46.1% of the Regent Honeyeater impacts.
- Crescent Head BA - To offset 99.25% of the action’s impacts on the Green and Golden Bell Frog (GGBF). The residual 0.75% offset for the GGBF is being provided through other compensatory measures. HVO contributed the residual funds towards a GGBF Habitat Mapping project at Crescent Head which was managed by the Biodiversity & Conservation Division of the NSW Department of Planning, Infrastructure and Environment.

In accordance with the approval, the Wandewoi BA, Mitchelhill BA, Condon View BA and the Crescent Head BA offset sites are to be secured in perpetuity with legally binding agreements.

HVO has been working with Commonwealth and State agencies to finalise the legally binding arrangements that will secure the offset sites in perpetuity in the most appropriate manner. HVO has agreed to the terms of a draft Conservation Agreement pursuant to s305 of the EPBC Act to satisfy the requirement for offset security.



An overview of the consultation that has taken place between HVO and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) (or the prior agencies) to finalise this matter is set out in the following chronological timeline:

27 September 2018: An approval variation request was submitted to the DCCEEW. The variation sought to extend the date by which the offsets had to be secured due to the ongoing dialogue with the various State and Commonwealth agencies about the most appropriate mechanism to satisfy the in-perpetuity security requirement in HVO's conditions of approval. DCCEEW officers were in agreement with the request, however, given that HVO was also discussing the proposal to substitute a component of the Wandewoi BA for the Hook property, the DCCEEW asked that the variation request be resubmitted to include all matters being discussed at the time.

18 October 2018: The second variation request was submitted to DCCEEW that proposed to:

- vary the approval to allow for the grassland component of the Wandewoi offset to be swapped for a property that contains the critically endangered Central Hunter Valley eucalypt forest and woodland;
- vary the approval to extend the date by which the offsets must be secured;
- vary the approval to permit the use of a s305 Conservation Agreement under Part 14 the EPBC Act to secure the offset sites in perpetuity; and
- request approval of the Minister for the HVO offset sites to be secured by entering into a s305 Conservation Agreement.

This second variation request required the revision of the Biodiversity Offset Strategy, the existing Biodiversity Areas Management Plans, the EPBC calculations and the preparation of a management plan and a specific weed management plan for the Hook Property. Ecological assessments of the Hook property were supplied to DCCEEW for review and preliminary acceptance of the quality of the proposed offset variation to ensure that the proposed Hook BA met the required quantum of impact.

13 June 2019: New DCCEEW officer allocated.

1 October 2019: New DCCEEW officer allocated.

31 October 2019: HVO provides DCCEEW with revised BOS, revised BOMP, BBAM assessments and offsets assessment calculators for Hook and Wandewoi.

21 November 2019: HVO provides to DCCEEW the GGBF residual impact calculation report and the spreadsheet with the management costs and potential projects as suggested by the NSW Biodiversity and Conservation Division of DPI&E.

25 November 2019: DCCEEW approves the GGBF residual offset liability calculations and proposed projects and requests additional offset calculations for the Hook proposal.



2020: Extensive discussion with DCCEEW officers and legal regarding offset assessment calculations required. Provision of ecological reports justifying the Hook variation proposal.

30 January 2021. DCCEEW agrees that the HVO Offset Strategy, the Biodiversity Areas Management Plan and EPBC calculations are appropriate to send to the Delegate for consideration.

24 June 2021: New DCCEEW officer allocated.

12 July 2021: Following consideration of HVO's second variation request, the draft variation to EPBC 2016/7640 conditions of approval was provided by DCCEEW for HVO to review.

2 August 2021: DCCEEW provides edits required to the BOS and BOMP.

3 August 2021: HVO's response to the proposed conditions of approval was submitted to DCCEEW.

27 October 2021: After addressing the comments provided by DCCEEW and having regard to the draft conditions of approval that have been provided by DCCEEW, HVO submitted the revised HVO Offset Strategy, the Biodiversity Areas Management Plan and EPBC calculations to DCCEEW for consideration by the Delegate. HVO considers these documents to be in final form, subject to approval by the Delegate.

9 November 2021: DCCEEW provided a draft Conservation Agreement for review by HVO for the purpose of implementing the security arrangement for the HVO offset sites.

17 November 2021: DCCEEW provided a second version of the draft conditions of approval to HVO for its review.

3 December 2021: HVO's feedback on the draft Conservation Agreement and the second draft conditions of approval were provided to DCCEEW.

20 December 2021: HVO and DCCEEW participated in a meeting to discuss HVO's feedback on the draft Conservation Agreement. At the conclusion of that meeting, DCCEEW indicated that it would respond to HVO's feedback in early 2022.

31 January 2022: DCCEEW provided the amended Conservation Agreement to HVO for review.

9 February 2022: HVO proposes separate Conservation Agreements for each BA.

11 March 2022: HVO completes review of amended Conservation Agreement. New DCCEEW officer allocated in March.

17 March 2022: DCCEEW requests HVO provide additional justification why separate Conservation Agreements should be applied to each BA.

21 March 2022: HVO provides justification for separate Conservation Agreements and offers to prepare the separate Agreements using the amended Agreements as a template.



- 29 March 2022:** DCCEEW agrees to separate Agreements and requests separate BOMPs.
- 20 April 2022:** DCCEEW provides draft variation to approval conditions for agreement. New DCCEEW officer allocated.
- 31 May 2022:** HVO provides separate management plans and edited Conservation Agreements to DCCEEW.
- 9 June 2022:** HVO provides DCCEEW updated Biodiversity Offsets Strategy with updated calculations.
- 30 June 2022:** DCCEEW provides BOMP reviews to HVO and requests edits.
- 7 November 2022:** DCCEEW provides HVO with track changed Conservation Agreements for review.
- 1 February 2023:** New DCCEEW officer allocated.
- 6 February 2023:** HVO updated new DCCEEW officer of approval status.
- 29 May 2023:** New DCCEEW officer allocated.
- 2 June 2023:** HVO provides DCCEEW with revised BOMPs.
- 15 August 2023:** DCCEEW provided HVO the varied EPBC conditions.
- 5 September 2023:** HVO accepts the varied EPBC conditions.
- 18 October 2023:** DCCEEW provided edited EPBC conditions.
- 23 October 2023:** HVO accepts the edited EPBC conditions.
- 27 and 29 November 2023:** DCCEEW accepted BOMPs, requests minor edit and provided Conservation Agreement for final review.
- 8 December 2023:** HVO confirms Conservation Agreement. HVO provides final edited BOMPs to remove DoEE/DAWE references and provides boundary shapefiles.
- 20 February 2024:** New DCCEEW officer allocated.
- 4 April 2024:** HVO held teleconference with DCCEEW to provide update on progress.
- 17 October 2024:** DCCEEW provided HVO the varied EPBC conditions (changed date to secure the offsets).
- 12 November 2024:** HVO advises of minor edit required to Hook boundary resulting from ARTC interaction. Management Plans, Offset Strategy, Hook shapefile and consultant briefing note to be edited to reflect revised boundary and loss of 0.5ha from Hook offer.



1.2 | LANDOWNER DETAILS

“Interest Holder” for each of the BAs:

HV Operations Pty Limited,
Coal & Allied Operations Pty Limited, and
Anotero Pty Limited

For communications regarding the BAs, the relevant contact details are:

Attn: Manager – Environment and Community
Hunter Valley Operations
PO Box 315,
Singleton, NSW, 2330.

Email: environmentandcommunity@hvo.com.au

2 | CONDITION OF COMPLIANCE

2.1 | EPBC 2016/7640

Condition Number	Condition	Compliance status	Evidence/Comments
1	The person taking the action must not clear more than 54.4 hectares of the Central Hunter Valley Eucalypt Forest and woodland (CHVEF) ecological community from the Riverview Pit and 6.6 ha of the CHVEF ecological community from within the West Pit and must limit all vegetation clearing to within the project disturbance boundaries defined at Schedule 1, Figures 1 - 4.	Compliant	Disturbance limited to within project disturbance boundaries through the HVO Ground Disturbance Permit (GDP) process. From within the EPBC areas, HVO has, in total, disturbed approximately 44ha CHVEF from Riverview Pit and 5.5ha of CHVEF from West Pit.
2	The person taking the action must prepare and submit a Vegetation Clearance Plan (VCP) for the Minister's approval to mitigate impacts of the action on the CHVEF ecological community, the Regent Honeyeater (<i>Anthochaera phrygia</i>), Swift Parrot (<i>Lathamus discolor</i>) and the Green and Golden Bell Frog (<i>Litoria aurea</i>). The VCP must include:	Compliant	Vegetation Clearance Plan (VCP) was submitted to the DCCEEW and approved by the Acting Assistant Secretary 24 October 2016.
2a	Clear delineation of vegetation to be cleared, as per the disturbance boundary shown in Schedule 1 Figures 1 - 4, and vegetation that is to be retained.	Compliant	These areas are outlined within Section 2.1 and Chapter 3 of the VCP. The areas to be cleared are first identified and approved within the GDP. In the field, the areas were delineated by a surveyor prior to clearing using flagging tape or a hard boundary, such as a track or existing fencing, where applicable.
2b	Pre-clearance survey methods, which must include but not be limited to the following requirements:		
	i. A qualified ecologist must undertake a pre-clearance survey within 24 hours prior to the removal of potential foraging, nesting or breeding habitat for the Regent Honeyeater or foraging habitat for the Swift	Compliant	Chapter 3 of the VCP. All pre-clearance surveys were undertaken by qualified ecologist. No species listed or nests were identified during the surveys.

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Parrot in areas identified in Schedule 2, Figures 1 - 5.			
ii.	If during pre-clearance surveys, Regent Honeyeater or Swift Parrot individuals are identified within the clearance area the VCP must specify the use of a two stage clearing protocol where non-habitat trees are cleared 24 hours prior to any habitat trees being cleared, to encourage fauna to move out of a habitat area.	Compliant	Section 3.2 and 3.3 of the VCP. No species listed or nests were identified during the surveys.
iii.	In the event an active Regent Honeyeater nest is identified during pre- clearance surveys, vegetation clearing and overburden removal within 100 m of the active nest should be delayed up until the Regent Honeyeater nest is no longer actively being used .	Compliant	Section 3.3 of the VCP. No species listed or nests were identified during the surveys.
iv.	A qualified ecologist must undertake pre-clearance surveys within a 2 week period prior to the removal of potential breeding habitat for the Green and Golden Bell Frog. Surveys are to be undertaken within all potential breeding habitat areas identified in Schedule 2, Figure 2 as well as a 200m buffer around each potential breeding habitat area.	Compliant	Section 3.3 of the VCP. No clearing occurred during the reporting period within the EPBC areas requiring pre-clearance surveys for GGBF.
v.	Pre-clearance survey methods for the Green and Golden Bell Frog must meet the survey effort requirements for the Green and Golden Bell Frog stipulated in the Survey Guidelines for Australia's threatened frog (2010) Commonwealth of Australia	Compliant	Section 3.3 of the VCP. No clearing occurred during the reporting period within the EPBC areas requiring pre-clearance surveys for GGBF.
vi.	In the event Green and Golden Bell Frog individuals, metamorphs or tadpoles are located during pre-clearance surveys, they are to be handled and translocated in accordance with the Hygiene protocols for the control of diseases in frogs (2008) Department of Environment and Climate Change (NSW).	Compliant	Section 3.3 of the VCP. No clearing occurred during the reporting period within the EPBC areas requiring pre-clearance surveys for GGBF.



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2c	<p>Include measures to avoid, suppress and control the spread of plant pathogens (such as <i>Phytophthora cinnamomi</i>) and <i>chytrid</i> fungus that may degrade habitat for protected matters.</p> <p>The action must not commence until the Vegetation Clearance Plan, required by Condition 2, has been approved by the Minister.</p>	Compliant	<p>Chapter 4 of the VCP. The VCP includes hygiene protocols to manage the spread of potential pathogens. Any machinery used to clear within the extension area relevant to the EPBC 2016/7640 approval will be washed of soil and mud prior to exiting HVO. The VCP also outlines measures to avoid the spread of Chytrid fungus from survey equipment, clearing machinery and during frog handling.</p> <p>The VCP was approved by the Minister on 24 October 2016 and the action commenced on 1 November 2016. A revised VCP was assessed by the Minister’s Delegate and notification provided on 31 October 2024 that the revised plan would not be likely to have a new or increased impact on a protected matter.</p>
3	The approved Vegetation Clearance Plan must be implemented.	Compliant	Measures required by the VCP have been implemented for disturbance associated with GDPs.
4	<p>To compensate for residual impacts to protected matters the person taking the action must, under a legally binding agreement, secure in perpetuity 405.8 ha at the Wandewoi Biodiversity Area, described in 4(a)(b) and (c) within three (3) years from the date of this approval. The Wandewoi Biodiversity Area must include:</p>	Non-compliant	<p>Wandewoi Biodiversity Area was required to be secured in perpetuity by 10 October 2019. Due to the drought that occurred up to 2020 impacting the likelihood of success of the required rehabilitation of 230ha at Wandewoi, HVO proposed to substitute the grassland component of the Wandewoi BA for the CHVEF on the Hook property. HVO has been in discussion with DCCEEW regarding a proposed variation to the offsets and the conditions of approval since mid-2018 with a formal request submitted in September 2018. This discussion included the security mechanism to be applied to the offsets and sought an extension to the conditions of approval to permit the offsets to be secured under a s305 conservation mechanism. Subsequent variations requesting the same matters were submitted in October 2018, September 2020 and May 2021.</p> <p>HVO was advised that the variation would not be submitted to the Delegate in isolation. Given that the Department considered that the negotiations at the time were close to being acceptable, a ‘package’ that comprising a revised management plan, revised Offset Strategy and conditions of approval that included the extension requested by HVO</p>

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would be sent to the Delegate for their consideration. On several occasions HVO revised and submitted these documents as requested by the Department. With changes in personnel within the Department, the documents were re-reviewed each time and DCCEEW requested additional edits with each personnel change.

On several occasions HVO has asked for DCCEEW's response to the requests for the extension and has been told that the submission of the request would be sufficient in the event of an audit.

DCCEEW are preparing a submission for the Delegate to vary the conditions of approval, implement a s305 conservation mechanism to secure the sites in perpetuity and approve the various draft BOMPs, including the recommended Hook offset swap for sections of the Wandewoi BA.

A full timeline of discussions between HVO and DCCEEW is detailed in Section 1.1 of this report.

4a	405.8 hectares of the CHVEF ecological community;	Compliant	The Wandewoi BA that has been agreed with the Department contains 405.8ha of CHVEF. This includes 175.8ha of Grey Box Woodland (CHVEF CEEC) and 230ha of Grey Box Derived Native Grassland (DNG).
4b	175.8 hectares of foraging habitat for the Swift Parrot; and	Compliant	The Wandewoi BA that has been agreed with the Department contains 175.8ha of foraging habitat for the Swift Parrot, comprising 175.8ha of Grey Box Woodland (CHVEF CEEC).
4c	40 ha of regenerating foraging habitat for the Swift Parrot.	Compliant	The Wandewoi BA that has been agreed with the Department contains foraging habitat for the Swift Parrot, including 230ha of Grey Box Derived Native Grassland (DNG). Once the variation has been approved by the Delegate, the DNG areas at Wandewoi will be regenerated to CHVEF, including the required hectares of foraging habitat.



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The revised Wandewoi BA Management Plan proposes 61ha of regenerating foraging habitat area at Wandewoi as a result of the EPBC calculations with the Hook property swap.

5	To compensate for residual significant impacts to 22.7 ha of Class A condition CHVEF from the Riverview Pit extension area the person taking the action must identify a direct offset site that meets requirements of the EPBC Act Offset Policy and secure the offset in perpetuity under a legally binding agreement within 12 months from the date of approval of the Offset Strategy at Condition 10.	Non-compliant	<p>The direct offset site at Mitchelhill detailed in the Biodiversity Offset Strategy (Condition 10) was to be protected under a legally binding agreement by 23 October 2018. A conservation mechanism to secure the BAs was discussed with the NSW Biodiversity Conservation Trust and the NSW Office of Environment and Heritage. A suitable mechanism could not be agreed upon and the DCCEEW subsequently agreed that a s305 conservation mechanism would be appropriate. HVO submitted an application to extend the date to allow the HVO BAs to be secured under a s305 conservation agreement to the DCCEEW on 27 September 2018 and 18 October 2018. The date extension requires an approval variation which the DCCEEW intends to include in the Delegate’s submission discussed in Condition 4 above.</p> <p>On several occasions HVO has asked for DCCEEW’s response to the requests for the extension and has been told that the submission of the request would be sufficient in the event of an audit.</p> <p>DCCEEW are preparing a submission for the Delegate to vary the conditions of approval, implement a s305 conservation mechanism to secure the sites in perpetuity and approve the various draft BOMPs, including the recommended Hook offset swap for sections of the Wandewoi BA.</p> <p>A full timeline of discussions between HVO and DCCEEW is detailed in Section 1.1 of this report.</p>
6	To compensate for residual significant impacts to 68.4 ha of breeding and foraging habitat for the Regent Honeyeater the person taking the action must identify a direct offset site that meets requirements of the EPBC Act Offset Policy and secure the offset in perpetuity under a legally binding agreement	Non-compliant	<p>Direct offset sites at Mitchelhill and Condon View detailed in Biodiversity Offset Strategy (Condition 10) is to be protected under a legally binding agreement by 23 October 2018. A conservation mechanism to secure the BAs was discussed with the NSW Biodiversity Conservation Trust and the NSW Office of Environment and Heritage. A suitable mechanism could not be agreed upon and the DCCEEW subsequently agreed that a s305</p>



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within 12 months from the date of approval of the Offset Strategy at Condition 10.

conservation mechanism would be appropriate. As noted in Section 1 above, HVO submitted an application to extend the date to allow the HVO BAs to be secured under a s305 conservation agreement to the DCCEEW on 27 September 2018 and 18 October 2018. The date extension requires an approval variation which the DCCEEW intends to include in the Delegate's submission discussed in Condition 4 above.

On several occasions HVO has asked for DCCEEW's response to the requests for the extension and has been told that the submission of the request would be sufficient in the event of an audit.

DCCEEW are preparing a submission for the Delegate to vary the conditions of approval, implement a s305 conservation mechanism to secure the sites in perpetuity and approve the various draft BOMPs, including the recommended Hook offset swap for sections of the Wandewoi BA.

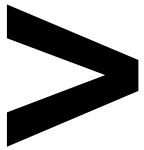
A full timeline of discussions between HVO and DCCEEW is detailed in Section 1.1 of this report.

7 To compensate for residual significant impacts to 2.6 ha of breeding habitat and 102.7 ha of foraging habitat for the Green and Golden Bell Frog the person taking the action must identify an **offset package** that meets requirements of the **EPBC Act Offset Policy** and secure a **direct offset site** in perpetuity under a **legally binding agreement** within 12 months from the date of approval of the Offset Strategy at Condition 10

Non-compliant

Direct offset sites at Crescent Head detailed in Biodiversity Offset Strategy (Condition 10) is to be protected under a legally binding agreement by 23 October 2018. A conservation mechanism to secure the BAs was discussed with the NSW Biodiversity Conservation Trust and the NSW Office of Environment and Heritage. A suitable mechanism could not be agreed upon and the DCCEEW subsequently agreed that a s305 conservation mechanism may be appropriate. As noted in Section 1 above, HVO submitted an application to extend the date to allow the HVO BAs to be secured under a s305 conservation agreement to the DCCEEW on 27 September 2018 and 18 October 2018. The date extension requires an approval variation which the DCCEEW intends to include in the Delegate's submission discussed in Condition 4 above.

On several occasions HVO has asked for DCCEEW's response to the requests for the extension and has been told that the submission of the request would be sufficient in the event of an audit.



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			<p>DCCEEW are preparing a submission for the Delegate to vary the conditions of approval, implement a s305 conservation mechanism to secure the sites in perpetuity and approve the various draft BOMPs, including the recommended Hook offset swap for sections of the Wandewoi BA.</p> <p>A full timeline of discussions between HVO and DCCEEW is detailed in Section 1.1 of this report.</p>
8	<p>Prior to securing the direct offsets required by Conditions 4, 5, 6 and 7 the direct offset sites and legally binding agreements must be agreed to by the Minister.</p>	Compliant	<p>Direct offset sites have been approved by the Assistant Secretary (DCCEEW) on 23 October 2017 through approval of the Biodiversity Offset Strategy – State Approved Mining (EPBC2016/7640) dated October 2017. The terms of legally binding agreements have also been agreed with DCCEEW.</p>
9	<p>The action cannot continue for more than 12 months from the date of approval of the Offset Strategy at Condition 10, unless the direct offset sites required by Conditions 5, 6 and 7 have been secured in perpetuity under a legally binding agreement by the person taking the action.</p>	Non-compliant	<p>Direct Offset Sites detailed in Biodiversity Offset Strategy (Condition 10) are to be protected under a legally binding agreement by 23 October 2018. The DCCEEW has agreed that a s305 conservation mechanism is appropriate. To facilitate this, a change to the conditions of EPBC 2016/7640 is required and, hence, as noted in Section 1 above, HVO submitted an application to extend the date required to secure the BAs on 27 September 2018 and 18 October 2018. Despite extensive correspondence and substantial progress, DCCEEW has not yet finalised the variation. On several occasions HVO has asked for DCCEEW's response to the requests for the extension and has been told that the submission of the request would be sufficient in the event of an audit.</p> <p>DCCEEW are preparing a submission for the Delegate to vary the conditions of approval, implement a s305 conservation mechanism to secure the sites in perpetuity and approve the various draft BOMPs, including the recommended Hook offset swap for sections of the Wandewoi BA.</p>

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			A full timeline of discussions between HVO and DCCEEW are detailed in Section 1.1 of this report.
10	Within six (6) months from the commencement of the action the person taking the action must prepare and submit an Offset Strategy for the Minister's approval. The Offset Strategy must specify the development of the offset package and how direct offset sites required by Conditions 5, 6 and 7 will be identified, secured and managed in perpetuity. The Offset Strategy must:	Compliant	Biodiversity Offset Strategy (BOS) – State Approved Mining (EPBC2016/7640) submitted to DCCEEW on 1 May 2017. Approved by the Assistant Secretary (DCCEEW) on 23 October 2017.
10a	Describe the development of the offset package and identify the proposed direct offset sites required by Conditions 5, 6 and 7, include a detailed description of the direct offset sites and demonstrate how the direct offset sites meet the EPBC Act Offset Policy and provide an adequate offset for the residual significant impacts to protected matters .	Compliant	Chapter 3, 4 and 5 of the BOS.
10b	Include proposed timeframes in which the direct offset sites will be secured by a legal binding agreement and a detailed description of how the legally binding agreement will secure the direct offset sites in perpetuity.	Compliant	Section 6 of the BOS. DCCEEW are preparing a submission for the Delegate to vary the conditions of approval and implement a s305 conservation mechanism to secure the sites in perpetuity.
10c	Proposed measures for the long term management of the direct offset sites .	Compliant	Section 6 of the BOS.
	The Offset Strategy approved by the Minister must be implemented	Compliant	Biodiversity Offset Strategy (BOS) – State Approved Mining (EPBC2016/7640) approved by the Assistant Secretary (DCCEEW) on 23 October 2017. Direct Offset sites detailed in the BOS have been purchased and the management activities outlined in the BOS are being implemented at the BAs.
11	For the protection of the CHVEF as well as habitat for the Regent Honeyeater, Swift Parrot and Green and Golden Bell Frog the person taking the action must prepare and submit a Biodiversity Offset Management Plan (BOMP) for	Compliant	Biodiversity Offset Management Plans for the BAs were submitted to the DCCEEW for approval on the 10 October 2017.

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the **Minister's** approval within 12 months from the date of this approval. At a minimum, the BOMP must:

Discussions regarding the security mechanism and the variation that was submitted to the DCCEEW on 27 September 2018 and 18 October 2018 requires an approval variation. The DCCEEW stated that the varied BOMPs, BOS, s305 conservation agreement and the variation are to be submitted to the Delegate as a package.

DCCEEW are preparing a submission for the Delegate to vary the conditions of approval and implement a s305 conservation mechanism to secure the sites in perpetuity.

11a	Clearly identify the direct offset sites described in Conditions 4, 5, 6 and 7. This must include offset attributes, shapefiles , textual descriptions and maps to clearly define the location and boundaries of the direct offset sites .	Compliant	<p>The Wandewoi, Mitchelhill and Hook BOMPs describe the direct offset site for CHVEF and Swift Parrot relevant to Condition 4 and 5 of the approval.</p> <p>The Mitchelhill and Condon View BOMPs describe the direct offset sites for the Regent Honeyeater relevant to Condition 6 of the approval.</p> <p>The Crescent Head BOMP describes the direct offset site for Green and Golden Bell Frog relevant to Condition 7 of the approval.</p>
11b	Provide a description of the offset attributes for each protected matter and how the offset site meets the offset requirements under Conditions 4, 5, 6 and 7.	Compliant	<p>The Wandewoi, Mitchelhill and Hook BOMPs describe the offset attributes for CHVEF and Swift Parrot relevant to Condition 4 and 5 of the approval.</p> <p>The Mitchelhill and Condon View BOMPs describe the offset attributes for the Regent Honeyeater relevant to Condition 6 of the approval.</p> <p>The Crescent Head BOMP describes the offset attributes for Green and Golden Bell Frog relevant to Condition 7 of the approval.</p>
11c	Provide a survey and description of the current condition (prior to any management activities) of the direct offset sites identified in Conditions 4, 5, 6 and 7.	Compliant	<p>The Wandewoi, Mitchelhill, Hook, Condon View and the Crescent Head BOMPs describes the survey results and provides a description of the condition of each BA following the purchase of the properties relevant to Condition 4 and 5 of the approval.</p>



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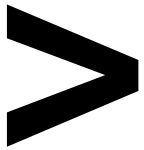
11d	<p>Include detailed management actions, including regeneration and revegetation strategies to be undertaken at the direct offset sites to improve the ecological quality of these areas. The BOMP must also include:</p> <ul style="list-style-type: none"> i. Management actions relating to improving habitat quality for protected matters including but not limited to: weed management, feral animal management, erosion and sediment control and fire management. ii. A description and timeframes that management measures would be implemented to improve the condition of CHVEF and habitat for the Regent Honeyeater, Swift Parrot and the Green and Golden Bell Frogs on the direct offset sites. iii. Performance and completion criteria for evaluating the management of the direct offset sites, and criteria for triggering remedial action. iv. A program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria. v. A description of potential risks to the successful implementation of the plan, a description of the measures that will be implemented to mitigate against these risks and a description of the contingency measures that will be implemented if defined triggers arise. vi. Details of who would be responsible for monitoring, reviewing, and implementing the plan. 	Compliant	<p>Chapter 5 of each BOMP describes the detailed management actions, timing, performance criteria and completion criteria relevant to the direct offset site for the CHVEF, Regent Honeyeater, Swift Parrot and GGBF.</p> <p>Chapter 6 of each BOMP describes the monitoring program.</p> <p>Chapter 7 of each BOMP provides a description of potential risks and corrective actions.</p> <p>Chapter 2 of each BOMP provides responsibilities for the MP.</p>
12	<p>The BOMP approved by the Minister must be implemented at the direct offset sites required to meet the requirements of Conditions 5, 6 and 7 within three (3) months from the date the offsets are secured under a legally binding agreement.</p>	Not applicable	<p>Direct Offset Sites required to meet Conditions 5, 6 and 7 are to be protected under a legally binding agreement by 23 Oct 2018. The DCCEEW has agreed that a s305 conservation mechanism is appropriate. A request for an extension to this date to allow the HVO BAs to be secured under a s305 was submitted to the DCCEEW on 27 September 2018 and 18 October 2018. DCCEEW are preparing a submission for the Delegate to vary the conditions of approval and implement a s305 conservation mechanism to secure the sites in perpetuity.</p>



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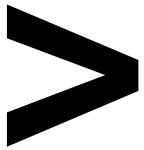
			Note that the direct offset sites are being managed in accordance with the DCCEEW-reviewed draft management plans.
13	To ensure timely compensation for significant impacts to protected matters , the approved BOMP must be implemented at the Wandewoi Biodiversity Area within one (1) month from the date the BOMP is approved, regardless if the Wandewoi Biodiversity Area has been secured under a legally binding agreement .	Not applicable	Wandewoi BA Management Plan was originally submitted to DCCEEW for review and approval on the 10 October 2017 and has been updated and resubmitted following Departmental reviews. Approval is yet to be obtained. Management activities outlined in the BOMP are being implemented including: track and fence management, weed spraying and vertebrate pest control.
14	The person taking the action may choose to revise a management plan approved by the Minister without submitting it for approval under Section 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:	Compliant	In 2020, minor edits were made to specify that the protocols in the VCP were restricted to the approved EPBC areas and to remove a duplicate photo and correct figure referencing in the text. In accordance with Condition 14 of the EPBC approval, HVO determined that these minor changes would not be likely to have a new or increased impact on a protected matter. These changes have been discussed with DCCEEW. More details are outlined in Section 8.
14a	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;	Compliant	Notification and the revised VCP (version 2.0) was provided to the Department on 6 January 2023. The Departments feedback was incorporated into the VCP and version 2.1 requires clearing machinery to be washed prior to leaving site as requested by DCCEEW.
14b	Implement the revised management plan from the date that it is submitted to the Department; and	Compliant	The revised management plan (version 2.1) is being implemented. No activities relating to the previous change occurred in 2024.
14c	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	Justification for the decision that 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 has been documented and outlined in the VCP notification letter to the DCCEEW dated 6 January



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			2023. As stated, this justification was rejected by the Department but the documentation remains.
15	The person taking the action may revoke its choice under Condition 14 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	Compliant	The proposed edits to the VCP that were rejected by the DCCEEW have reverted to that approved by the Department.
16	Condition 14 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 applicable	
17	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:	Not applicable	
17a	Condition 14 does not apply, or ceases to apply, in relation to the revised management plan; and	Not applicable	
17b	The person taking the action must implement the previous management plan most recently approved by the Minister	Not applicable	
	To avoid any doubt, this condition does not affect any operation of conditions 14, 15 and 16 in the period before the day the notice is given.	Not applicable	



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At the time of giving the notice the **Minister** may also notify that for a specified period of time that Condition 14 does not apply for one or more specified plans required under the approval

18	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 has commenced as per the notified Commencement of Action (1 November 2016).
19	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	Department of Environment and Energy advised by letter dated 9 November 2016 that the action had commenced in accordance with the approved Vegetation Clearance Plan on the 1 November 2016.
20	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 14.a	Not applicable	The various Biodiversity Area Management Plans will be published when approved by the Delegate.
21	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 VCP, 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	All disturbance-related activities received prior approval through HVO's GDP process. Records of activities and outcomes are maintained by site personnel and stored within the electronic folders and compliance management system. Activities have been undertaken in accordance with the applicable conditions of approval and HVO's approved policies, plans and strategies.



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22	<p>Within three months of every 12 month anniversary of 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.</p>	Compliant	<p>HVO has published on its website compliance reports for the previous compliance reporting years. For the 2023 reporting year, the compliance report was published on 31 January 2024. Evidence of this publication along with a summary was provided to DCCEEW on the same day.</p> <p>This compliance report outlines HVO's compliance with the approval conditions for 2024 (1 January 2024 – 31 December 2024). Evidence of date of publication and notification of non-compliances with the conditions will be provided to DCCEEW on the 31 January 2025.</p>
23	<p>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.</p>	Not applicable	

2.2 | VEGETATION CLEARANCE PLAN

Commitment	Compliance status	Evidence/Comments
1. A GDP will be completed and approved prior to any clearance in the extension areas.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
2. Conduct pre-clearance surveys for CHVEF in accordance with Section 3.1.1	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period. No pre-clearance surveys have been undertaken
3. Identify clearance limits on plans and on the ground.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
4. Conduct pre-clearance surveys for listed species in accordance with Section 3.3, 3.4 and 3.5.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period. No pre-clearance surveys have been undertaken
5. Manage listed species during vegetation clearance in accordance with Section 3.3.4, 3.4.4 and 3.5.4.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
6. All clearing machinery involved in vegetation and/or topsoil clearance in the extension areas will visit the wash-down facility for cleaning prior to leaving HVO.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
7. Disinfection measures are implemented in accordance with Section 4.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
8. Records will be kept in accordance with Section 5.2.	Not applicable	No clearing activities occurred within the EPBC areas during the reporting period.
9. Publish the annual compliance report on the proponent's website.	Compliant	This compliance report will be placed on the HVO public website and notification provided to DCCEEW.

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3 | NEW ENVIRONMENTAL RISKS AND POTENTIAL THREATS TO MATTERS OF NATIONAL AND STATE ENVIRONMENTAL SIGNIFICANCE

Crescent Head

A small patch of Tropical Soda Apple (*Solanum viarum*) seedlings were found during the routine inspections of the Crescent Head North biodiversity area. This exotic species was subject to a Biosecurity (Tropical Soda Apple) Control Order 2022 under the *Biosecurity Act 2015*. The identified seedlings were carefully hand removed, placed in sealed garbage bags and removed from site for appropriate disposal in accordance with the Tropical Soda Apple best practice manual (27 Feb 2024). The identified locations were pegged for further assessment during subsequent inspections.

Hook

During the reporting period, a trespasser entered the property through a locked side gate and removed firewood from a stockpile created by a previous landowner. Discussions occurred with the neighbour and to prevent recurrence, the side gate was closed and the gate removed.



Figure 3-1 -Site of the unauthorised firewood removal from the Hook biodiversity area.

No additional environmental risks or threats to matters of national environmental significance have been identified during the reporting period.



4 | SUMMARY OF CLIMATIC CONDITIONS

Table 4-1 shows the monthly rainfall compared to the long term average for the BAs. The rainfall received during 2024 at all locations slightly exceeded the annual average with the exception of Condon View.

Table 4-1 - Rainfall received during 2024 against the average annual rainfall occurring at each of the BAs

Site	Weather station	Annual Rainfall Received (mm)	Annual Average (mm)	Surplus/Deficit (mm)
Condon View	Putty Tea Rooms # 61209	638.2	749.7	-111.5
Crescent Head	Crescent Head # 59047	1561.2	1458.5	102.7
Hook	Elderslie # 61092	784	724.2	59.8
Mitchelhill	Muswellbrook (Spring Creek) # 61192	780.6	683.8	96.8
Wandewoi	HVO Corp - North	645.2	635	10.2

* Note:

Crescent Head: December rainfall extrapolated from rainfall received in Kempsey.

Hook: April rainfall extrapolated from rainfall received at Branxton (Dalwood Vineyard).



5 | MANAGEMENT AND MONITORING SCHEDULE

Established offset sites at Wandewoi, Mitchelhill, Hook, Condon View and Crescent Head Biodiversity Areas (BAs) offset the impacts on *Lathamus discolor* (Swift Parrot), *Anthochaera phrygia* (Regent Honeyeater), *Litoria aurea* (Green and Golden Bell Frog) (GGBF) and Central Hunter Valley Eucalypt Forest and Woodland (CHVEFW). The Crescent Head offset area is the only site established to offset impacts to GGBF; the monitoring requirements for this BA are discussed separately in this report.

The objectives for each offset are outlined in Table 5-1.

Table 5-1 - Offset objectives for each BA.

Offset area	CHVEFW	Swift Parrot	Regent Honeyeater	Green and Golden Bell Frog
Wandewoi BA	Y	Y		
Mitchelhill BA	Y	Y	Y	
Hook BA	Y	Y		
Condon View BA			Y	
Crescent Head BA				Y

The Biodiversity Management Plan for each site identifies the key conservation outcomes of the long-term management and protection of the offset areas. These outcomes are outlined in Table 5-2.

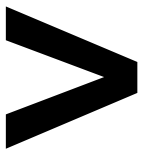


Table 5-2 - Desired conservation outcomes for the HVO offset areas

Conservation outcome	Wandewoi BA	Mitchelhill BA	Hook BA	Condon View BA
Protection of the BA under a legally binding conservation covenant	X	X	X	X
Protect and improve the ecological quality of CHVEFW at Wandewoi, Mitchelhill and Hook BAs	X	X	X	
Improve the CHVEFW derived grassland areas so they attain the key characteristics of CHVEFW	X	X	X	
Increased condition and extent of suitable habitats for the Regent Honeyeater and Swift Parrot within protected reserves at Wandewoi, Mitchelhill, Hook and Condon View BAs	X	X	X	X
Enhanced landscape connectivity with the surrounding landscape	X	X	X	X
Improved fauna movement and flora dispersal opportunities with the surrounding landscape	X	X	X	X
Enhanced network of protected vegetation within the Hunter Valley	X	X	X	X

The management plan lists the conservation values, key performance indicators, and completion criteria identified for the offset areas. Key performance indicators and completion criteria for foraging habitat and habitat connectivity and condition are being realised through this monitoring program and management response.

The landscape monitoring requires an interpretation of aerial photo images of the BAs over time and is not considered in this compliance report. This report provides a summary of investigations and activities undertaken to address both the ecological and management requirements of HVO's BAs.

Offset monitoring has been ongoing according to the schedule in Table 5-3 since the EPBC approval in 2016 and the subsequent consultation of the draft Biodiversity Areas Management Plans with the DCCEEW.

Table 5-3 -Monitoring schedule proposed in biodiversity areas management plans

Monitoring method	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	On
Landscape								
Aerial photo interpretation	X				X			Repeat every 5th year
Ecological								
Condition Assessment	Spring	Spring		Spring		Spring		Repeat from Year 2
Bird Assemblage	Winter	Winter		Winter		Winter		Repeat from Year 2
Green and Golden Bell Frog: threatened species monitoring	Sept - Mar			Sept - Mar				Repeat every 4th year
Green and Golden Bell Frog: habitat assessment	Spring	Spring		Spring		Spring		Biennial
Mosquito Fish monitoring	Biannual			Annual				If required
Management								
Rapid Condition Assessment - CHVEFW		Spring	Spring	Spring	Spring	Spring	Spring	Spring
Rapid Condition Assessment – Swift Parrot and Regent Honeyeater		Winter	Winter	Winter	Winter	Winter	Winter	Winter
Property inspection	Biannual							

6 | MANAGEMENT ACTIVITIES - 2024

Various conservation, monitoring, management and maintenance activities were undertaken within the BAs throughout the reporting period between 1 January 2024 and 31 December 2024. An overview of the various activities that occurred is presented in Table 6.1.

Table 6-1 - Overview of activities undertaken within the HVO EPBC 2016/7640 BAs during the reporting period

Site	Activities undertaken during the reporting period
Condon View	Property inspections, weed control, vertebrate pest management, rapid condition assessment, bushfire assessment and repair of eroded access tracks.
Crescent Head	Slashing of boundary firebreaks and internal access tracks, track management, weed control, pig trapping, frog monitoring, property inspections, bushfire assessment.
Hook	Rapid condition assessment, property inspections, African Olive mapping, control and mulching, other species weed management, vertebrate pest management, slashing of existing boundary firebreaks and internal access tracks, bushfire assessment.
Mitchelhill	Property inspections, weed management, rapid condition assessment, vertebrate pest management, slashing of existing boundary firebreaks and internal access tracks, bushfire assessment. Activities specific to the western BA: Repair of eroded access tracks.
Wandewoi	Slashing of boundary firebreaks and internal access tracks, property inspections, rapid condition assessment, weed control, vertebrate pest management and bushfire assessment.

6.1 | PROPERTY INSPECTIONS AND ACTIVITIES

Property inspections were undertaken regularly across all the BAs during the reporting period and provided critical advice regarding works that needed to be prioritised. A summary of the condition of each BA based on the property inspection reports is as follows:

Condon View

As per previous years, Condon View has few serious management issues and does not have issues with illegal access. Despite being logged at some point many years ago, the site is well vegetated, has minimal weeds that are primarily located around an old dam, and recruitment of various native species has been observed. During 2024, weed control and vertebrate pest management activities were the main activities that occurred within the BA.

The eastern boundary track was subject to rill erosion following grading by the Rural Fire Brigade in 2023 to gain access to install a backburn on a neighbouring property. During 2024, it was noticed that the track was starting to erode again as it had not been compacted. Although the majority of the impacted track was on a neighbouring property, access across this section is required to gain access to the rear of the offset. With the permission of the neighbour, works commenced to regrade the track, rollovers were installed and ballast rock placed at the ends of the roll over gullies to restrict sediment movement (**Figure 6-1**).



The other main activities to occur within the Condon View offset include weed management, with a focus on lantana and grassy weeds. The property inspection reports identified areas that required weed management, which were targeted during the management activities (Figure 6-2)

Monitoring within the BA has identified various native fauna species as utilising the offset. This BA has the benefit of being located close to the Wollemi National Park in an area that is well vegetated and did not burn in the bushfires of 2020. The pest management activities will continue in 2025.

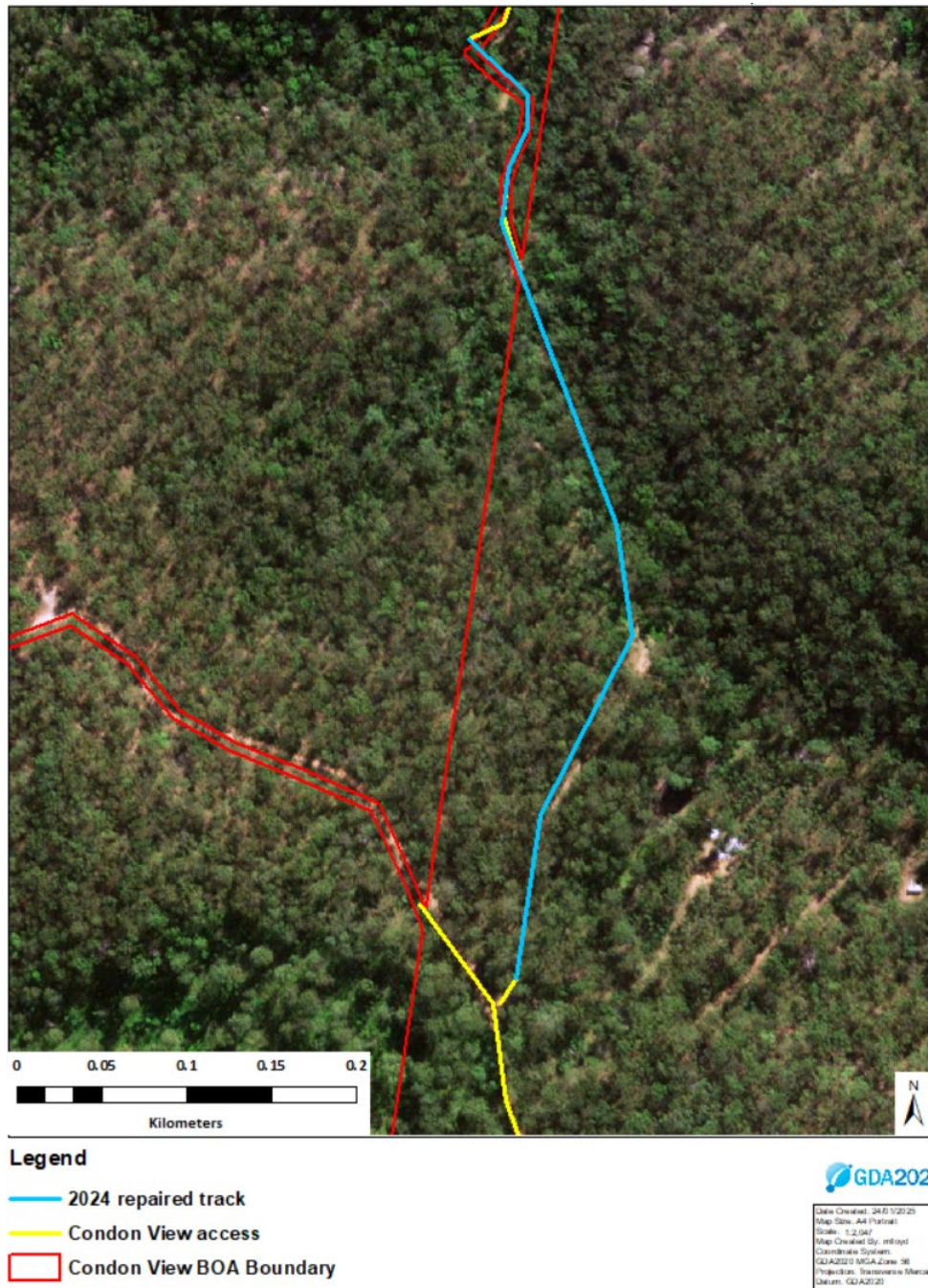


Figure 6-1 - Location of the repaired track into the Condon View BA.

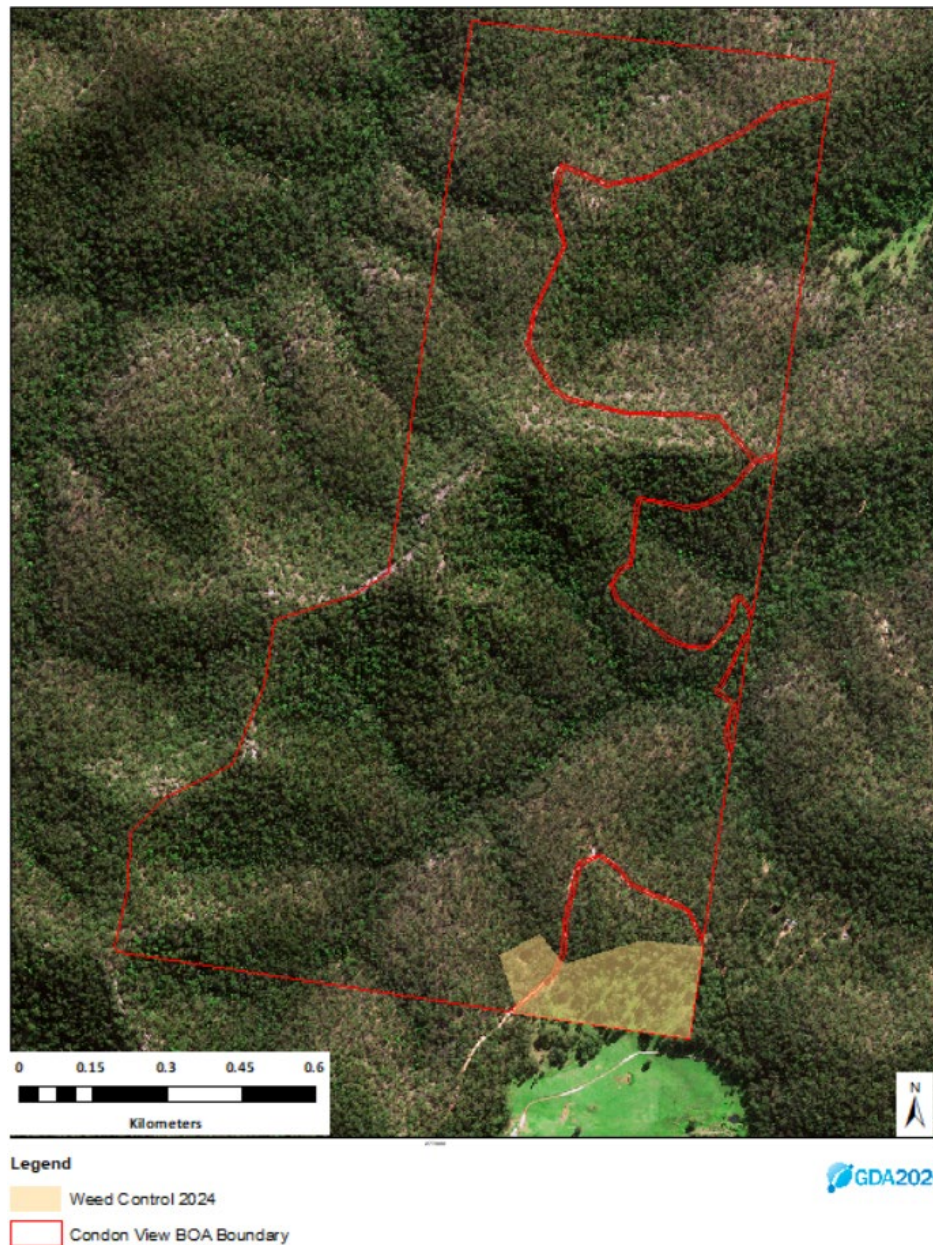
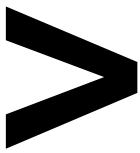


Figure 6-2 - Weed management within the Condon View BA.

Crescent Head

At Crescent Head North, the fencelines that were burnt in October 2023 were surveyed and the boundaries marked for ready identification. Fencelines that bordered private property that required restraining or reconstruction were repaired. The fenceline that adjoins the Hat Head National Park is yet to be repaired and will occur during 2025. The delay is due to the work being tied up with the planned repair of the access tracks to the site.

No trespass events were noted during 2024.



As per previous years, no dog baiting occurred at the Crescent Head offsets due to discussions with the Ranger of the adjacent National Parks indicating that a pure population of dingos exist in the Park that assist to manage the pig population. Should evidence of the dingos potentially impacting the GGBFs become available, further discussions will be held with NSW National Parks and Wildlife Service.

Crescent Head North is in good condition but does have some minor weed issues, particularly at the exposed edges of vegetation where light is greater than beneath the established plants. As it is liable to flooding events, weed incursion and feral aquatic pests have been recorded within low lying areas and aquatic habitats.

Property inspections have identified a small patch of the invasive weed, Tropical Soda Apple. The property inspections specifically target this species as it is known to disperse in flood waters and can be readily managed if seed set is prevented. On each occasion, the Tropical Soda Apple individuals within the observed areas were bagged and removed from site for appropriate disposal.

The weeds are being managed within the BA. As with other years, Bitou bush (*Chrysanthemoides monilifera subsp. rotundata*), Goundsel (*Baccharis halimifolia*), Lantana (*Lantana camara*), Small-leaved Privet (*Ligustrum sinense*) and Wild Tobacco (*Solanum mauritianum*) were targeted, however, during 2024, the main weed identified as requiring specific attention in future management activities within the northern BA is Mickey mouse plant (*Ochna serrulata*).

The few existing internal fencelines will be retained to contain any potential stray cattle from adjacent properties. A small number of stacked roofing tiles can be found near Pond 1 at Crescent Head North. Being inert, these are being retained in situ as additional habitat for frogs, such as the GGBF.

During the inspections, the constructed frog ponds and associated water tanks were reported to be in good condition, despite the netting (installed over the pond to provide the frogs protection from bird predation) requiring replacement. No Green and Golden Bell Frogs or tadpoles were photographed within the constructed pond or the grass beneath the pond. Various native fauna were sighted during the inspections and included Lace monitors Red brow finches, Fan tails, Wrens, Bower birds, Kookaburras, Ducks, Parrots, snakes, Wattle birds and various reptiles.

Crescent Head South is also in good condition but requires grass biomass management in areas to reduce the risk of bushfire. The dominant management issue in the reporting period was vegetation management, specifically along access tracks and boundaries, maintaining habitat connectivity in accordance with the management plan, and bushfire management.



Vegetation management occurred during 2024 to maintain the movement corridors between the constructed frog pond and Pond D. In accordance with the draft management plan for the BA, and in line with the *Best Practice Guidelines for Green and Golden Bell Frog Habitat*, tree regrowth within the movement corridors and around the constructed frog pond is prevented to prevent shadowing of the constructed pond and encourage grassy tussock growth between the two sites.

No tadpoles were observed within the artificial frog ponds at the Crescent Head South BA. While no GGBF have been sighted within this BA, the property is being managed in accordance with the best practice GGBF guidelines. Native fauna sighted during the inspections included red neck wallabies, lace monitors, snakes, Eastern spinebills and various other native birds, tadpoles in the constructed ponds and numerous frogs calling in and around the frog ponds.

Hook

The primary management issues within the Hook property is the removal of African Olive (*Olea europaea subspecies cuspidate*) and Lantana, to enable the recruitment of native species consistent with the Central Hunter Valley Eucalypt Forest and Woodland ecological community. With the exception of the African olive and Lantana, exotic weeds are primarily concentrated within the grassland areas. A diverse suite of native species is recruiting across all areas of the site, but active management of the exotic grasslands are ongoing and will occur through 2025.

During 2024, a hand weed wiping trial was implemented at the edge of the exotic grassland area due to CHVEFW species also regrowing within the grassland. The intention is to control the exotic grasses at the edges and allow the CHVEFW species to become established. The hand wiping, hopefully, will enable the grasses to be managed and prevent the overshadowing of the intended community. Once the CHVEFW species have grown above the grassland, other less-intensive methods can be used to manage the grass. Should this strategy prove fruitful, it will be implemented across strategic areas within the property.

Management activities during 2024 included slashing tracks within the BA and extensive weed control and vertebrate pest management.

In February 2024, the Hook property was surveyed to record the locations of all African olive individuals in accordance with the Hook BA Intensive Weed Management Plan. Weed management services were undertaken over several occasions also targeting the African olive regrowth and lantana occurring within the areas that were mulched last year.

As per previous years, a 24 tonne excavator with a mulching head attachment was used to thin the more dense areas of African olive. In 2024, the African olives within a 5.35ha area were mulched, which opened up the area to more targeted management. The mulched biomass enabled light to reach the ground in these areas which has proven beneficial for native species regrowth.



In addition to the native species, the increased light was found to enable lantana and pear species to increase in number. These species have become subject to additional management during 2024, which is likely to continue through 2025.

In the HVO EPBC variation proposal that was submitted to the Delegate, HVO has made a commitment to reduce the extent of African olives on the Hook BA by 30% annually. While the effectiveness of the mulching programme to enable HVO to meet the 30% reduction in African olive commitment was encouraging, it is hoped that the excavator will not be required again for additional olive management. This is due to the bulk of the dense areas having being thinned to an extent that the management of individuals will not significantly increase the risk of fire to the vegetation community. This potential will be assessed during the olive survey to occur in late February 2025.

This commitment to a 30% reduction in African olives is discussed further in Section 6.3 |.

The areas managed for weeds during 2024 can be seen in Figure 6-3 below.

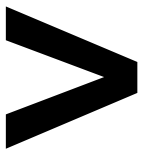
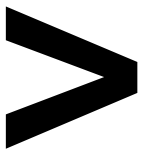


Figure 6-3 - Weed management within the Hook BA.

Mitchelhill

The Mitchelhill West BA is in good condition and recruitment has been recorded throughout the offset areas. During the reporting period, no unauthorised entry events were noted.

Weed management has occurred with the major weeds targeted being African boxthorn (*Lycium ferocissimum*), Galenia (*Galenia pubescens*) *Opuntia tormentosa* and Pampas grass (*Cortaderia* species).



The Upper Hunter Weeds Authority undertook an inspection in June 2023. The property inspection report identified both Pampas grass (*Cortadenia species*) within the old gravel quarry, and Velvety tree pear (*Opuntia tomentosa*) with a section of bushland. As these species are listed as invasive plants under the *Biosecurity Act 2015*, a reinspection has been scheduled to occur between March and April 2025 to allow time for management of these species to occur. During 2024, areas where these individuals were identified have had a particular focus for weed management (Figure 6-4).

To reduce the fire risk coming into summer, the open grassy areas and the planted riplines were slashed between the rows where natural regrowth has not occurred.

Natural recruitment was noted across the BA and, while the planted tubestock in the riplines have established well, infill plantings are planned for 2025 to supplement the rehabilitation areas. Seed of species representing the CHVEFW vegetation community are being grown to plant as tubestock during autumn 2025.

The Mitchelhill East BA is primarily steep country which is why it is predominately vegetated with few cleared areas. The weeds present on the BA are typical of those within agricultural environments and, while these can be found in scattered dense infestations, the majority are located within the lines ripped to facilitate the planted tubestock. Natural regeneration is occurring within the BA extending into the cleared grassland areas. Management of this regrowth and weed competition within the ripped lines will continue throughout 2025.

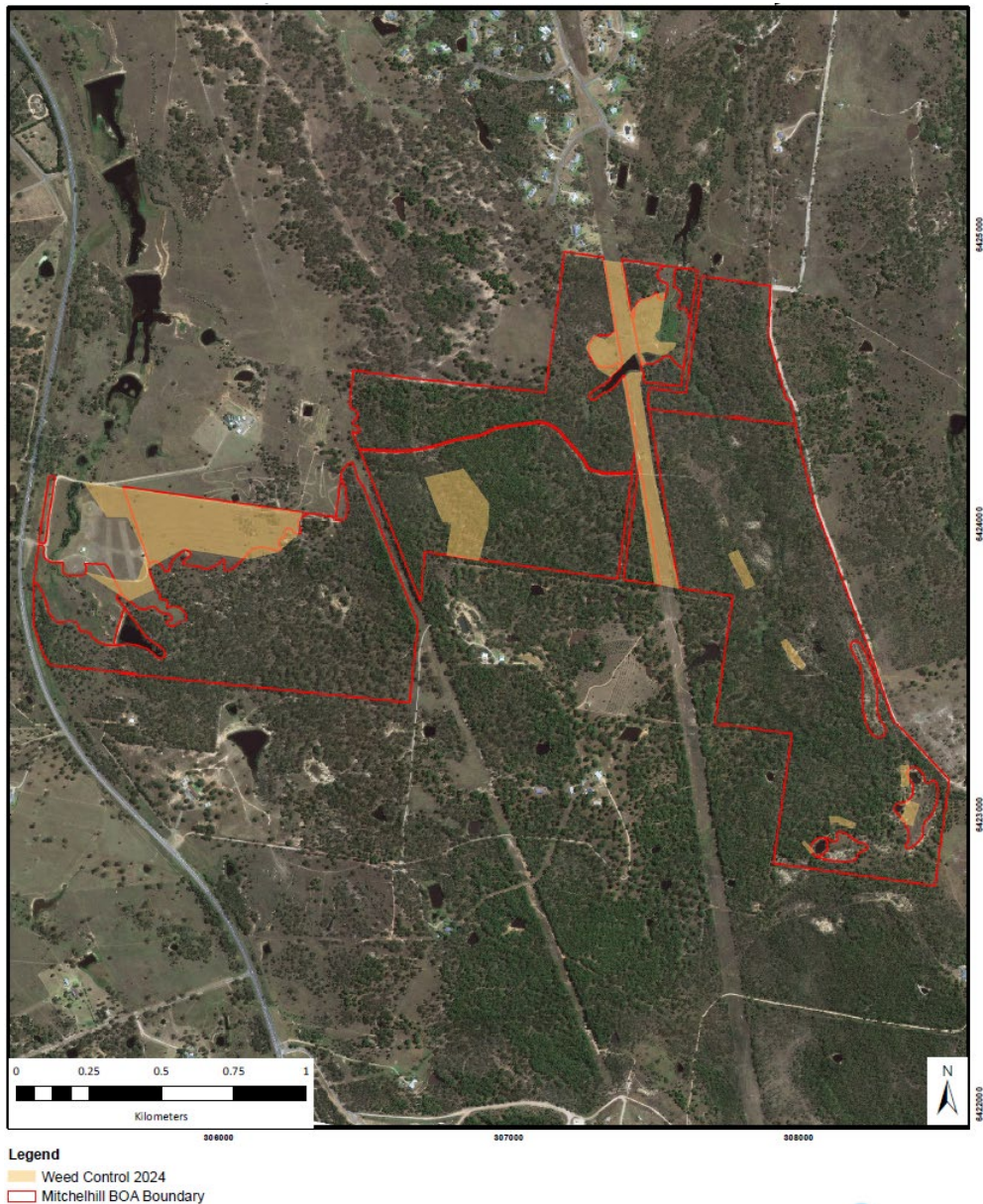
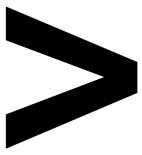


Figure 6-4 - Weed management within the Mitchelhill West biodiversity area.



Wandewoi

The management of weed growth is the main issue at the Wandewoi BA although the majority of the weed proliferation was in the cleared, previous agricultural areas and gullies. Slashing of the tracks and open areas assisted in managing weed establishment where possible with careful planning to avoid areas of native regrowth. Weed management via spraying has also occurred within specific areas identified during the monthly inspections as containing areas of weed regrowth.

To assist in fire management, a firebreak was mown along the alluvial flats where the ridgeline commences. The intention was to slow the progress of any grassfire should it occur on the alluvial areas before it established within the steep country. The vegetation in these areas do not represent CHVEFW at this point in time, hence no risk to this community occurred with this activity.

Cultural heritage barriers are being maintained and vertebrate pests (pigs and wild dogs) are routinely managed during trapping and baiting programmes. Widespread recruitment of native species has been observed within the woodland along the ridgeline. Weed management within these areas is scheduled to continue during 2025.

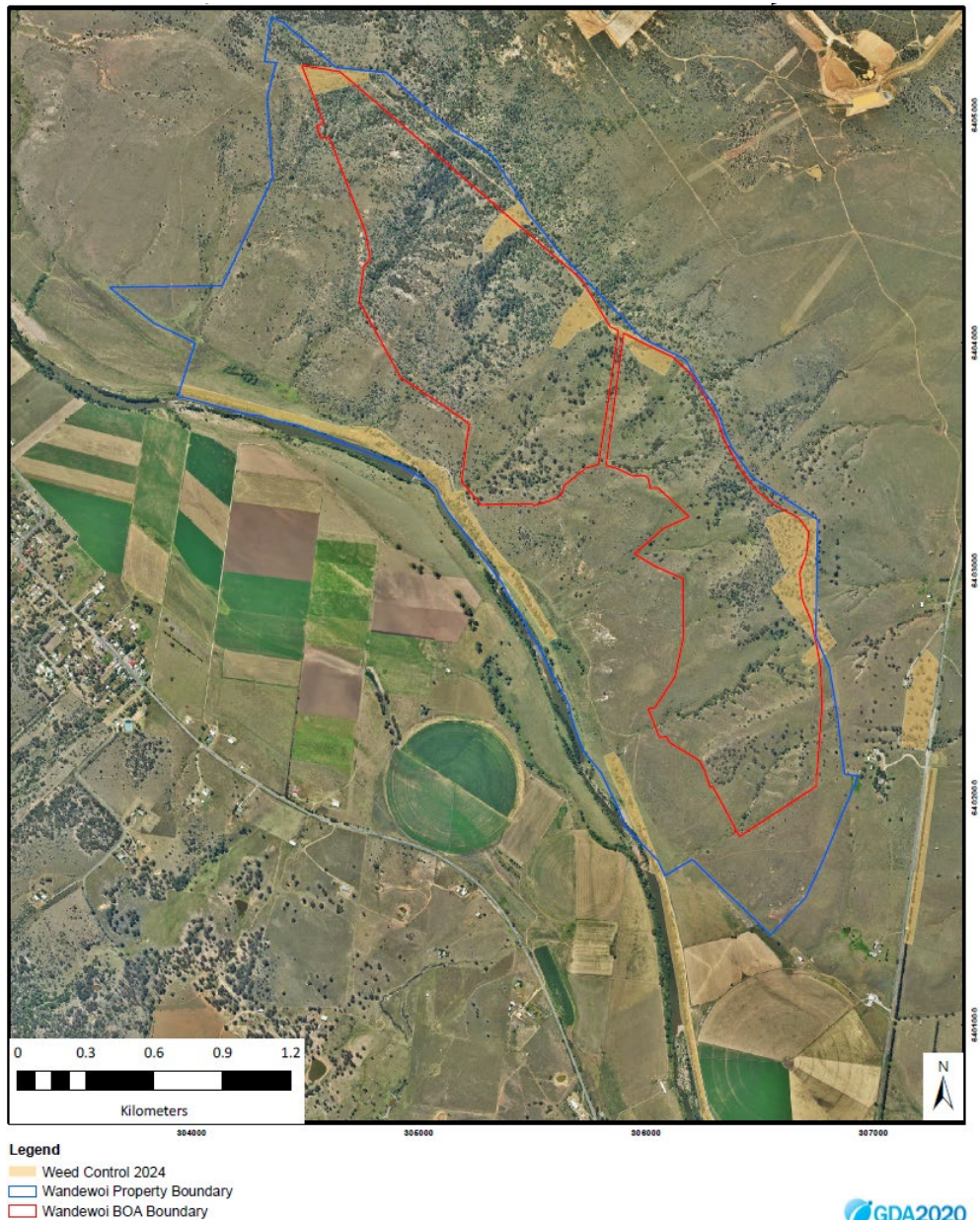


Figure 6-5 - Weed management within the Wandewoi biodiversity area.

6.2 | VERTEBRATE PEST MANAGEMENT

Vertebrate pest management has been undertaken within all of HVOs EPBC biodiversity areas in conjunction with the Local Land Services (LLS), NSW National Parks and Wildlife Services (NPWS) and surrounding landholders. During 2024, HVO participated in a 1080 baiting programme that targeted dogs and foxes, and pig trapping and baiting across the HVO lands and biodiversity offset areas.



The wild dog baiting programme occurred across the Mitchelhill (East and West), Hook, Wandewoi and Condon View BAs. While no dog baiting programmes occurred at the Crescent Head BA, a pig trapping programme was undertaken during 2024 based on evidence of a small number of pigs traversing the property. The property inspection reports at Crescent Head have not indicated a need to undertake wild dog and fox control to manage predation on the GGBF. Discussions around regional dog baiting programmes have occurred with the Kempsey NPWS due to the Crescent Head BAs adjoining the Limeburners Creek and Hat Head National Parks. To date, NPWS officers have indicated a reluctance to bait for dingos due to a ‘pure’ population of dingos occurring within Limeburners Creek National Park (pers comm.) and their ability to control pig populations and ensure that the pigs are transient across the area.

1080 Baiting Programme

Wild dog baiting programmes within the BAs occurred during autumn and spring 2024. Ten-eighty (1080) bait stations are selected based on previous baiting station locations, motion camera results from previous programs and sightings of wild dogs and foxes, biodiversity concerns and the location of tracks and trails within the offsets. Stations were either established as Ejector Bait Sites or baited with fresh meat containing sodium fluoroacetate (1080) at a concentration that targeted wild dogs and foxes.

The ground baiting method used aligns with the NSW Code of Practice and Standard Operating Procedures for the Effective and Humane Management of Wild Dogs produced by NSW Department of Primary Industry (DPI) (March 2022).

The location of the baits within each BA for both the autumn/winter and the spring 2024 programmes are shown in Figure 6-6 to Figure 6-15.

The spring 2024 vertebrate pest management programme represented the 13th baiting programme undertaken at the Mitchelhill, Hook and Wandewoi BAs, and the 15th undertaken at the Condon View BA. Some of the fauna recorded on the motion sensor cameras during the baiting programmes are shown in Section 9 |.

An additional baiting programme was undertaken in Spring 2024 across HVO. This programme included the Wandewoi BA and adjacent lands along the Hunter River.

A summary of the baiting programmes undertaken at the BAs are outlined in Table 6-3 and Table 6-4. Table 6-4 presents the results from the previous two years. The final column entitled ‘Baiting efficiency excluding other’ removes the non-target species from the calculation and gives a more accurate representation of the efficiency for the target species.



The results at all sites indicate that, during 2024, the species taking the majority of baits did vary according to location and time of year. Fluctuations between target and non-target species was observed with the majority of target species being either the wild dog or fox. Based on tracks and photographic evidence, the main non-target species consuming the baits appears to be the lace monitor (*Varanus varius*), although quolls (*Dasyurus maculatus*) have been reported within the Mitchelhill East and West BAs. Motion sensor cameras established at the bait stations have not indicated that the quolls were taking the baits.

Research has indicated that Australian native fauna are naturally resistant to 1080, and concentrations in the meat bait need to be substantially higher to adversely affect the animals. Despite this, any native species take is an undesirable outcome for baiting results and is not intended.

The outcomes of the baiting programme does not ensure a linear decline in vertebrate pests the following year despite efforts and expenditure. This emphasises the importance of a centralised coordination (LLS in this case) to ensure adjacent landholders participate in the scheme to minimise other properties becoming a source from where recolonisation can occur. The vertebrate pest management programme will continue during 2025.



Table 6-2 - Results of 1080 Vertebrate Pest Management Programmes at the Wandewoi BA.

Season	Bait Station Name	Check 1 Species	Check 2 Species	Check 3 Species
Autumn	1211	Fox	-	-
Autumn	1213	Dog	Dog	-
Autumn	1215	-	Dog	-
Autumn	1219	Fox	Dog	
Autumn	1220	-	Dog	-
Autumn	1222	Dog	Dog	-
Autumn	1224	Dog	Dog	Fox
Autumn	1225	Dog	Dog	Fox
Autumn	1256	-	Dog	Dog
Autumn	1253	-	Dog	Fox
Autumn	1251	-	Dog	-
Spring	2377	Fox	-	-
Spring	2378	Fox	-	-
Spring	2379	-	Pig	Fox
Spring	2380	Fox	-	-
Spring	2384	Fox	-	-
Spring	2393	-	-	-
Spring	2394	Fox	-	-
Spring	2395	Fox	Pig	Fox
Spring	2402	-	Pig	Fox
Spring	2403	Fox	-	-
Spring	2404	Fox	Dog	Fox

Table 6-3 - Comparison of Results of all 1080 Vertebrate Pest Management Programmes for HVO Biodiversity Areas (except Wandewoi and Crescent Head).

Baiting Program	No. of Baiting Sites	Baiting opportunities	Baits taken by Dogs	Dog (%)	Baits taken by Foxes	Fox (%)	Baits taken by other (non-target) species	Other (%)	Total No. of Baits Taken	No. Sites where baits taken at least once	Represented as Percentage (%)	No. sites with baits taken on all occasions	No. sites with no baits taken	No. baits Disturbed Not Taken	No. baits taken alternatively by Dog or Fox	Baiting Efficiency %	Baiting efficiency (excl 'other')
May 23 LB	11	22	6	86%	1	14%	0	0%	7	6	55%	1	5	3	0	32%	32%
Oct 23 LB	11	22	7	58%	1	8%	4	33%	12	8	73%	6	3	0	0	55%	36%
May 24 LB	12	24	7	54%	6	46%	0	0%	13	11	91%	2	1	2	0	54%	54%
Nov 24 LB	12	24	4	21%	9	47%	6	31%	19	11	91%	8	1	3	0	79%	54%
May 23 MIT E	5	10	1	25%	3	75%	0	0%	4	3	60%	1	2	1	0	40%	40%
Oct 23 MIT E	5	10	4	50%	3	38%	1	13%	8	4	80%	4	1	0	2	80%	70%
May 24 MIT E	5	10	2	67%	1	33%	0	0%	3	3	60%	0	2	2	0	30%	30%
Nov 24 MIT E	5	10	0	0%	5	100%	0	0%	5	4	80%	1	1	1	0	50%	50%

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Baiting Program	No. of Baiting Sites	Baiting opportunities	Baits taken by Dogs	Dog (%)	Baits taken by Foxes	Fox (%)	Baits taken by other (non-target) species	Other (%)	Total No. of Baits Taken	No. Sites where baits taken at least once	Represented as Percentage (%)	No. sites with baits taken on all occasions	No. sites with no baits taken	No. baits Disturbed Not Taken	No. baits taken alternatively by Dog or Fox	Baiting Efficiency %	Baiting efficiency (excl 'other')
May 23 MIT W	11	22	12	75%	4	25%	0	0%	16	10	91%	6	1	1	2	73%	73%
Oct 23 MIT W	12	24	9	60%	1	7%	5	33%	15	9	75%	6	3	0	1	63%	42%
May 24 MIT W	12	24	3	37%	6	67%	0	0%	9	6	50%	3	6	1	1	38%	33%
Nov 24 MIT W	12	24	4	20%	8	40%	8	40%	20	12	100%	8	0	2	1	83%	60%
May 23 CON	17	32	13	65%	5	25%	2	10%	20	14	82%	5	2	2	2	63%	56%
Oct 23 CON	16	32	7	27%	3	12%	16	62%	26	15	94%	11	1	0	0	81%	31%
May 24 CON	6	12	3	37.5%	5	62.5%	0	0%	8	5	83%	3	1	1	3	67%	67%
Nov 24 CON	6	12	4	40%	4	40%	2	20%	10	6	100%	4	0	0	1	83%	67%

Note

MITE = Mitchelhill East BA
MITW = Mitchelhill West BA

WAN = Wandewoi BA
CON = Condon View BA

LB = Lower Belford (Hook) BA

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Effective: 31/01/2025

Review:

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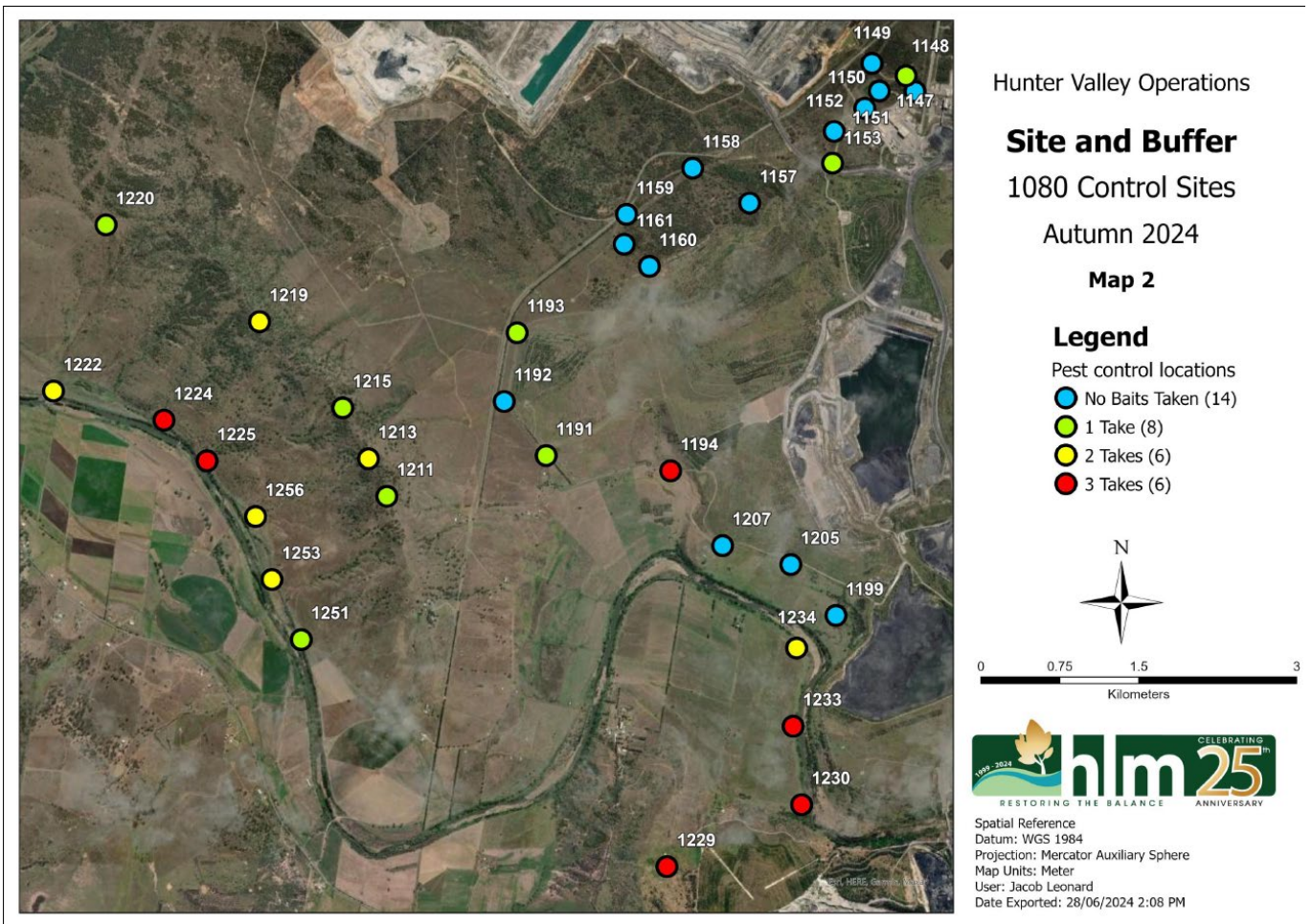


Figure 6-6 - Wandewoi BA vertebrate pest management results for the Autumn 2024 programme.

Note: The Wandewoi baiting results are those shown on the western side of the ridgeline on the left of the figure.

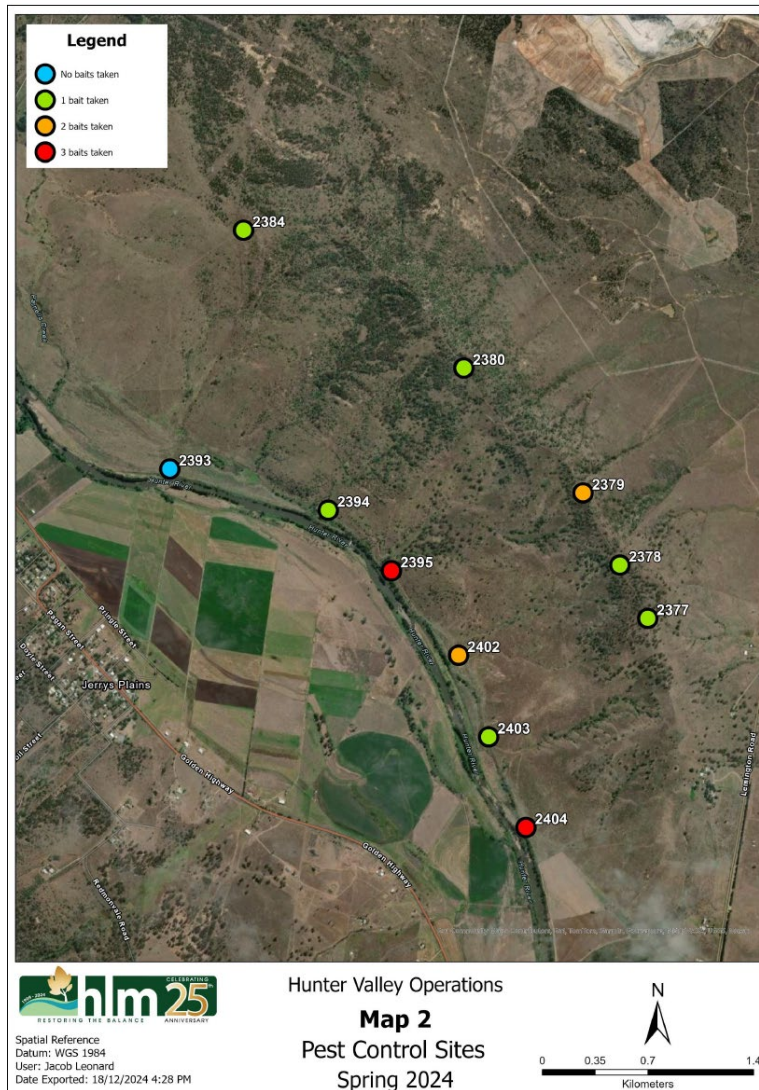
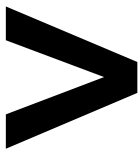


Figure 6-7 -Wandewoi BA vertebrate pest management locations for the Spring 2024 programme

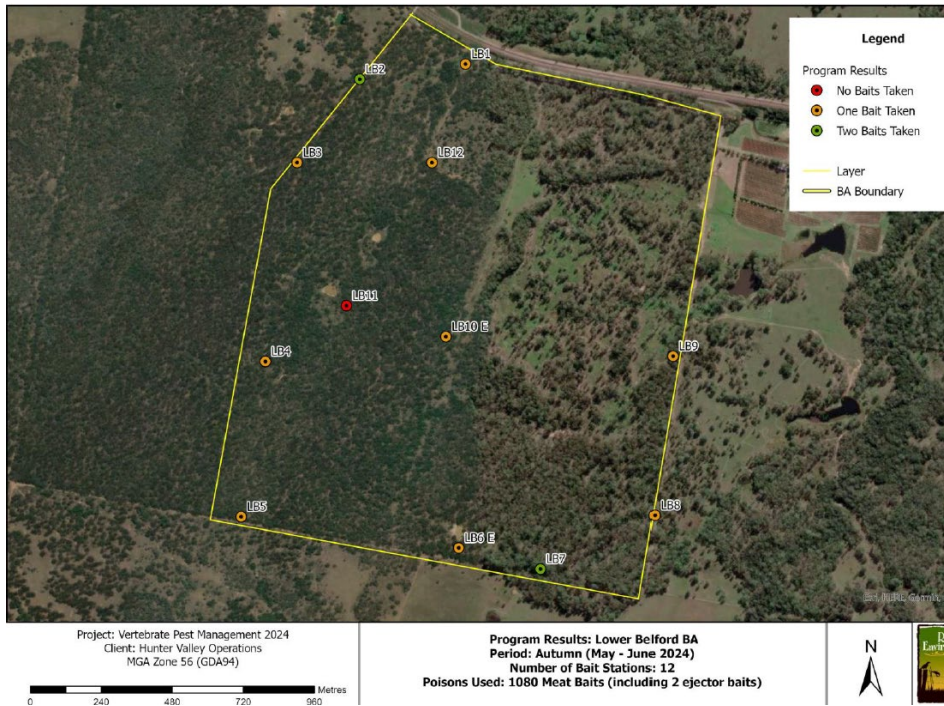


Figure 6-8 - Hook property vertebrate pest management results for the Autumn 2024 programme.

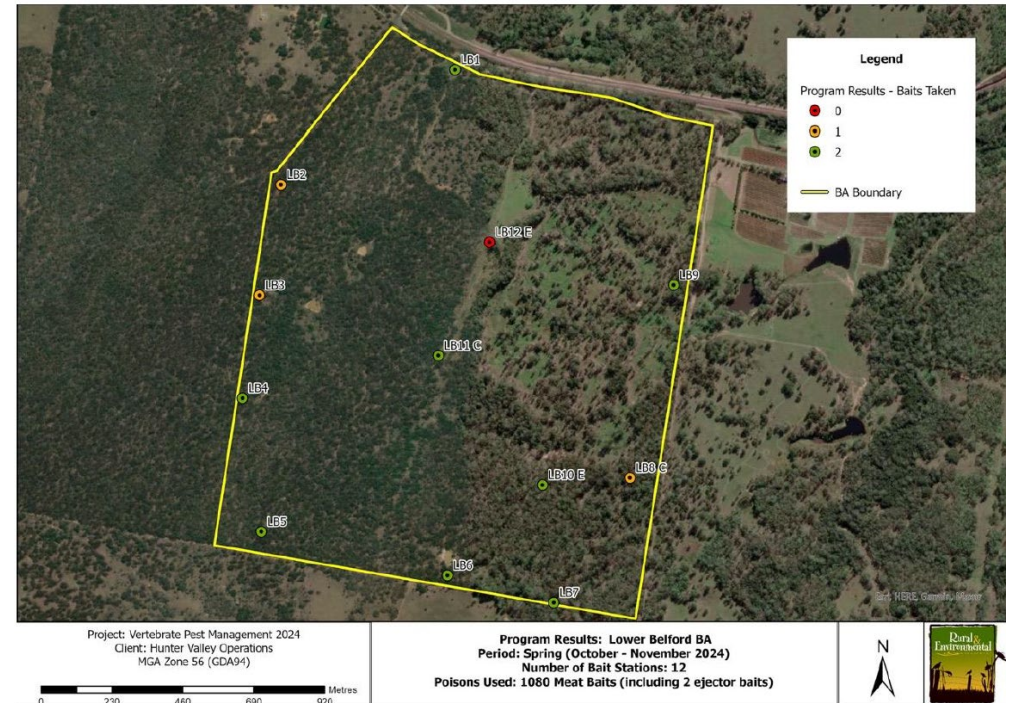


Figure 6-9 - Hook property vertebrate pest management results for the Spring 2024 programme.

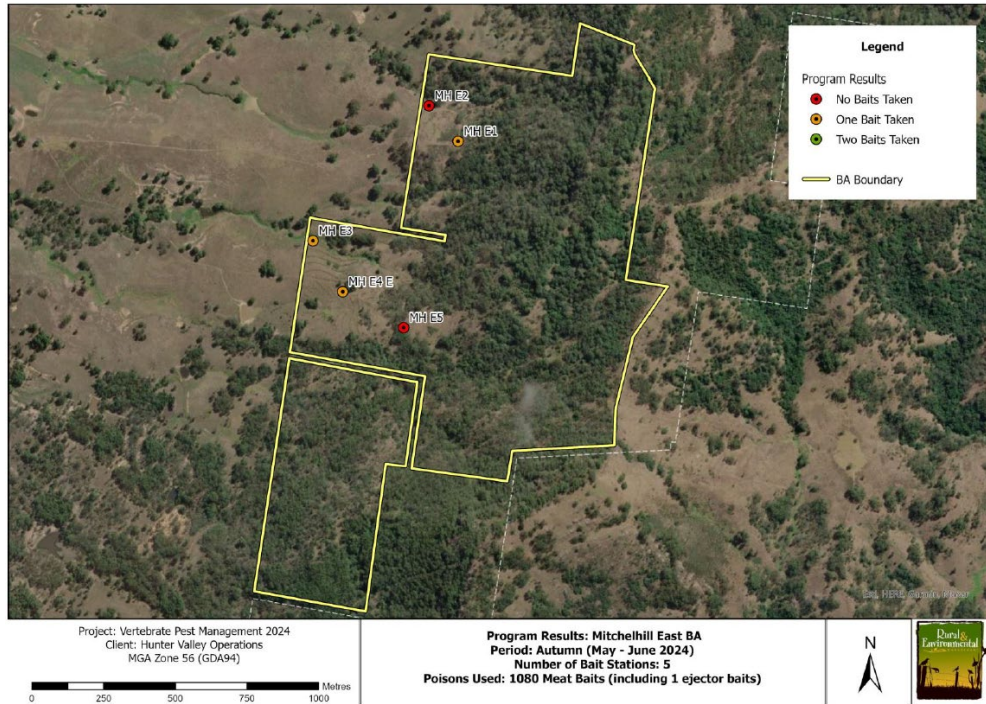


Figure 6-10 - Mitchelhill East BA vertebrate pest management results for the Autumn 2024 programme.

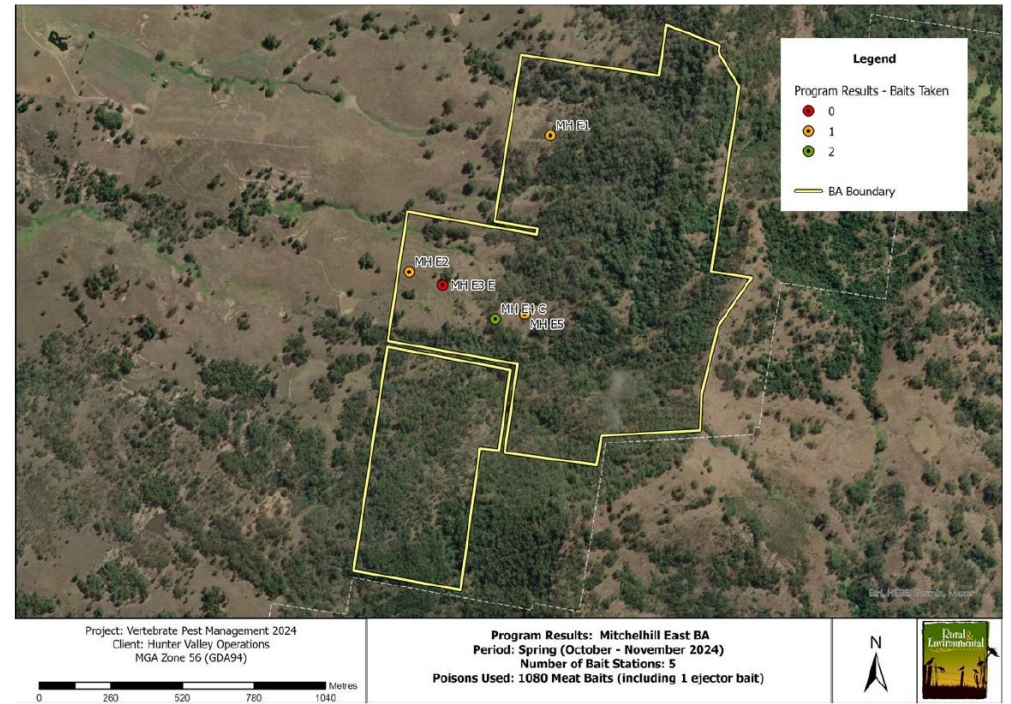


Figure 6-11 - Mitchelhill East BA vertebrate pest management results for the Spring 2024 programme.

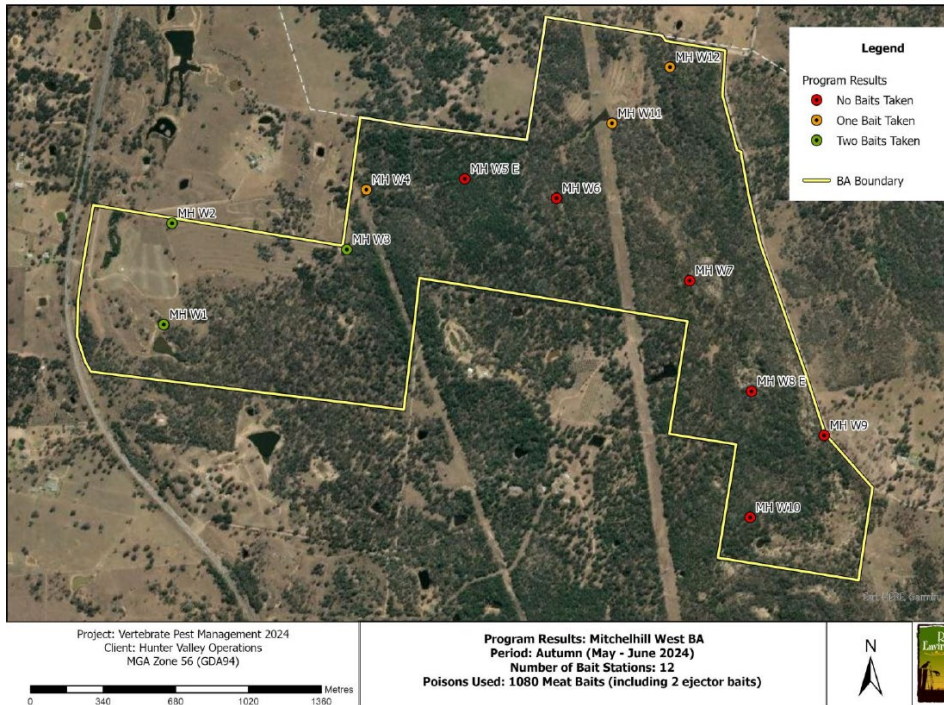


Figure 6-12 - Mitchelhill West BA vertebrate pest management results for the Autumn 2024 programme.

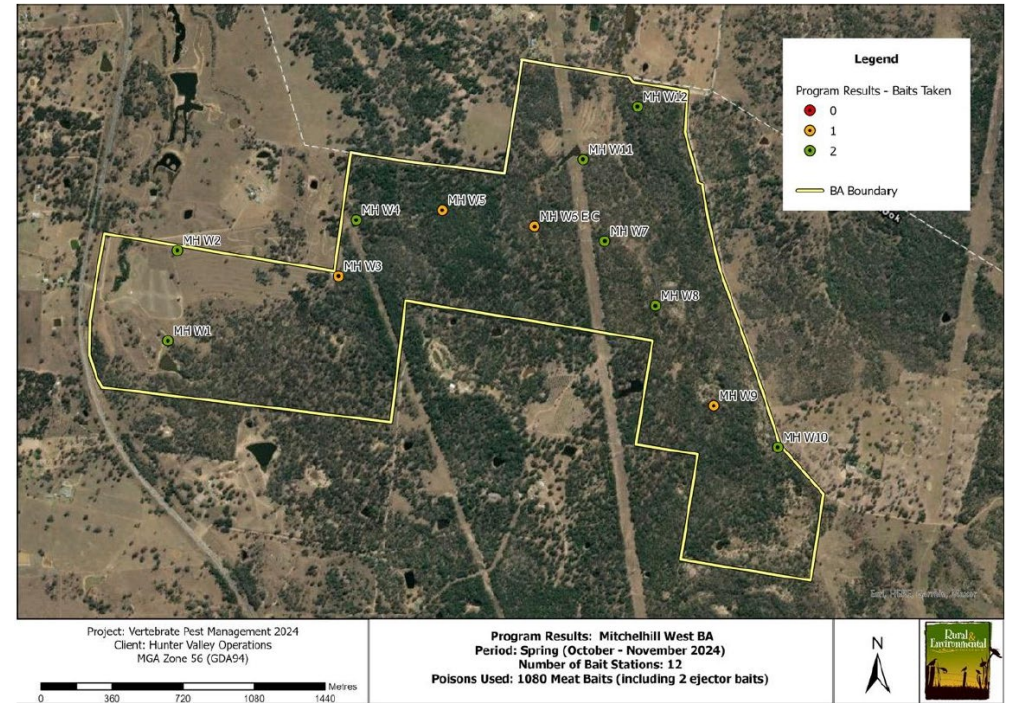


Figure 6-13 - Mitchelhill West BA vertebrate pest management results for the Spring 2024 programme

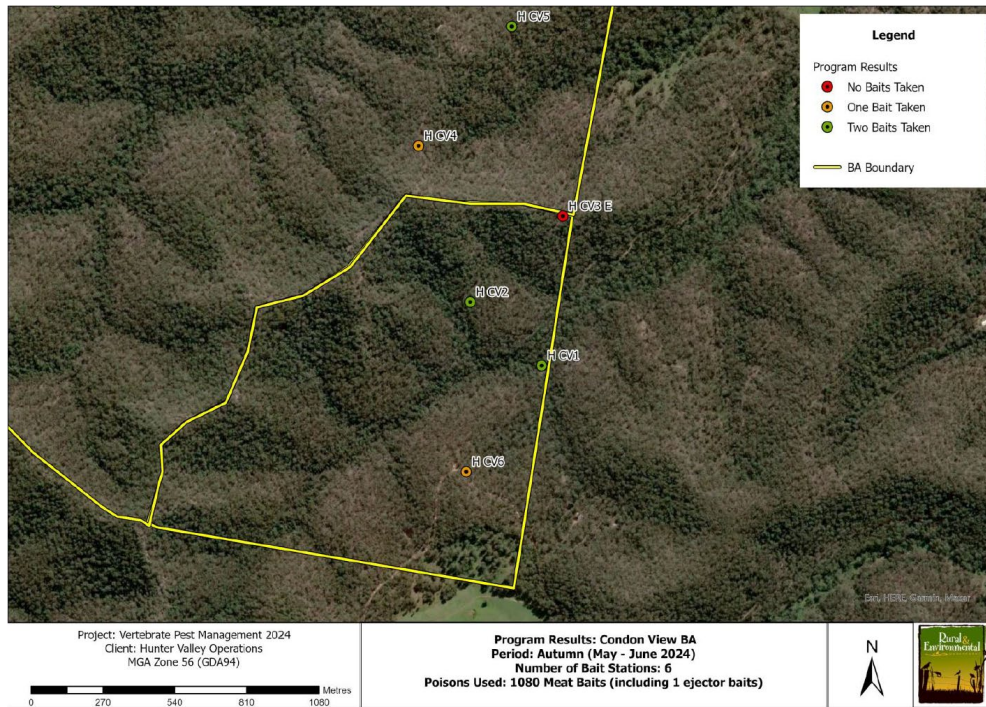


Figure 6-14 - Condon View BA vertebrate pest management results for the Autumn 2024 programme.

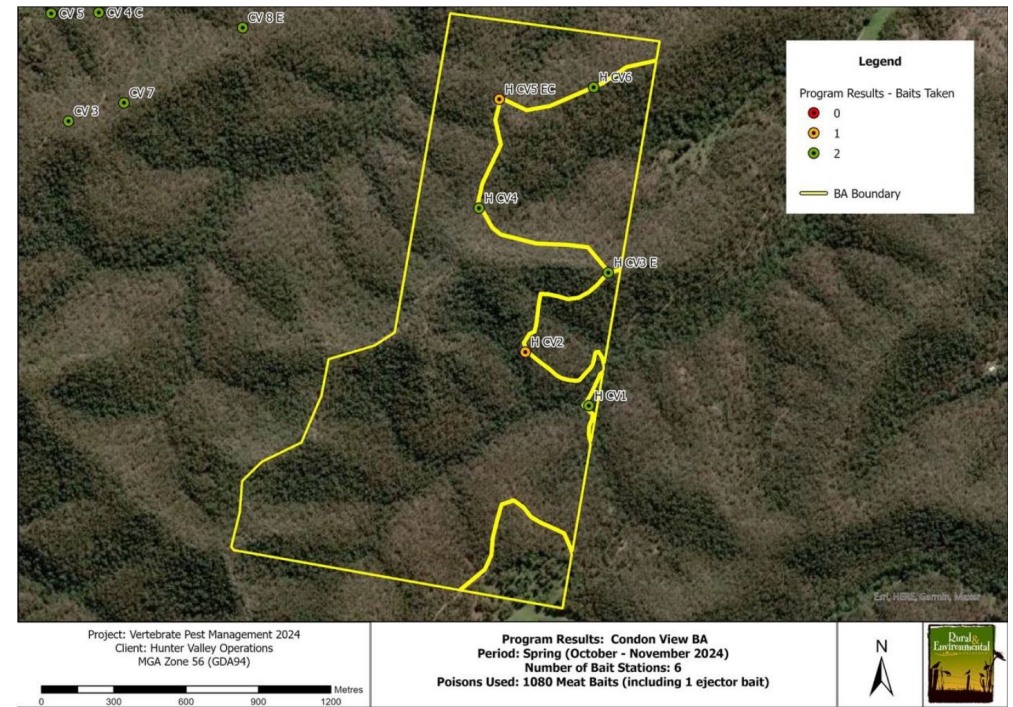
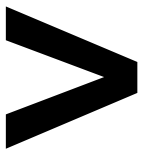


Figure 6-15 - Condon View BA vertebrate pest management results for the Spring 2024 programme.



Hook Deer Culling Programme

Based on evidence that deer were traversing the Hook BA, a deer culling programme was undertaken to remove the feral deer from biodiversity offset. Between February and July 2024, three motion sensor cameras were established within areas where the deer had been recorded as visiting. One site included a feeder with the camera, and feed was placed on the ground at a second location.

A safety management plan and draft neighbour notifications were prepared should the cull occur.

The monitoring during this period determined that while deer did occasionally traverse the offset, they were in low numbers and were not frequent visitors to the BA, which would likely ensure a low success rate of a shooting programme. While wild dogs, foxes and cats were more often caught on the cameras, deer numbers traversing the BA will continue to be assessed during 2025 to determine the most effective time and location for a cull to be implemented.

Pig Control Programme

HVO undertook pig baiting and trapping programmes at HVO during 2024. The programmes were in response to monitoring results and observations that reported pigs traversing the Hunter River.

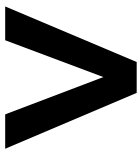
Baits or traps were established at various locations along the Hunter River, including sites within the Wandewoi BA. The locations of the control sites can be seen in Figure 6-16. Free feed stations were initially provided to encourage visitation by the pigs. Once visitation was determined, the free feed stations were swapped for the sodium nitrite bait stations. Sodium nitrite baits were used as studies have found that the effect on pigs is immediate with little impact on non-target species.

Each trap was baited and monitored with either a live stream HogEye Camera trap system or standard motion sensor camera system. This system allows for remote activation of the trap and aligns with the Code of Practice and Standard Operation Procedures.

Each station was checked daily using the live web-based system and visited if required to restock food or access the trap.

Within the Wandewoi BA, while four free-feed station were established during winter, and two during the spring baiting attempts, only the spring monitoring displayed evidence of pig visitations, and twelve pigs were controlled from these locations.

Across the broader HVO lands, 34 pigs were controlled during the winter programme, and 33 pigs were removed during the spring 2024 programme.



Extensive weed management has been undertaken along the Hunter River in 2024 to reduce the cover and habitat for feral animals residing within HVO-owned land. Since this occurrence, the visible populations of feral pigs residing in the area have decreased. It is hoped that the number of pigs controlled in future campaigns would decrease as a result of declining populations, or represent groups that traverse across the area as opposed to breeding within lands at HVO.

Pig trapping is scheduled again at HVO during 2025, which will include the Wandewoi BA. A trapping programme will also occur at the other BAs should monitoring results indicate that the pigs still traverse the area.



Figure 6-16 - Free-feed locations along the Hunter River at HVO during the winter 2024 programme.

Note: Stations established within the Wandewoi BA occur to the west of the ridgeline on the left of the figure.



6.3 | HOOK BA INTENSIVE WEED MANAGEMENT PLAN

The Intensive Weed Management Plan for the Hook BA was implemented to reduce the extent of the African olive (*Olea europaea subsp. cuspidata*) population within the Hook BA and, to a lesser extent, Lantana (*Lantana camara*) and prickly pear (*Opuntia species*). The Hook BA Intensive Weed Management Plan was submitted to DCCEEW for approval with the EPBC variation as part of the Hook Biodiversity Offset Management Plan.

Under the *Biosecurity Act 2015*, all landowners have a responsibility to control noxious weeds on their property, known as a General Biosecurity Duty. Landowners or land managers have a “General Biosecurity Duty” to prevent, eliminate or minimise the biosecurity risk posed or likely to be posed by priority weeds. African olive is listed as a priority weed for the Hunter region.

In the Plan, HVO has committed to reducing the extent of African olive within the Hook BA by 30% per year. This exceeds the 20% reduction recommended by the Upper Hunter Weeds Authority General Biosecurity Control Duty Guidelines.

The Plan states that in February each year, the Hook BA will be surveyed to determine the extent and location of African olive individuals.

The fifth African olive survey was undertaken on the BA during 2024; the first being in February 2020. Every second year the portion of the offset surveyed has been selected based on where the majority of the weed treatment has been undertaken. To date, this has generally been concentrated in the western and northern portions of the offset. For these years an entire overview of the offset has been created by superimposing the remaining surveyed area from the previous year. It is considered that the density and distribution of African olives in the untreated areas will remain relatively static due to minimal disturbance. The individual and patch counts for these areas have also been used in calculating final results.

In 2024, the entire offset was surveyed, and data collected and mapped according to the following:

- Large plants (individual)
- Medium plants (individual)
- Small plants (individual)
- Seedling (individual)
- Medium to large patch
- Seedling to small patch
- Previously treated areas

Plant size was determined according to the following heights:

- Seedling: up to 12cm
- Small: 12cm to 100cm (1m)
- Medium: Approximately 1m to 3m in height
- Large: Greater than 3m in height

During the survey, individual Lantana and prickly pear plants within the offset are recorded as these weed species are also considered priority for control within the Hook BA. There was no discerning between plant sizes for either Lantana or prickly pear.

Activities that remove African Olive target the more-dense areas and areas containing the large mature seeding individuals to reduce the volume of seed being produced within the property. When larger individuals are removed, frequently, a 'carpet' of African olive individuals germinates from the seedbank that was beneath the removed tree. While follow up treatment does occur across these areas as soon as possible, it does not have to occur immediately as these individuals will not produce seed and the additional time will allow the identified seedlings to grow taller to enable them to be readily identified.

The results from the 2024 survey and the areas targeted for weed control during that year are outlined in Table 6-4 and Figure 6-17 and Figure 6-18.

Table 6-4 - Summary of the 2024 African olive survey against the previous survey results.

Categories	2020	2021	2022	2023	2024
	Total No Individuals				
Large (over 3m)	578	440	939	623	1443
Medium (1-3m)	967	762	764	786	923
Small (12cm-1m)	2209	2068	3322	3886	3564
Seedling (≤ 12 cm)	416	438	640	792	1872
Total	4170	3708	5665	6087	7892
Mulched area			3.12	4.9	5.35
Patch description	Patch size (ha)				
Medium-large	20.44	18.05	7.92	5.69	2.28
Small- seedling	0.88	0.29	0.9	0.51	0
Treated area incl. mulched	9.32	5.80	4.63	32.07	5.35
Total (ha)	30.64	24.14	13.45	38.27	7.64

The 2024 survey recorded 1443 large African olive trees, 923 medium trees, 3564 small trees and 1872 seedlings. Approximately 2.28 ha of dense infestations (patches) of 'medium to large' African olives were present on the offset and no dense 'seedling to small' patches of note were recorded.

Comparing the results of the 2024 survey results against the previous year, there was a significant increase in the large tree count and an increase the medium tree count. The small tree count was relatively static and the number of seedlings observed more than doubled. The explanation for these results is the good progress in managing the dense patches of African olive. Previously, the patches were such that individual counts were difficult. Much of these patches have now been broken up and individuals are able to be counted and managed.

Given these results were recorded in February and reflect the management activities of the previous year, the annual count of the African olive population in February 2025 is eagerly awaited give the 85.4ha that were managed during the 2024 reporting period (Figure 6-18).

As at the last survey in February 2024, there was a reduction of the medium-large olive patch from 5.69ha to 2.28ha. The initial 2020 survey recorded 20.44 ha of 'medium to large' dense

infestations of African olives were recorded; with a subsequent 18.16ha reduction of this patch size class over five years.

The mulching of the dense 'patch' areas enables a reduction in the flammable, impenetrable biomass that would result if the larger trees were cut and allowed to fall without being mulched. Furthermore, if they were to remain, the fallen, large olives would provide protection for recruiting olive individuals enabling them to hide from view and provide difficulty for contractors to treat the sheltering seedlings.

Mulching of the infestations of medium to large African olives using a 24-tonne excavator with a mulching head attachment has proved highly successful in expediting the control process and allowing ease of access to small plants and seedling regrowth. Natural regeneration of native flora at all levels; groundcover, mid and upper story, is regenerating in these previously mulched areas and is indicative of the success of this strategy.

The use of the mulcher to remove the denser patches of large African olive individuals was shown to be very effective and cost efficient in reducing the olive biomass. It is hoped that this technique will not be required during 2025, although this will be assessed following the olive survey that will occur in February. Should it not be required, the less intrusive cut and paint method will be continued.



Figure 6-17 - African olive survey results at the Hook BA.

Note: February 2023 survey (left) and 2024 survey (right) noting the size class changes following weed removal activities during the 2023 reporting year.

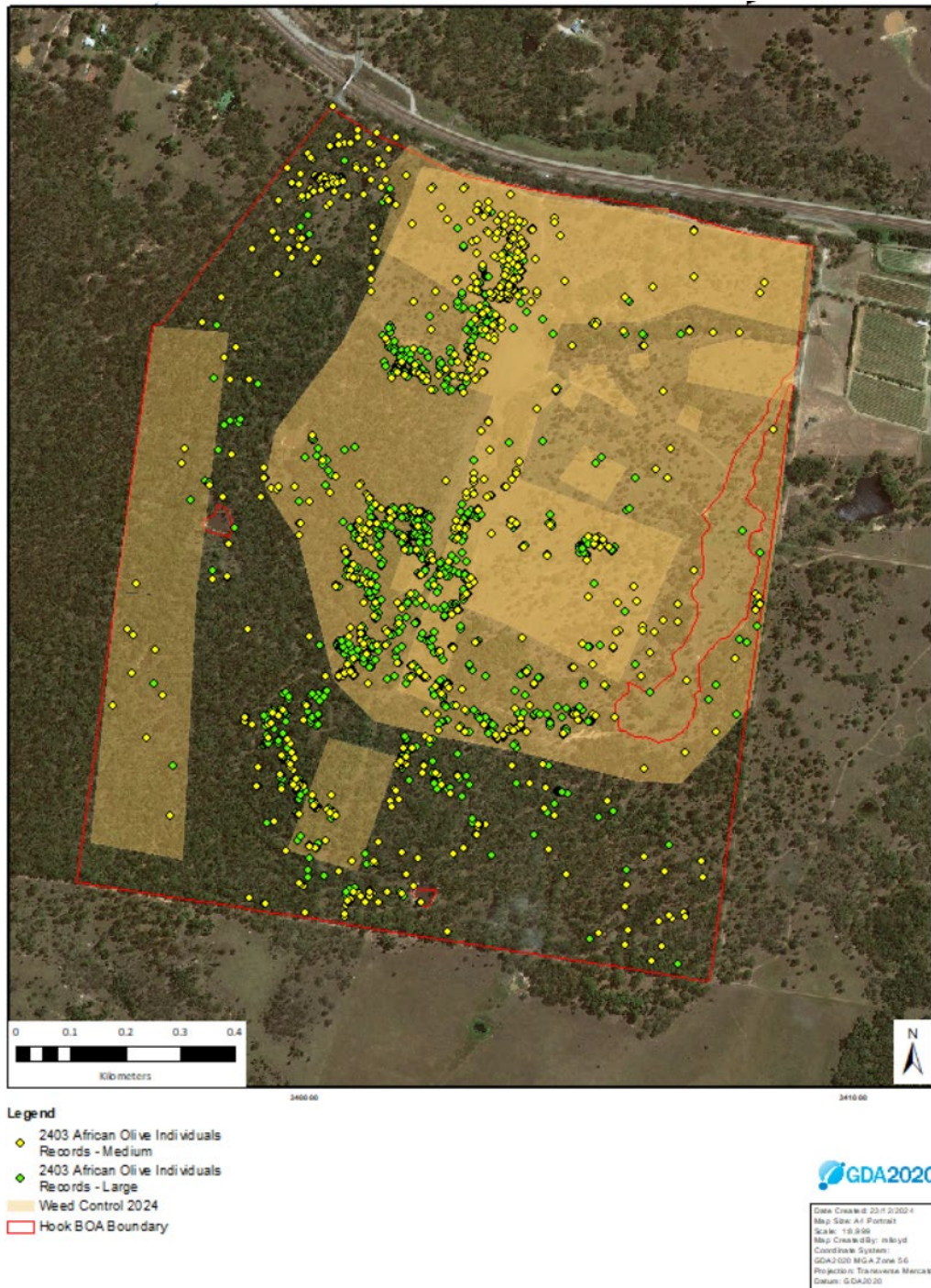
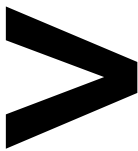


Figure 6-18 - African olive management areas based on the 2024 African olive survey results of the large and medium olive individuals at the Hook BA.

7 | ECOLOGICAL MONITORING

Ecological monitoring has been undertaken at each of the BAs as per the monitoring schedule outlined in Table 5-3. The objectives of monitoring is to confirm that the BOMP for each BA is being effectively implemented and the conservation objectives are being achieved.

Each BOMP lists the conservation values, key performance indicators, and completion criteria identified for the offset areas. Key performance indicators and completion criteria for foraging habitat and habitat connectivity and condition are being realised through the monitoring program and management response.

7.1 | ECOLOGICAL MONITORING

The following table provides a summary of the ecological monitoring activities undertaken across the various BAs as outlined in the BOMPs.

The locations of each of the monitoring points and detailed description of each monitoring methodology can be seen in Chapter 6 of each BOMP and Figure 7-1 to Figure 7-7.

Table 7-1 - Ecological monitoring activities completed during the reporting year.

Monitoring event	Site	Comments
Condition assessment	Condon View, Hook, Mitchelhill, Wandewoi	Not scheduled for the reporting year – Section 7.1.2
Bird assemblage	Condon View, Hook, Mitchelhill, Wandewoi	Not scheduled for the reporting year – Section 7.1.3
GGBF monitoring	Crescent Head	Completed – Section 7.1.5
GGBF habitat assessment	Crescent Head	Completed – Section 7.1.4
Mosquito Fish monitoring	Crescent Head	Completed – Section 7.1.6
Rapid condition assessment	Condon View, Crescent Head, Hook, Mitchelhill, Wandewoi	Completed – Section 7.1.1 and Appendix A
Property inspections	Wandewoi	Mar, Apr, Jun, Aug, Oct, Dec
	Mitchelhill	Mar, Apr, Jun, Aug, Oct, Nov, Dec
	Hook	Mar, Apr, Jun, Aug, Sept, Dec
	Condon View	Feb, Apr, Sept, Oct, Nov, Dec
	Crescent Head	Apr, Jul, Sept, Dec

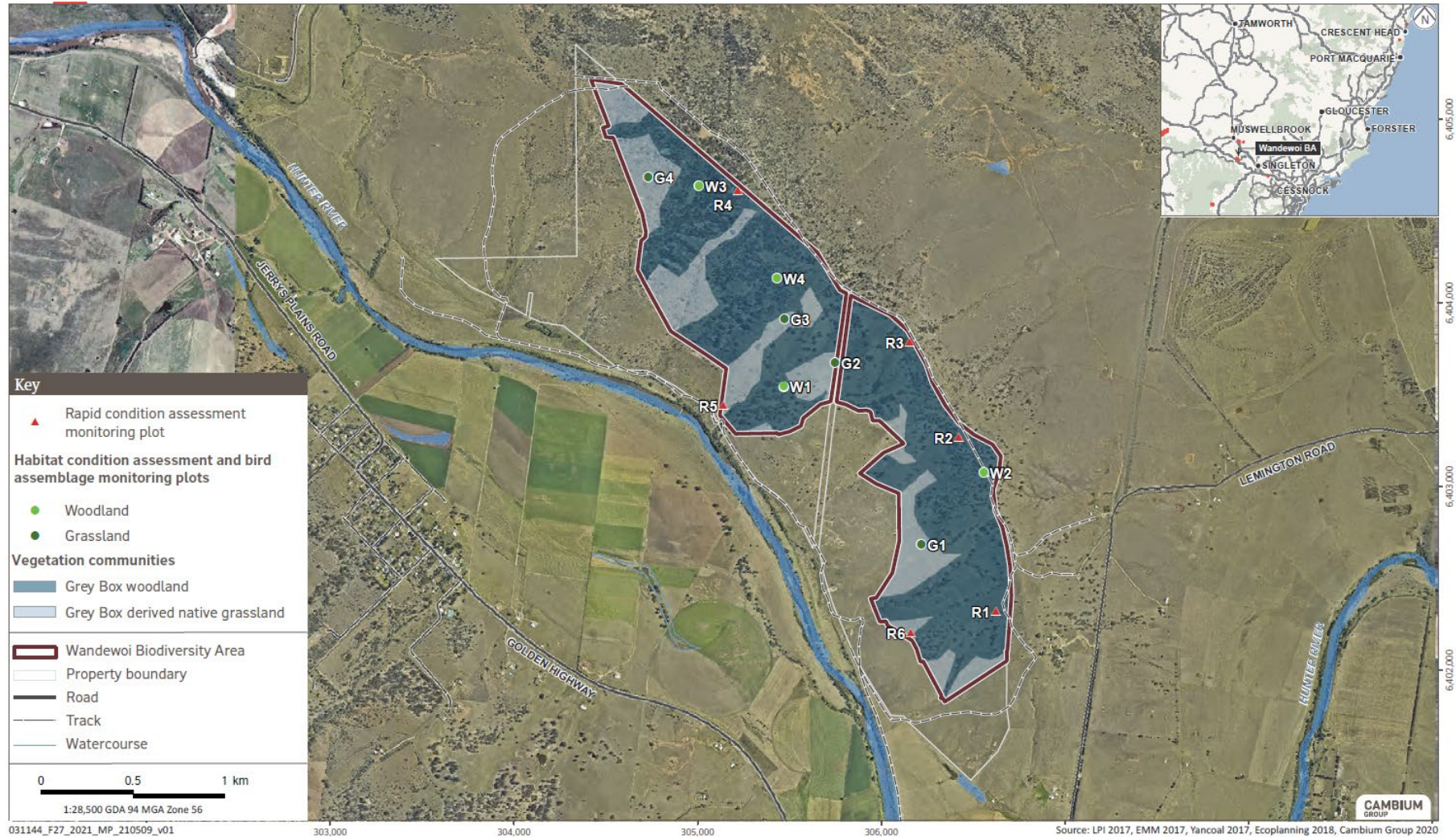


Figure 7-1 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations at the Wandewoi Biodiversity Area.

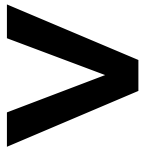


Figure 7-2 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations

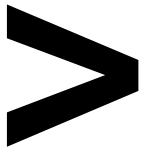


Figure 7-3 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations



Figure 7-4 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations

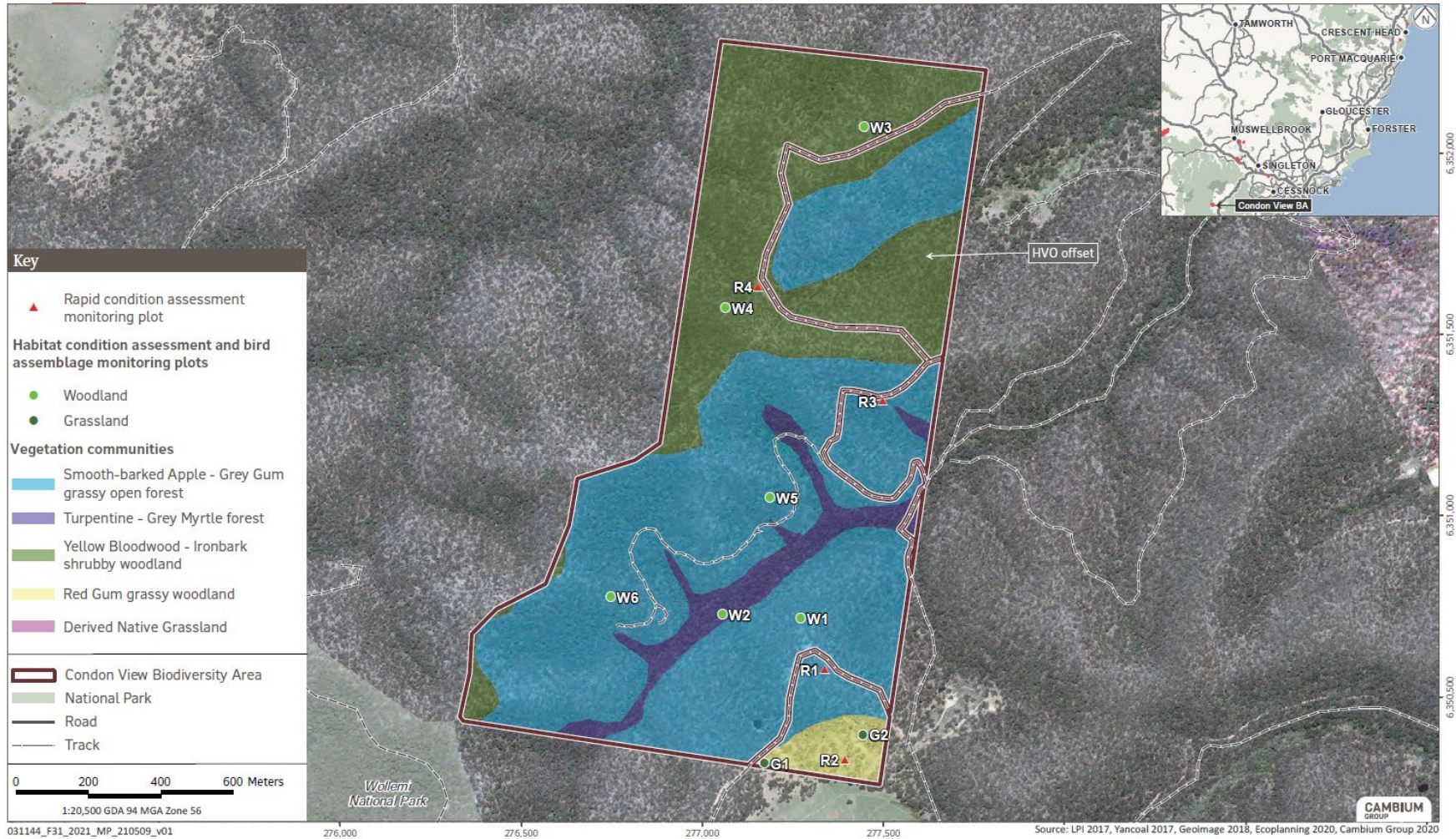


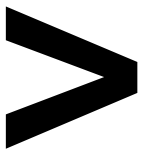
Figure 7-5 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations



Figure 7-6 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations



Figure 7-7 - Rapid condition assessment, habitat condition assessment and bird assemblage monitoring locations



7.1.1 | RAPID CONDITION ASSESSMENTS

The rapid condition assessments (RCE) are presented in Appendix A: Rapid Condition Assessment - Current and Previous Year Tables and the locations can be seen in Figure 7-1 to Figure 7-7. The results from the 2023 and 2024 RCE are presented. The quick examination determined that, overall, there was little change in condition between the years. A more thorough assessment was undertaken with the full ecological assessments below.

7.1.2 | CONDITION ASSESSMENT

Ecological condition assessments are undertaken as per Table 5-3. The ecological condition assessments and the five-yearly weed assessments were last completed during 2023, hence none were scheduled for this reporting year.

As outlined in the 2023 compliance report, the PCTs used were updated to be consistent with those outlined in the State Vegetation Type Map. Table 7-2 lists the previous and current PCTs within each Biodiversity Area and whether they are equivalent to the CHVEFW Threatened Ecological Community. The results reflect that the relative condition scores have changed not only as a result in data captured, but due to changes in the new benchmarks.

Table 7-2 - Plant community types within each BA.

Previous PCT	New PCT	Biodiversity Area	CHVEFW
Spotted Gum - Narrow-leaved Ironbark - Red Ironbark shrub - grass open forest of the central and lower Hunter (PCT 1601)	Central Hunter Ironbark-Spotted Gum Forest (PCT 3315)	Mitchelhill (West), Hook	Yes
Narrow-leaved Ironbark - Grey Box - Spotted Gum shrub - grass woodland of the central and lower Hunter (PCT 1604)	Central Hunter Ironbark-Spotted Gum Forest (PCT 3315)	Mitchelhill (East)	Yes
Narrow-leaved Ironbark - Grey Box grassy woodland of the central and upper Hunter (PCT 1691)	Central Hunter Slopes Grey Box Forest (PCT 3314)	Wandewoi	Yes
Turpentine - Grey Myrtle forest of sheltered sandstone gullies of the Central Coast hinterland, Sydney Basin Bioregion (PCT 1282)	Hunter Range Turpentine-Grey Myrtle Gully Forest (PCT 3152)	Condon View	No
Yellow Bloodwood - ironbark shrubby woodland of the dry hinterland of the Central Coast, Sydney Basin Bioregion (PCT 1327)	Hunter Range Ironbark Forest (PCT 3605)	Condon View	No
Rough-barked Apple – Grey Gum grassy open forest of the hinterland hills of the Central Coast, Sydney Basin Bioregion (PCT 1385)	Hunter Range Colluvial Apple-Gum Forest (PCT	Condon View	No
Rough-barked Apple - Red Gum grassy woodland of the MacDonald River Valley on the Central Coast, Sydney Basin Bioregion (PCT 1386)	Hunter Range Creekflat Apple-Red Gum Forest (PCT 403	Condon View	No

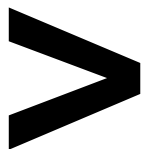
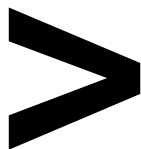


Table 7-3 - Progress towards performance and completion criteria relevant to the conservation objectives

Conservation value	Key performance criteria	Completion criteria
Central Hunter Valley Eucalypt Forest and Woodland		
CHVEFW	<p>Wandewoi: improved condition of 175.8 ha. No condition assessments scheduled for the reporting year.</p> <p>Mitchelhill: improved condition of 183.4 ha. No condition assessments scheduled for the reporting year.</p> <p>Hook: improved condition of 78.6 ha of woodland and 28.3 ha of regenerating woodland. No condition assessments scheduled for the reporting year.</p>	<p>Observed and measured increase in condition through monitoring in woodland.</p> <p>No condition assessments scheduled for the reporting year.</p>
DNG	<p>Wandewoi: transition of 59.8 ha of grassland to woodland. No condition assessments scheduled for the reporting year.</p> <p>Mitchelhill: transition of 31.5 ha of grassland to woodland.</p> <p>Hook: transition of 2.6 ha of grassland to woodland. No condition assessments scheduled for the reporting year.</p>	<p>Observed and measured trajectory towards and/or attainment of the key characteristics of CHVEFW or reference site attributes in DNG (measured biannually).</p> <p>No condition assessments scheduled for the reporting year.</p>
Bird Habitat		
Swift Parrot habitat	<p>Wandewoi: improved condition of 175.8 ha of woodland habitats. No condition assessments scheduled for the reporting year.</p>	<p>Observed and measured increase in or maintained condition through monitoring in woodland.</p> <p>No condition assessments scheduled for the reporting year.</p>



	<p>Mitchelhill: improved condition of 113 ha of woodland habitats.</p> <p>No condition assessments scheduled for the reporting year.</p> <p>Hook: improved condition of 122 ha of woodland habitats.</p> <p>No condition assessments scheduled for the reporting year.</p>	<p>Observed and measured trajectory towards and/or attainment of the key characteristics of CHVEFW or reference site attributes in DNG (measured biannually).</p> <p>No condition assessments scheduled for the reporting year.</p>
Regent Honeyeater habitat	<p>Mitchelhill: improved condition of 245 ha of woodland habitats.</p> <p>No condition assessments scheduled for the reporting year.</p> <p>Condon View: improved condition of 168 ha of woodland habitats.</p> <p>No condition assessments scheduled for the reporting year.</p>	<p>Observed and measured increase in or maintained condition through monitoring in woodland.</p> <p>No condition assessments scheduled for the reporting year.</p> <p>Observed and measured trajectory towards and/or attainment of the key characteristics of CHVEFW or reference site attributes in DNG (measured biannually).</p> <p>No condition assessments scheduled for the reporting year.</p> <p>This metric referencing CHVEFW may not be applicable for Condon View given the PCT edits as outlined in Table 7.2.</p>

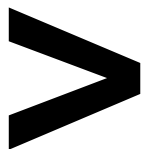


Table 7-4 - Progress towards performance and completion criteria relevant to specific management actions.

Actions	Years 1 to 4	Years 5 to 10	Completion criteria
Weed control			
Weed control	At least one control event per year with additional events as required for species listed in the BOMP that are identified as needing control, and any other weeds needing control recording from monitoring activities. All actions to be recorded in the Annual Report. Weed control undertaken as required.	At least one weed control event each year for species listed in the BOMP that are identified as needing control, and any other weeds needing control as recorded from monitoring activities. All actions to be recorded in the Annual Report. Weed control undertaken as required.	Ecological monitoring data indicates a trajectory for reduction in weed plant cover over three consecutive years. No condition assessments scheduled for the reporting year. Property inspection reports undertaken which includes weed condition. African olive (<i>Olea europaea</i>) control was evident within the Hook BA.
Monitoring	Complete condition assessment monitoring (7.1.2), rapid condition assessment (7.1.1), and property inspections (6.1). Condition assessment completed as required.	Complete condition assessment monitoring (7.1.2), rapid condition assessment (7.1.1), and property inspections (6.1). Condition assessment completed as required.	Monitoring is completed as per the monitoring schedule. Condition assessment completed as required.
Fire for conservation			
Monitoring	Complete condition assessment monitoring (7.1.2) and property inspections (6.1). Condition assessment completed as required.	Complete condition assessment monitoring (7.1.2) and property inspections (6.1). Condition assessment completed as required.	Monitoring has been completed as per the schedule. Condition assessment completed as required.

Retention of regrowth		
Natural regeneration	Annual weed control, vertebrate pest and fire management actions implemented as per this Plan. Completed as required.	Ecological monitoring demonstrates a trajectory to benchmark values for relevant attributes measured over three consecutive monitoring events (the average of all plots) No ecological monitoring scheduled for the reporting year.
Monitoring	Complete condition assessment monitoring and property inspections. No condition assessment monitoring scheduled for the reporting year. Rapid condition assessments and property inspections undertaken.	Monitoring has been completed as per monitoring schedule. Monitoring and inspections completed.

7.1.3 | BIRD ASSEMBLAGE MONITORING

Bird assemblage assessments are undertaken as per Table 5-3. Bird assemblage assessments were undertaken in 2023, hence none were scheduled for this reporting year.

7.1.4 | GREEN AND GOLDEN BELL FROG HABITAT ASSESSMENT

Habitat assessments for the GGBF are undertaken as per Table 5-3. As 2024 represented the seventh year that monitoring has occurred, no habitat monitoring was scheduled for this reporting year.

Tracks and dispersal pathways have been subject to ongoing management as part of the site fire management and to maintain movement corridors for the GGBF. While woody vegetation is present within the corridors, it predominantly occurs as regrowth or resprouting vegetation. Maintenance of this regrowth is necessary to ensure that the vegetation community does not form a tall, closed canopy.

The management plan provides key performance criteria and completion criteria related to the conservations objectives as well as criteria related to specific conservation management actions. The criteria relevant to this habitat assessment are addressed in Table 7-5 and Table 7-6.

Note that there are no performance criteria or completion criteria for offline ponds. Performance and completion criteria are associated with the presence and/or absence of Mosquito Fish and GGBF to determine whether suitable habitat has been established in offline ponds.

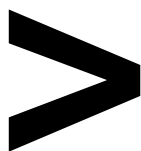
Table 7-5 - Progress towards performance and completion criteria for the Green and Golden Bell Frog.

Habitat value	Key performance criteria	Completion criteria
Green and Golden Bell Frog habitat	Improved condition of 189.5 ha of Green and Golden Bell Frog habitat over 10 years. No survey was scheduled for 2024.	Observed and measured increase in or maintained condition through monitoring over 10 years. No survey occurred in 2024, however, observations suggest that the condition of ponds was maintained during the survey period.
Existing breeding habitat	Reduction in the Mosquito Fish population in the ponds where control methods are possible. Refer to Section 7.1.6.	Mosquito Fish control trials are completed and their success is evaluated by analysis of monitoring results. Refer to Section 7.1.6.
Supplementary breeding habitat	Provision of suitable supplementary breeding habitat. Offline ponds have been installed at Crescent Head North and South. Green and Golden Bell Frog have been observed at the offline pond at Crescent Head North in previous years.	Offline ponds are designed with consideration of breeding habitat principles outlined in Best Practice Guidelines for Green and Golden Bell Frog Habitat (DECC 2008). Offline ponds that address the best practice guidelines have been installed at Crescent Head North and South.
Foraging habitat	Maintenance of existing foraging habitat quality. No habitat condition survey was scheduled for 2024.	Foraging habitat is managed with consideration of the principles outlined in Best Practice Guidelines for Green and Golden Bell Frog Habitat (DECC 2008). Habitat has been managed consistent with the guidelines. This includes weed control and monitoring.

<p>Habitat connectivity</p>	<p>Maintenance of connectivity between GGBF habitat components.</p> <p>Dispersal pathways have been maintained to reduce the cover and height of woody vegetation and other vegetation at Crescent Head North and South.</p>	<p>Open vegetative structure is maintained on existing tracks and fence lines,</p> <p>Maintained during the monitoring period.</p>
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Table 7-6 - Progress towards performance and completion criteria for managing vegetation in GGBF habitat.

Performance criteria	Year 1 to Year 10	Completion criteria
Management of regrowth and remnant vegetation		
<p>Maintenance of aquatic vegetation (i.e. breeding habitat structure in ponds).</p> <p>No habitat condition survey was scheduled for 2024. Previous assessments have indicated that all ponds have >20% open water or were dry.</p>	<p>Complete annual inspection and manage aquatic vegetation such that 20% of open water is maintained in permanent ponds.</p> <p>No habitat condition survey was scheduled for 2024. Previous assessments have indicated that all ponds have >20% open water or were dry.</p>	<p>Annual inspection and aquatic vegetation maintenance are completed.</p> <p>No habitat condition survey was scheduled for 2024.</p>
<p>Maintenance of movement corridors (i.e. existing open grassed areas along access tracks and lot boundaries).</p> <p>Maintenance of movement corridors undertaken.</p> <p>Ongoing maintenance of movement corridors required where woody plants have re-sprouted.</p>	<p>Complete annual inspection and remove tree and shrub saplings as necessary.</p> <p>Monthly and biannual property inspections completed. Groundcover maintenance completed as required in 2024. Note that saplings and regrowth have been cut rather than removed.</p>	<p>Annual inspection and groundcover maintenance are completed.</p> <p>Monthly and biannual property inspections completed.</p> <p>Ongoing annual inspection and groundcover maintenance required.</p>



Weed control		
Control weeds to maintain a suitable habitat structure in breeding, foraging and dispersal habitat. Weed control undertaken. Slashing of tracks occurred to reduce the cover of woody and herbaceous vegetation in 2024.	Complete weed assessments during habitat monitoring and property inspections. No habitat condition survey was scheduled for 2024.	Habitat monitoring data indicates a trajectory for reduction in cover over three consecutive assessments. No habitat condition survey was scheduled for 2024.
Bushfire management		
Prepare and implement a bushfire management plan. The bushfire management plan has been prepared and updated with the 2024 findings.	Complete habitat monitoring and property inspections. Annual bushfire monitoring completed.	Habitat monitoring and property inspections have been conducted annually. Annual bushfire monitoring completed. Monthly and biannual property inspections completed.

7.1.5 | GREEN AND GOLDEN BELL FROG SURVEYS

Field surveys at both Crescent Head North and South were undertaken over four nights on 4 to 7 November 2024. Rainfall leading up to the survey and other weather conditions were monitored closely so that the survey could be conducted during optimal weather conditions and within the survey period as outlined in DEWHA (2010). The total rainfall in the months leading up to the November survey was, overall, below average with 59.0 mm recorded prior to the survey in October (average 83.9 mm), 91.4 mm in September (average 41.5 mm) and 24.6 mm in August (average 44.2 mm). As such, the rainfall prior to the November surveys for GGBF was not optimal with less than 50 mm falling prior to the survey. However, rain fell during the survey period and two of the four nights of surveys were conducted after thunderstorms.

GGBF have previously been recorded at Crescent Head North. However, no GGBF were recorded at Crescent Head North during the 2024 survey. Nor were any GGBF recorded at Crescent Head South during the survey. A total of six frog species were identified at both Crescent Head North and Crescent Head South during these surveys.



It is possible that the GGBF detected in previous years were dispersing individuals. If correct, the known breeding areas in the vicinity of Ryan's Cut are a likely source for these frogs. Pond 1 and the offline pond are the only permanent ponds at Crescent Head North where these dispersing frogs were detected, while Ponds 2 and 3 are ephemeral. An inspection of Ryan's Cut was undertaken during November 2024 survey to assess the abundance of suitable ponds for the GGBF. Despite below average rainfall, a number of ponds were observed during this inspection that are likely to provide suitable habitat for the GGBF.

The wildfire at Crescent Head North in spring 2023 burnt around the ponds and potential dispersal habitat. The fire mostly affected the ground layer in a mosaic pattern, which recovered during the 12 months following.

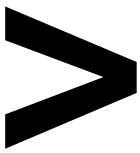
Table 7-7 - Frog species recorded during the GGBF monitoring surveys.

Scientific name	Common name	Crescent Head North											
		Pond 1				Pond 2				Pond 3			
		Oct 18	Mar 19	Oct 21	Nov 24	Oct 18	Mar 19 ¹	Oct 21	Nov 24	Oct 18 ¹	Mar 19 ¹	Oct 21 ¹	Nov 24 ¹
<i>Crinia signifera</i>	Common Eastern Froglet				X					X+			X
<i>Crinia tinnula</i>	Wallum Froglet									X			
<i>Limnodynastes dumerilii</i>	Eastern Banjo Frog												
<i>Limnodynastes peronii</i>	Striped Marsh Frog	X		X	X	X				X+			
<i>Limnodynastes tasmaniensis</i>	Spotted Marsh Frog												
<i>Litoria aurea</i>	Green and Golden Bell Frog		2	X									
<i>Litoria dentata</i>	Bleating Tree Frog									+			
<i>Litoria caerulea</i>	Green Tree Frog			X	X								
<i>Litoria fallax</i>	Eastern Dwarf Tree Frog	X	X	X	X					X			X
<i>Litoria gracilentata</i>	Dainty Green Tree Frog				X								X
<i>Litoria latopalmata</i>	Broad-palmed Rocket Frog					S				X			
<i>Litoria nasuta</i>	Striped Rocket Frog		X										
<i>Litoria peronii</i>	Brown Tree Frog	X+											
<i>Litoria tyleri</i>	Tyler's Tree Frog				X					X			
<i>Uperoleia fusca</i>	Dusky Toadlet					X				X			
<i>Uperoleia laevigata</i>	Smooth Toadlet			X									

Note: X = recorded (heard and/or observed), S = captured with sweep net, + = denotes species heard calling at a distance from the monitoring pond, ¹ = denotes dry ephemeral pond/swamp at time of survey.

Scientific name	Common name	Crescent Head South																	
		Pond 1						Pond 2						Pond 3					
		Oct -18	Mar -19	Feb -20	Oct/Nov -21	Feb -22	Nov 24	Oct -18	Mar -19	Feb -20	Oct/Nov -21	Feb -22	Nov 24	Oct -18	Mar -19	Feb -20	Oct/Nov -21	Feb -22	Nov 24
<i>Crinia signifera</i>	Common Eastern Froglet			X+													X+		X
<i>Crinia tinnula</i>	Wallum Froglet																X		
<i>Limnodynastes dumerilii</i>	Eastern Banjo Frog				X												X		
<i>Limnodynastes peronii</i>	Striped Marsh Frog	X		X+	X	X	X						X	X+	X	X+	X	X+	X
<i>Limnodynastes tasmaniensis</i>	Spotted Marsh Frog	X+					X						X						
<i>Litoria aurea</i>	Green and Golden Bell Frog																		
<i>Litoria dentata</i>	Bleating Tree Frog				X												X+		
<i>Litoria caerulea</i>	Green Tree Frog			X+	X+					X+									
<i>Litoria fallax</i>	Eastern Dwarf Tree Frog	X	X, S	X+	X	X	X	X	X		X	X	X	X		X	X		X
<i>Litoria gracilenta</i>	Dainty Green Tree Frog			X+	X	X	X				X		X				X	X	X
<i>Litoria latopalmata</i>	Broad-palmed Rocket Frog													X+					
<i>Litoria nasuta</i>	Striped Rocket Frog			X+	X	X					X	X				X+			X
<i>Litoria peronii</i>	Brown Tree Frog	X			X		X				X						X		X
<i>Litoria tyleri</i>	Tyler's Tree Frog															X			
<i>Mixophyes fasciolatus</i>	Great Barred Frog											X							
<i>Uperoleia fusca</i>	Dusky Toadlet			X+	X+					X+						X+			
<i>Uperoleia laevigata</i>	Smooth Toadlet										X								

Note: X = recorded (heard and/or observed), S = captured with sweep net, + = denotes species heard calling at a distance from the monitoring pond, ¹ = denotes dry ephemeral pond/swamp at time of survey.



7.1.6 | MOSQUITO FISH MONITORING

This section documents Mosquito Fish monitoring for the Crescent Head Biodiversity Area over the 2024 monitoring period (which extends from spring 2024 to autumn 2025). This is the seventh year that monitoring of the mosquito fish within the ponds has occurred. Three inground ponds are being monitored at both sites along with the constructed pond at each site. This data has been compared to baseline information from monitoring in 2018 and data collected in previous years.

Water was absent at Pond 3 at Crescent Head North following insufficient rainfall. Water has only been observed in Pond 3 once following significant rainfall. Pond 2 held water for the fifth time at Crescent Head North during the monitoring project, in the form of a large puddle. This pond is located along a drainage line and requires flow to fill the depression. The soil was soft during the survey suggesting that the pond recently contained water.

Water levels were lower than some previous years surveys, due to below average rainfall leading up to the November survey. However, Pond 2 at Crescent Head North was holding enough water to sample compared to 2023 when it was dry.

Mosquito Fish were present in Pond 1 at Crescent Head North in November 2024, but none were captured in Pond 2 and Pond 3 was dry. There was an increase in the number of Mosquito Fish sampled at Pond 1 Crescent Head North with 44 being recorded in 2024 compared to 18 in 2023.

There was a small decrease in Mosquito Fish recorded in Pond 1 at Crescent Head South, with 36 recorded in 2024 and 55 recorded during 2023. Pond 2 at Crescent Head South is consistent with the sample in 2023, with eight Mosquito Fish being recorded in 2024 and nine recorded in 2023. Mosquito Fish abundance was highest in Pond 3 at Crescent Head South. A total of 357 Mosquito Fish were captured during the 2024 survey compared to 42 individuals in 2023.

Although not assessed, it is possible that a higher number of fish were caught at Pond 3 in 2024 because dissolved oxygen levels in the water column were low resulting in a higher number of fish close to the surface where oxygen levels are generally higher (Pyke 2005).

Compared to previous survey years the number of Mosquito Fish sampled is somewhat stable between 2023 and 2024, with the exception of Pond 3 at Crescent Head South. It is accepted that the abundance of Mosquito Fish shifts markedly between seasons and years with similar survey effort. While this phenomenon is acknowledged in the literature, the factors that affect change in abundance remain poorly understood (MDBA 2011).

One native fish species were recorded during the Mosquito Fish survey; the Firetail Gudgeon (*Hypseleotris galii*). Firetail Gudgeon is a known predator of GGBF tadpoles (Pyke and White 2000). Firetail Gudgeons were recorded in Pond 1 and Pond 3 at Crescent Head South and Pond 1 Crescent Head North.

A mechanism to remove Mosquito Fish from the ponds is yet to be applied. The majority of the larger inground ponds are fed by groundwater and contain native fish. These inground ponds regularly flood through overland flow and any attempts to remove the Mosquito Fish would have to be repeated. The complete drying of a pond is likely to be the most effective method of removing the species from a pond without applying chemicals. While attempts to drain the ponds may be undertaken, given the presence of native fish within the ponds, draining of the ponds to rid the Mosquito Fish may present a challenge to regulators. Further, as they are groundwater fed, it is unlikely that draining and drying of the ponds would be successful without significant regional water losses. Success is more likely to focus efforts to develop breeding habitats that are free from Mosquito Fish and are not impacted by flood flows. Should attempts to drain the existing ponds occur, it will be important to restore habitat (i.e. water levels) relatively quickly thereafter if low rainfall is predicted.

The management plan provides key performance criteria and completion criteria related to the conservation objectives as well as criteria related to specific conservation management actions. The criteria relevant to Mosquito Fish monitoring are addressed in Table 7-8 and Table 7-9 for the conservation objectives and specific management actions, respectively.

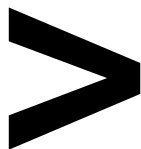
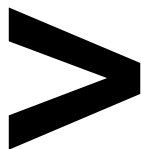


Table 7-8 - Progress towards performance and completion criteria relevant to the conservation objectives.

Habitat value	Key performance indicator	Completion criteria
Existing breeding habitat	<p>Reduction in the Mosquito Fish population in the ponds where control methods are possible.</p> <p>Lower numbers of Mosquito Fish at Pond 1 and Pond 2 at Crescent Head North and Ponds 1 and 2 at Crescent Head South in the last two years. A large increase of Mosquito Fish recorded at Pond 3 at Crescent Head South.</p>	<p>Mosquito Fish control trials are completed and their success is evaluated by analysis of monitoring results.</p> <p>Not yet commenced due to ponds being groundwater fed and native fish species recorded.</p>

Table 7-9 - Progress towards performance and completion criteria relevant to pond management.

Performance criteria	Year 1 to year 10	Completion criteria
Pond management		
Offline ponds	<p>Complete drainage survey.</p> <p>Prepare plan for construction.</p> <p>Construct ponds and water capture to fill ponds.</p> <p>Review success.</p> <p>Drainage survey completed, construction of ponds completed.</p> <p>GGBF detected at the offline pond at Crescent Head North in March 2021.</p>	<p>Drainage survey completed.</p> <p>Ponds have been constructed in accordance with design.</p> <p>Ponds constructed at Crescent Head North and South</p>
Pond A to F	<p>Complete drainage survey.</p> <p>Prepare plan for pond refurbishment.</p> <p>Implement plan.</p> <p>Conduct Mosquito Fish control.</p> <p>Review success.</p>	<p>Drainage survey completed.</p> <p>Ponds refurbished in accordance with plan.</p> <p>Mosquito Fish control completed in suitable ponds in accordance with approved methods.</p> <p>Drainage survey completed.</p>



	Drainage survey completed, Pond refurbishment being planned based on ecological monitoring results.	Pond refurbishment not yet commenced due to ponds being groundwater fed and native fish species recorded.
Monitoring	<p>Monitor number of Mosquito Fish following initial control.</p> <p>Monitor for the presence of Green and Golden Bell Frogs.</p> <p>Follow-up monitoring and control of Mosquito Fish.</p> <p>Monitor for the presence of Green and Golden Bell Frogs.</p> <p>Monitoring completed as required in 2024.</p>	<p>Mosquito Fish numbers have declined in Pond A to F where suitable.</p> <p>Mosquito Fish are absent from offline ponds.</p> <p>Suitable frog habitat has been established within managed areas.</p> <p>Seventh monitoring period completed for all permanent ponds.</p> <p>Mosquito Fish populations consistently present in Pond 1 at Crescent Head North and Ponds 1-3 at Crescent Head South.</p> <p>Mosquito Fish numbers have been consistently low for two years at Pond 1 Crescent Head North and Pond 1 & 2 at Crescent Head South.</p> <p>Offline ponds have been created and Mosquito Fish have not been recorded in these ponds. Tadpoles were recorded at the offline pond at Crescent Head South (Eastern Dwarf Tree Frog).</p>

8 | VEGETATION CLEARANCE PLAN

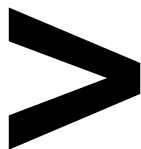
The Vegetation Clearance Plan (VCP) documents measures to manage CHVEF, Regent Honeyeater, Swift Parrot and the GGBF during the vegetation clearance for the approved action. The VCP was prepared in accordance with conditions 1, 2, 21 and 22 of EPBC 2016-7640 and was implemented following the Minister's approval of the Plan on 24 October 2016.

Condition 1 of EPBC 2016/7640 states that HVO must not clear more than 54.4 ha of CHVEF from within the Riverview Pit EPBC boundary and 6.6 ha of CHVEF from within the West Pit EPBC boundary. While no clearing occurred within the EPBC areas during the reporting period, from within these EPBC areas, HVO has, in total, disturbed approximately 44ha CHVEF from Riverview Pit and 5.5ha of CHVEF from West Pit.

The VCP is initially managed through HVO's Ground Disturbance Permit process whereby pre-clearance checks and conditions are applied prior to any disturbance or on-ground works. Conditional approvals are applied to each permit which include specific requirements to comply with the surveys and processes outlined in the VCP.

No surveys have recorded the Regent Honeyeater, Swift Parrot or the Green and Golden Bell Frog (adults, metamorphs or tadpoles) as residing or traversing across the EPBC area since the approval was obtained.

More details are outlined in the compliance table in Section 2 |.



9 | FAUNA CAPTURED ON CAMERA



Figure 9-1 - Wild dog recorded at the Hook BA.

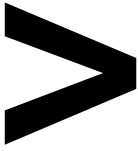


Figure 9-2 - A European Fox at the Hook BA.



Figure 9-3 - Deer recorded at the Hook BA.

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Figure 9-4 - Deer photographed during the deer monitoring programme at the Hook BA.



Figure 9-5 - A number of possums photographed during pest management monitoring



Figure 9-6 - An echidna photographed during pest management monitoring at the Hook BA.



Figure 9-7 - A wombat photographed by motion sensor camera at the Mitchelhill East BA.

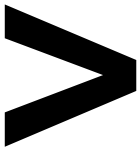


Figure 9-8 - A brush-tailed phascogale photographed by motion sensor camera at the Mitchelhill West BA.



Figure 9-9 - A bandicoot photographed by motion sensor camera at the Mitchelhill West BA.

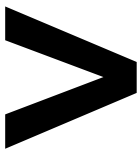


Figure 9-10 - Two wild dogs photographed by motion sensor camera at the Mitchelhill West BA.



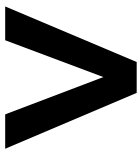
Figure 9-11 - An eastern spotted quoll photographed by motion sensor camera at the Mitchelhill West BA.



Figure 9-12 - A wombat photographed by motion sensor camera at the Condon View BA.



Figure 9-13 - A bandicoot photographed by motion sensor camera at the Condon View BA.



10 | REFERENCES

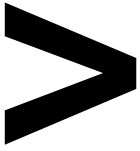
Department of Environment and Climate Change (DECC) (2008), *Best practice guidelines for the Green and Golden Bell Frog*, Department of Environment and Climate Change MSW, Sydney.

Department of the Environment (2015) Approved Conservation Advice (including the listing advice) for the Central Hunter Valley eucalypt forest and woodland ecological community. Canberra Department of the Environment. Accessed at <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/130-conservationadvice>.

Department of Environment, Water, Heritage and the Arts (DEWHA) (2010) Survey Guidelines for Australia's threatened frogs: Guidelines for detecting frogs listed as threatened under the EPBC Act. EPBC Policy Statement.

Pyke, G.H. and White, A.W. (2000). Factors influencing predation on eggs and tadpoles of the endangered Green and Golden Bell Frog *Litoria aurea* by the introduced Plague Minnow *Gambusia holbrooki*. *Australian Zoologist* 31(3): 496-505.

Pyke, G.H. (2005). A review of the biology of *Gambusia affinis* and *G. holbrooki*. *Reviews in Fish Biology and Fisheries*. 15:339-365.



11 | APPENDIX A: RAPID CONDITION ASSESSMENT - CURRENT AND
PREVIOUS YEAR TABLES

Wandewoi Biodiversity Area

Rapid Condition Assessment - Woodland

Ecoplanning, November 2024
Note: True = 1, False = 0

Hunter Valley Operations

Site ID	WAN R1	WAN R2	WAN R3	WAN R4	WAN R5	WAN R6
Low grazing intensity - never farmed	0	0	0	0	0	0
Tree and shrub regeneration present (<2m)	0	1	1	1	0	0
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1
Healthy mature trees (no dieback)	1	0	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	0	1	1	1	0	0
No evidence of firewood collection	1	1	1	1	1	1
No obvious signs of erosion or salinity	1	1	1	0	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1
Presence of native shrubs	1	1	1	1	1	1
Presence of large, old growth trees with hollows	0	0	0	0	1	0
Dead timber is left standing	1	1	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1	1	1
Abundance of native ground flora	1	1	1	1	0	0
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	1
Connected to or in close proximity to other remnant vegetation	0	0	0	0	0	0
Health Rating	15	16	17	16	15	14
% cover of canopy species	Em 1%	Em 5%, Et 2%	Em 5%, Et 6% Af 1%	Al 1%, Em 10%, Bp 1%	Em 1%	Em 1%
Stem class maximum (cm)	50-80 cm	30-50 cm	50-80 cm	50-80 cm	>80 cm	50-80 cm
Stem class minimum (cm)	20-30 cm	<5 cm	<5 cm	<5 cm	50-80 cm	30-50cm
Stem class average (cm)	50-80 cm	20-30 cm	20-30 cm	20-30 cm	50-80 cm	50-80 cm

Note Et = *Eucalyptus tereticornis*, Em = *Eucalyptus moluccana*, Af = *Angophora floribunda*, Al = *Allocasuarina littoralis*, Bp = *Brachychiton populneus*

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Wandewoi Biodiversity Area

Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Bruce Mullins (Ecoplanning)

Note: True = 1, False = 0

Site ID	WAN R1	WAN R2	WAN R3	WAN R4	WAN R5	WAN R6
Low grazing intensity - never farmed	0	0	0	0	Grassland	Grassland
Tree and shrub regeneration present (<2m)	0	1	1	1		
Infrequent fire regime (<5year intervals)	1	1	1	1		
Healthy mature trees (no dieback)	1	0	1	1		
Little to no evidence of rabbits	1	1	1	1		
Little to no evidence of foxes/cats	1	1	1	1		
Low abundance of weeds (most remnants contain some weeds)	1	0	0	1		
No evidence of firewood collection	1	1	1	1		
No obvious signs of erosion or salinity	1	1	1	1		
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1		
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1		
Few tracks, trails or fence lines	1	1	1	1		
Presence of native shrubs	1	1	1	1		
Presence of large, old growth trees with hollows	1	0	1	0		
Dead timber is left standing	1	1	1	1		
Fallen timber and logs are left on the ground	1	1	1	1		
Abundance of native ground flora	1	1	1	1		
Presence of litter, cryptogams, cracks and rocks	1	1	1	1		
Remnant is large (> 5ha is optimum)	1	1	1	1		
Connected to or in close proximity to other remnant vegetation	1	1	1	1		

Health Rating

18	16	18	18		
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Mitchelhill (West) Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

Ecoplanning, November 2024

Note: True = 1, False = 0, (G) = Grassland

Site ID	MIT-W R1 (G)	MIT-W R2	MIT-W R3	MIT-W R4	MIT-W R5	MIT-W R6
Low grazing intensity - never farmed	0	1	1	1	1	0
Tree and shrub regeneration present (<2m)	0	1	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1
Healthy mature trees (no dieback)	1	0	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	0	1	1	1	1	0
No evidence of firewood collection	0	1	1	1	1	0
No obvious signs of erosion or salinity	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1
Presence of native shrubs	0	1	1	1	1	1
Presence of large, old growth trees with hollows	0	1	1	1	1	0
Dead timber is left standing	0	1	1	1	1	0
Fallen timber and logs are left on the ground	0	1	1	1	1	0
Abundance of native ground flora	1	1	1	1	1	0
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	0
Connected to or in close proximity to other remnant vegetation	1	1	1	1	1	0
Health Rating	12	19	20	20	20	11
% cover of canopy species	Et 1%	Em 20%, Ec 2%	Cm 15%, Ec 10%, Em 1%	Cm 16%, Ep 2%, Ec 2%	Ec 10%, Cm 2%, Et 1%, Em 1%	Et 1%, Ec 1%
Stem class maximum (cm)	>50 cm	>50 cm	>80 cm	>80 cm	>80 cm	20-30 cm
Stem class minimum (cm)	<5 cm	<5 cm	<5 cm	<5 cm	<5 cm	<5 cm
Stem class average (cm)	10-20 cm	20-30 cm	20-30 cm	20-30 cm	20-30 cm	5-10 cm

Note Ec = *Eucalyptus crebra*, Ep = *Eucalyptus punctata*, Cm = *Corymbia maculata*, Et = *Eucalyptus tereticornis*, Em = *Eucalyptus moluccana*, Ef = *Eucalyptus fibrosa*

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Mitchelhill (West) Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Bruce Mullins (Ecoplanning)

Note: True = 1, False = 0

Site ID	MIT-W R1	MIT-W R2	MIT-W R3	MIT-W R4	MIT-W R5	MIT-W R6
Low grazing intensity - never farmed	Grassland	1	1	1	1	Grassland
Tree and shrub regeneration present (<2m)		1	1	1	1	
Infrequent fire regime (<5year intervals)		1	1	1	1	
Healthy mature trees (no dieback)		1	1	1	1	
Little to no evidence of rabbits		1	1	1	1	
Little to no evidence of foxes/cats		1	1	1	1	
Low abundance of weeds (most remnants contain some weeds)		1	1	1	1	
No evidence of firewood collection		0	1	1	1	
No obvious signs of erosion or salinity		1	1	1	1	
Not susceptible to fertiliser application, herbicide or pesticide drift		1	1	1	1	
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)		1	1	1	1	
Few tracks, trails or fence lines		1	1	1	1	
Presence of native shrubs		1	1	1	1	
Presence of large, old growth trees with hollows		0	1	1	1	
Dead timber is left standing		1	1	1	1	
Fallen timber and logs are left on the ground		1	1	1	1	
Abundance of native ground flora		1	1	1	1	
Presence of litter, cryptogams, cracks and rocks		1	1	1	1	
Remnant is large (> 5ha is optimum)		1	1	1	1	
Connected to or in close proximity to other remnant vegetation		1	1	1	1	

Health Rating

	18	20	20	20	
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**Mitchelhill (East) Biodiversity Area
Rapid Condition Assessment - Woodland**

Hunter Valley Operations

Ecoplanning, November 2024
Note: True = 1, False = 0, (G) = Grassland

Site ID	MIT-E R1 (G)	MIT-E R2	MIT-E R3	MIT-E R4 (G)	MIT-E R5	MIT-E R6
Low grazing intensity - never farmed	0	1	0	0	1	1
Tree and shrub regeneration present (<2m)	1	1	1	0	1	1
Infrequent fire regime (<5year intervals)	0	1	1	1	1	1
Healthy mature trees (no dieback)	1	1	0	0	1	1
Little to no evidence of rabbits	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	0	1	1	0	0	1
No evidence of firewood collection	1	1	1	0	1	1
No obvious signs of erosion or salinity	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	0	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	0	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1
Presence of native shrubs	1	1	1	0	1	1
Presence of large, old growth trees with hollows	1	0	1	0	0	1
Dead timber is left standing	1	1	1	0	1	1
Fallen timber and logs are left on the ground	1	1	1	0	1	1
Abundance of native ground flora	0	1	1	0	1	1
Presence of litter, cryptogams, cracks and rocks	0	1	1	0	1	1
Remnant is large (> 5ha is optimum)	1	1	1	0	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	0	1	1
Health Rating	15	19	18	5	18	20
% cover of canopy species	Cm 1%, Ec 1%, Et 1%	Af 4%, Et 10% Cm 2%	Af 1%, Cm 15% Et 5%	-	Cm 1%, Ec 5%	Et 10%, Ec 5% Cm 1%
Stem class maximum (cm)	>80 cm	>80 cm	>80 cm	-	50-80 cm	>80 cm
Stem class minimum (cm)	<5 cm	<5 cm	<5 cm	-	5-10 cm	<5 cm
Stem class average (cm)	20-30 cm	20-30 cm	20-30 cm	-	20-30 cm	20-30 cm

Note Af = *Angophora floribunda*, Ec = *Eucalyptus crebra*, Cm = *Corymbia maculata*, Et = *Eucalyptus tereticornis*

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Mitchelhill (East) Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Bruce Mullins (Ecoplanning)

Note: True = 1, False = 0

Site ID	MIT-E R1	MIT-E R2	MIT-E R3	MIT-E R4	MIT-E R5	MIT-E R6
Low grazing intensity - never farmed	Grassland	1	0	Grassland	0	0
Tree and shrub regeneration present (<2m)		1	1		1	1
Infrequent fire regime (<5year intervals)		1	1		1	1
Healthy mature trees (no dieback)		1	1		1	1
Little to no evidence of rabbits		1	1		1	1
Little to no evidence of foxes/cats		1	1		1	1
Low abundance of weeds (most remnants contain some weeds)		1	1		0	0
No evidence of firewood collection		1	1		1	1
No obvious signs of erosion or salinity		1	1		1	1
Not susceptible to fertiliser application, herbicide or pesticide drift		1	1		1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)		1	1		1	1
Few tracks, trails or fence lines		1	1		1	1
Presence of native shrubs		1	1		1	1
Presence of large, old growth trees with hollows		0	1		0	1
Dead timber is left standing		1	1		1	1
Fallen timber and logs are left on the ground		0	1		1	1
Abundance of native ground flora		1	1		1	1
Presence of litter, cryptogams, cracks and rocks		1	1		0	0
Remnant is large (> 5ha is optimum)		1	1		1	1
Connected to or in close proximity to other remnant vegetation		1	1		1	1
Health Rating		17	19		16	17

Hook Biodiversity Area

Rapid Condition Assessment - Woodland

Hunter Valley Operations

Ecoplanning, November 2024

Note: True = 1, False = 0

Site ID	HOO R1	HOO R2	HOO R3	HOO R4	HOO R5	HOO R6
Low grazing intensity - never farmed	0	1	1	1	1	1
Tree and shrub regeneration present (<2m)	1	1	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1
Healthy mature trees (no dieback)	0	1	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	1	1	1	1
No evidence of firewood collection	0	0	1	1	1	1
No obvious signs of erosion or salinity	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1
Presence of native shrubs	1	1	1	1	1	1
Presence of large, old growth trees with hollows	0	0	0	0	0	0
Dead timber is left standing	1	0	0	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1	1	1
Abundance of native ground flora	1	1	1	1	1	1
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1	1	1
Health Rating	16	17	18	19	19	19
% cover of canopy species	Ec 2%, Cm 1%, Et 3%	Em 12%, Et 8%, Ec 1%	Cm 10%, Ef 6%, Em 10%	Et 10%, Em 10%, Cm 2%	Em 10%, Cm 5%, Ef 2%	Em 5%, Cm 2%, Ef 2%
Stem class maximum (cm)	50-80 cm	30-50 cm	50-80 cm	50-80 cm	50-80 cm	50-80 cm
Stem class minimum (cm)	<5 cm	<5 cm	<5 cm	<5 cm	<5 cm	<5 cm
Stem class average (cm)	20-30 cm	20-30 cm	20-30 cm	20-30 cm	10-20 cm	10-20 cm

Note Ec = *Eucalyptus crebra*, Cm = *Corymbia maculata*, Et = *Eucalyptus tereticornis*, Em = *Eucalyptus moluccana*, Ef = *Eucalyptus fibrosa*

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Hook Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Bruce Mullins (Ecoplanning)

Note: True = 1, False = 0

Site ID	HOO R1	HOO R2	HOO R3	HOO R4	HOO R5	HOO R6
Low grazing intensity - never farmed	0	1	1	1	1	0
Tree and shrub regeneration present (<2m)	1	1	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1
Healthy mature trees (no dieback)	0	1	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	0	1	1	1
No evidence of firewood collection	1	1	1	1	0	1
No obvious signs of erosion or salinity	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1
Few tracks, trails or fence lines	1	0	1	1	1	1
Presence of native shrubs	0	1	1	1	1	1
Presence of large, old growth trees with hollows	0	0	0	0	0	0
Dead timber is left standing	1	1	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1	1	1
Abundance of native ground flora	1	1	1	1	1	1
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1	1	1

Health Rating

16	18	18	19	18	18
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Number: HVOOC-1797567310-5123

Status: Approved

Effective: 31/01/2025

Owner: Environment and Community Coordinator

Version: 1.0

Review: [Planned Review Date]

Crescent Head Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2024

Auditor: Ecoplanning

Note: True = 1, False = 0

Site ID	CRE-S R1	CRE-S R2	CRE-S R3	CRE-S R4	CRE-N R1	CRE-N R2	CRE-N R3	CRE-N R4
Low grazing intensity - never farmed	1	1	1	1	1	1	1	1
Tree and shrub regeneration present (<2m)	1	1	1	1	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1	1	1
Healthy mature trees (no dieback)	1	1	1	1	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	1	1	1	1	1	1
No evidence of firewood collection	1	1	1	1	1	1	1	1
No obvious signs of erosion or salinity	1	1	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1	1	1
Presence of native shrubs	1	1	1	1	1	1	1	1
Presence of large, old growth trees with hollows	0	0	0	0	0	0	0	1
Dead timber is left standing	1	1	1	1	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1	1	1	1	1
Abundance of native ground flora	1	1	1	1	1	1	1	1
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1	1	1	1	1

Health Rating

19	19	19	19	19	19	19	19	20
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Number: HVOOC-1797567310-5123

Owner: Environment and Community Coordinator

Status: Approved

Version: 1.0

Effective: 31/01/2025

Review: [Planned Review Date]

Crescent Head Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Ecoplanning

Note: True = 1, False = 0

Site ID	CRE-S R1	CRE-S R2	CRE-S R3	CRE-S R4	CRE-N R1	CRE-N R2	CRE-N R3	CRE-N R4
Low grazing intensity - never farmed	1	1	1	1	1	1	1	1
Tree and shrub regeneration present (<2m)	1	1	1	1	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1	1	1	1	1
Healthy mature trees (no dieback)	1	1	1	1	1	1	1	1
Little to no evidence of rabbits	1	1	1	1	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	1	1	1	1	1	1
No evidence of firewood collection	1	1	1	1	1	1	1	1
No obvious signs of erosion or salinity	1	1	1	1	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1	1	1	1	1
Presence of native shrubs	1	1	1	1	1	1	1	1
Presence of large, old growth trees with hollows	0	0	0	0	0	0	0	1
Dead timber is left standing	1	1	1	1	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1	1	1	1	1
Abundance of native ground flora	1	1	1	1	1	1	1	1
Presence of litter, cryptogams, cracks and rocks	1	1	1	1	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1	1	1	1	1

Health Rating

19	19	19	19	19	19	19	19	20
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Number: HVOOC-1797567310-5123

Status: Approved

Effective: 31/01/2025

Owner: Environment and Community Coordinator

Version: 1.0

Review: [Planned Review Date]

**Condon View Biodiversity Area
Rapid Condition Assessment - Woodland**

Hunter Valley Operations

Ecoplanning, November 2024
Note: True = 1, False = 0

Site ID	CON R1	CON R2	CON R3	CON R4
Low grazing intensity - never farmed	1	0	1	1
Tree and shrub regeneration present (<2m)	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1
Healthy mature trees (no dieback)	1	1	1	1
Little to no evidence of rabbits	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	1	1
No evidence of firewood collection	1	0	1	1
No obvious signs of erosion or salinity	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1
Presence of native shrubs	1	1	1	1
Presence of large, old growth trees with hollows	1	0	1	1
Dead timber is left standing	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1
Abundance of native ground flora	1	1	1	1
Presence of litter, cryptogams, cracks and rocks	1	1	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1
Health Rating	20	17	20	20
% cover of canopy species	Ep 10%, Ef 2%, Ac 5%, Ce 10%, Ee 10%	Et 10%, Em 1%	EP 2%, Ef 2%, Sg 8%, Ee 5%, Ac 5%	Ep 10%, Ee 5%, Ce 5%
Stem class maximum (cm)	50-80 cm	50-80 cm	50-80 cm	50-80 cm
Stem class minimum (cm)	<5 cm	<5 cm	<5 cm	<5 cm
Stem class average (cm)	20-30 cm	20-30 cm	10-20 cm	30-50 cm

Note Ee = *Eucalyptus eugenioides*, Em = *Eucalyptus moluccana*, Ep = *Eucalyptus punctata*, Et = *Eucalyptus tereticornis*, Ac = *Angophora costata*, Ce = *Corymbia eximia*, Sg = *Syncarpia glomulifera*

Number: HVOOC-1797567310-5123

Status: Approved

Effective: 31/01/2025

Owner: Environment and Community Coordinator

Version: 1.0

Review: [Planned Review Date]

Condon View Biodiversity Area
Rapid Condition Assessment - Woodland

Hunter Valley Operations

November 2023

Auditor: Bruce Mullins

Note: True = 1, False = 0

Site ID*	CON R1	CON R2	CON R3	CON R4
Low grazing intensity - never farmed	1	0	1	1
Tree and shrub regeneration present (<2m)	1	1	1	1
Infrequent fire regime (<5year intervals)	1	1	1	1
Healthy mature trees (no dieback)	1	1	1	1
Little to no evidence of rabbits	1	1	1	1
Little to no evidence of foxes/cats	1	1	1	1
Low abundance of weeds (most remnants contain some weeds)	1	1	1	1
No evidence of firewood collection	1	1	1	1
No obvious signs of erosion or salinity	1	1	1	1
Not susceptible to fertiliser application, herbicide or pesticide drift	1	1	1	1
Less than 20% trees with Mistletoe (NB some mistletoe is healthy)	1	1	1	1
Few tracks, trails or fence lines	1	1	1	1
Presence of native shrubs	1	1	1	1
Presence of large, old growth trees with hollows	1	0	0	1
Dead timber is left standing	1	1	1	1
Fallen timber and logs are left on the ground	1	1	1	1
Abundance of native ground flora	1	0	1	1
Presence of litter, cryptogams, cracks and rocks	1	0	1	1
Remnant is large (> 5ha is optimum)	1	1	1	1
Connected to or in close proximity to other remnant vegetation	1	1	1	1

Health Rating

20	16	19	20
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*R1 (HVO) = R1 (Yancoal), R2 = new site, R3 (HVO) = R5 (Yancoal), R4 (HVO) = R6 (Yancoal)

Number: HVOOC-1797567310-5123

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Owner: Environment and Community Coordinator

Version: 1.0

Review: [Planned Review Date]