



Newmont Boddington
EPBC 2012/6370
Current Revised Proposal under assessment
BLACK COCKATOO MANAGEMENT PLAN

Declaration of Accuracy	
Project Name	Newmont Boddington Mine Extension Project
Proponent/ ACN or ABN	Newmont Boddington Gold Pty Ltd
Location	Boddington, Western Australia
Approved Action	The Boddington Gold Mine Expansion Project involves expansion of the operation through expansion of waste rock dump and new residual disposal area.

Declaration of accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. 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) _____

Organisation (please print) _____

Date ____/____/____

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DOCUMENT CONTROL

Date	Description of changes	Reviewer	Approver
10 June 2025	Updated to address requirements for the Revised Proposal.	Steph Myles	

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1 EXECUTIVE SUMMARY

The Black Cockatoo Management Plan (BCMP) has been prepared by Newmont Boddington Gold Pty Ltd (Newmont Boddington) (the Proponent) for the Newmont Boddington Life of Mine Extension Amendment Proposal (Revised Proposal).

This BCMP outlines Newmont Boddington's approach to managing potential environmental impacts of the Revised Proposal to fauna habitat, with a specific focus on Forest Red Tail Black Cockatoo (*Calyptorhynchus banksii naso*) (FRTBC), Baudin's Cockatoo (*Zanda baudinii*) (BBC) and Carnaby's Cockatoo (*Zanda latirostris*) (CBC). Further, the BCMP satisfy Condition 10 of EPBC 2012/6270.

The BCMP has been developed in accordance with the "Environmental management plan guidelines" developed by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) (DCCEEW 2024c) and "Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plan" (EPA 2024) developed by the Environmental Protection Authority (EPA) and supports Ministerial Statement 971 (MS971).

Executive summary Table 1-1 presents a summary of the key components of this BCMP.

Table 1-1: Executive Summary

Proposal	Newmont Boddington Gold Mine Life of Mine Extension Amendment Proposal (Revised Proposal).
Proponent name	Newmont Boddington Gold Pty Ltd
Ministerial Statement Number & EPBC Act Approval	New Ministerial Statement to replace MS971 EPBC 2012/6370 EPBC 2011/6192
Purpose	Provides management of BBC, CBC and FRTBC habitat with the potential to be impacted by the Revised Proposal during construction, operational and rehabilitation activities. This BCMP has been updated in anticipation of a new Ministerial Statement for the Revised Proposal and EPBC Decision Notice (as an accredited assessment). To meet the requirements of implementation Condition 10 of the EPBC 2012/6370 and Condition 3 of EPBC 2011/6192.
Condition Clauses	To be determined New Ministerial Statement and EPBC Act Decision Notice is yet to be issued. Condition 10 of EPBC 2012/6370 Condition 3 of EPBC 2011/6192
Potential Impacts	The key potential impacts to fauna habitat as a result of the Proposal include: <ul style="list-style-type: none"> • Loss of habitat (physical removal) • Vehicle strike • Alterations to fauna behaviour as a result of increased noise, vibration and light • Decline in habitat condition as a result of: <ul style="list-style-type: none"> ○ Establishment or spread of weed species/populations ○ Introduction or spread of dieback ○ Introduction of feral fauna or increases in local populations ○ Increase in dust emissions

Proposal	Newmont Boddington Gold Mine Life of Mine Extension Amendment Proposal (Revised Proposal).
Key Management Actions	<p>The key management actions relevant to this BCMP include:</p> <ul style="list-style-type: none"> • Adherence to Site Disturbance Permit system • Adequate staff training and awareness • Implementation of dust, noise, light and vibration mitigation • Progressive rehabilitation, including minimum planting or seeding requirements based on conservation significant fauna habitat requirements • Weed and dieback mitigation in accordance with the Weed and Forest Disease Monitoring and Management Plan • Implementation of monitoring programmes, focussed on usage of rehabilitated areas by conservation significant fauna.
Key components in the EMP	Outcome-based components to achieve the following: maintain the long-term viability of the three black cockatoo species.
Proposed construction date	Not applicable - Ministerial Statement is yet to be issued for the Revised Proposal.
EMP required pre construction	Yes

2 CONDITIONS OF APPROVAL

Condition 3 of EPBC 2011/6192 states *'the person taking the action must implement and adhere to the Black Cockatoo Management Plan (NBG, January 2012), or subsequent editions or revisions of that Plan'*.

Condition 10 of EPBC 2012/6370 Approval for the LOM Extension Project states that *"to protect Black Cockatoos the person taking the action must prepare and submit a Black cockatoo Management Plan (BCMP) for approval by the Minister"*. This Condition provides additional detail around management actions and mitigations to be implemented as part of the BCMP. Table 2-1 outlines the relevant sub-clauses of Condition 10 and indicates the sections of the BCMP which address these requirements.

Table 2-1: EPBC Act Approval Conditions and Relevant BCMP Section

Ref	Condition	Condition Requirement	Plan Reference	Demonstration of how the plan addresses condition requirements, including commitments
1	10a	A staff induction program that provides information to all employees and contractors on the responsibilities of the person taking the action, its employees and contractors to minimise and avoid impacts to Black Cockatoos	Table 8-2	The BCMP outlines an induction package to be completed by all Newmont Boddington staff and contractors highlighting black cockatoo hazards and potential impacts of interactions within the Revised Development Envelope.
2	10b	Measures to identify and avoid clearing of potential Black Cockatoo breeding habitat, including within the "Proposed RDA", "WRD#10", "WRD#11" and "WRD#12" areas within the project site as shown in Figure 1. These measures must include identification of native vegetation containing nestlings and a commitment not to clear vegetation containing nestlings have left the nest without human intervention.	Table 8-2	The BCMP outlines protocols for identifying and avoiding clearing of black cockatoo breeding habitats. Staff are trained to identify potential nesting areas, and no vegetation with active nests will be cleared during the black cockatoo breeding season.
3	10c	Measures to maximise the rehabilitation of "Proposed RDA", "WRD#10", "WRD#11" and "WRD#12" shown in Figure 1 prior to the expiry date of this approval by using food plant and hollow producing trees species for Black Cockatoos in rehabilitation seed mixes.	Table 8-2	Rehabilitation efforts by Newmont Boddington include planting native species such as food plants and trees that provide hollows. Monitoring and progress reports will ensure Black cockatoo needs are met before approval expiry.
4	10d	Investigation of the use of artificial nest hollows on the project site.	Table 8-2	Research into artificial nest hollows will be conducted by Newmont Boddington, in conjunction with fauna

Ref	Condition	Condition Requirement	Plan Reference	Demonstration of how the plan addresses condition requirements, including commitments
				specialists, monitoring programs. This also includes the assessment of the effectiveness of artificial nests in supporting black cockatoo populations.
5	10e	Measures to identify and limit the spread of <i>Phytophthora cinnamomi</i> , including consideration where relevant of the Threat Abatement Plan for Disease in Natural Ecosystems caused by <i>Phytophthora cinnamomic</i> (Australian Government Department of the Environment, 2014).	Table 8-2	Management measures in this BCMP include pathogen monitoring, postponing clearing activities during wet weather, and prevention of the spread of the disease through maintaining hygiene standards around vehicles, machinery, or personnel in line with the Threat Abatement Plan.
6	10f	The prohibition of pets and firearms on the project site.	Table 8-2	The Site Induction Programme informs all employees and contractors about the prohibition of pets and firearms within the MDE. This will be reinforced through project-specific induction training and kick-off meetings.
7	10g	Measures to mitigate vehicle collisions, including speed limits on the project site and the installation of relevant signage on roads and entry points to the project site noting the presence of Black Cockatoos.	Table 8-2	This BCMP outlines that speed limits will be enforced, and signage will be placed in strategic areas to raise awareness of black cockatoos on the roads. Effectiveness will be monitored.
8	10h	A requirement for all employees and contractors to report all incidents that result in the injury or death of a Black Cockatoo to the project site environmental department. The project site environmental department must report all incidents that result in death or injury to Black Cockatoos in the annual compliance report required by Condition 3.	Table 8-2	Employees and contractors will report any incidents involving black cockatoos to the Site Environment Team which will include the details of such incidents in the annual compliance report.

3 PROJECT DESCRIPTION

Newmont Boddington is situated in the Jarrah Forest Biogeographic and Northern Jarrah Forest subregion (Figure 4-1), home to numerous fauna species protected under both state and federal Legislation. Mining operations present several risks to these species, with impacts managed through a Risk Management System (RMS) framework. The RMS is a business-designed, fit-for-purpose management system built from its key risks and their controls. Applied to all levels and areas of the business, the structure of Newmont's RMS is based on the 'Plan-Do-Check-Act' model and includes elements of risk assessment and control identification, documentation governance, and verification of implementation and effectiveness.

Potential impacts on black cockatoos were previously addressed in Newmont Boddington's original BCMP, developed to comply with state and federal approval conditions associated with the Life of Mine (LOM) Extension Project (EPBC 2012/6370)(Approved Proposal).

The Approved Proposal covers the current operation that consists of two large open pits, a processing plant, tailings storage facilities (active and inactive) and associated infrastructure. An additional tailings storage facility, RDA2, has been approved for construction by the Environmental Protection Authority (EPA) but not yet built. This footprint represented the immediate inundation area of the tailings storage facility and further work was required to understand the additional infrastructure required for safe construction and operation of RDA2 (Figure 4-2).

Tailings from the processing plant are currently deposited in the F1/F3 Residue Disposal Area (RDA) which is forecasted to reach capacity by 2030. Approval for the footprint of a second RDA was granted in 2014 under MS971 and EPBC 2012/6370. The RDA2 feasibility design has identified additional footprint requirements for supporting infrastructure. The Newmont Boddington Life of Mine Extension Amendment Proposal (Proposal) is a significant amendment to the Newmont Boddington Mine approved under Ministerial Statement 971. The Proposal principally comprises additional footprint which will be required to ensure the safe construction and operation of the previously approved RDA2 tailings dam in the Saddleback Treefarm (Figure 4-2).

The disturbance footprint for this Proposal is required for the following activities:

- bauxite preservation and stockpiling as required
- expansion of the access road from Albany Highway
- access and perimeter roads
- pipeline and powerline corridors
- surface water management infrastructure
- construction laydowns
- office and workshop areas
- access road from the mine
- rehabilitation material (topsoil and gravel) stockpiles
- footprint for the F1/F3 RDA closure spillway construction
- potential discharge of treated water to the environment, and
- other associated infrastructure for the Revised Proposal.

The Proposal is in the process of being referred to the Environmental Protection Authority (EPA) under Section 38 of the *Environmental Protection Act 1986* (EP Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This BCMP has been prepared in accordance with Western Australian (WA) Policy and Guidance, including:

- Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures (EPA 2024a).
- Environment Protection Authority's (EPA) *Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* (EPA 2024b).

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- EPAs Interim Guidance for Environmental outcomes and outcomes-based conditions (EPA 2022).

This BCMP also addresses Commonwealth requirements, described in the Environmental Management Plan Guidelines (DCCEEW 2024a).

4 OBJECTIVES

4.1 Purpose and scope

The BCMP reflects Newmont Boddington's ongoing commitment to biodiversity conservation and compliance with relevant environmental obligations, specifically for the three threatened black cockatoo species which are known to utilise the Boddington area for foraging and/or breeding.

- The BCMP has been developed to comply with State and Federal management plan guidance, and to describe management actions to minimise impact to black cockatoos from disturbance which may result from existing and future approvals.

4.2 Exclusions of this BCMP

Newmont Boddington maintains a stand-alone Terrestrial Fauna Management Plan (TFMP), therefore information regarding the operational management of ground-dwelling terrestrial fauna is not provided within this BCMP.

4.3 State and Federal objectives

The three species of black cockatoo that occur at Newmont Boddington are recognised at both the State and Federal levels due to their conservation status as threatened species. The BCMP aligns with the EPA Terrestrial Fauna objective which is to '*protect terrestrial fauna so that biological diversity and ecological integrity are maintained*' in alignment with the EPA's objective for the protection of terrestrial fauna (EPA 2016a).

Threatened species are a listed Matter of National Environmental Significance under the EPBC Act.

Activities at Newmont Boddington are governed under the state of Western Australia and Commonwealth of Australia environmental legal framework. This is set out in Table 4-1.

Table 4-1: Legislation and guidance

Legislation and Guidance	Relevance to Project
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	This BCMP has been developed to meet existing approvals including Condition 10 of EPBC 2012/6370 and Condition 3 of EPBC 2011/6192.
<i>Environmental Protection Act 1986</i> (EP Act)	The key environmental factor relevant to this BCMP is terrestrial fauna. This BCMP aims to ' <i>protect terrestrial fauna so that biological diversity and ecological integrity are maintained</i> ' in accordance EPA's objective for the protection of terrestrial fauna (EPA 2016a). This BCMP is expected to meet future conditions and will be subject to approval by the WA Environmental Protection Authority (EPA) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) prior to implementation of future Proposals.
<i>Biodiversity Conservation Act 2016</i> (BC Act)	Outlines the process by which significant fauna species are listed and protected based on their conservation status. Ministerial permission is required to remove or impact threatened species listed under the BC Act.
Recovery Plans and Threat Abatement Plans	Outline a framework for research and management of key threatening processes and outline actions necessary to reduce the impacts of these

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Legislation and Guidance	Relevance to Project
	<p>threats on native species and communities. Recovery Plans and TPAs relevant to management of black cockatoos at Newmont Boddington include:</p> <ul style="list-style-type: none">• Department of Environment and Conservation (DEC 2008) <i>Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Red tailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan</i>.• Department of Parks and Wildlife (DPaW 2013). <i>Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan</i>.• The Threat Abatement Plan for disease in natural ecosystems caused by <i>Phytophthora cinnamomi</i> guides management activities relating to dieback (DotEE 2018).• Department of Climate Change, Energy, the Environment and Water (DCCEEW 2024b). <i>Threat abatement plan for predation by feral cats 2024</i>.

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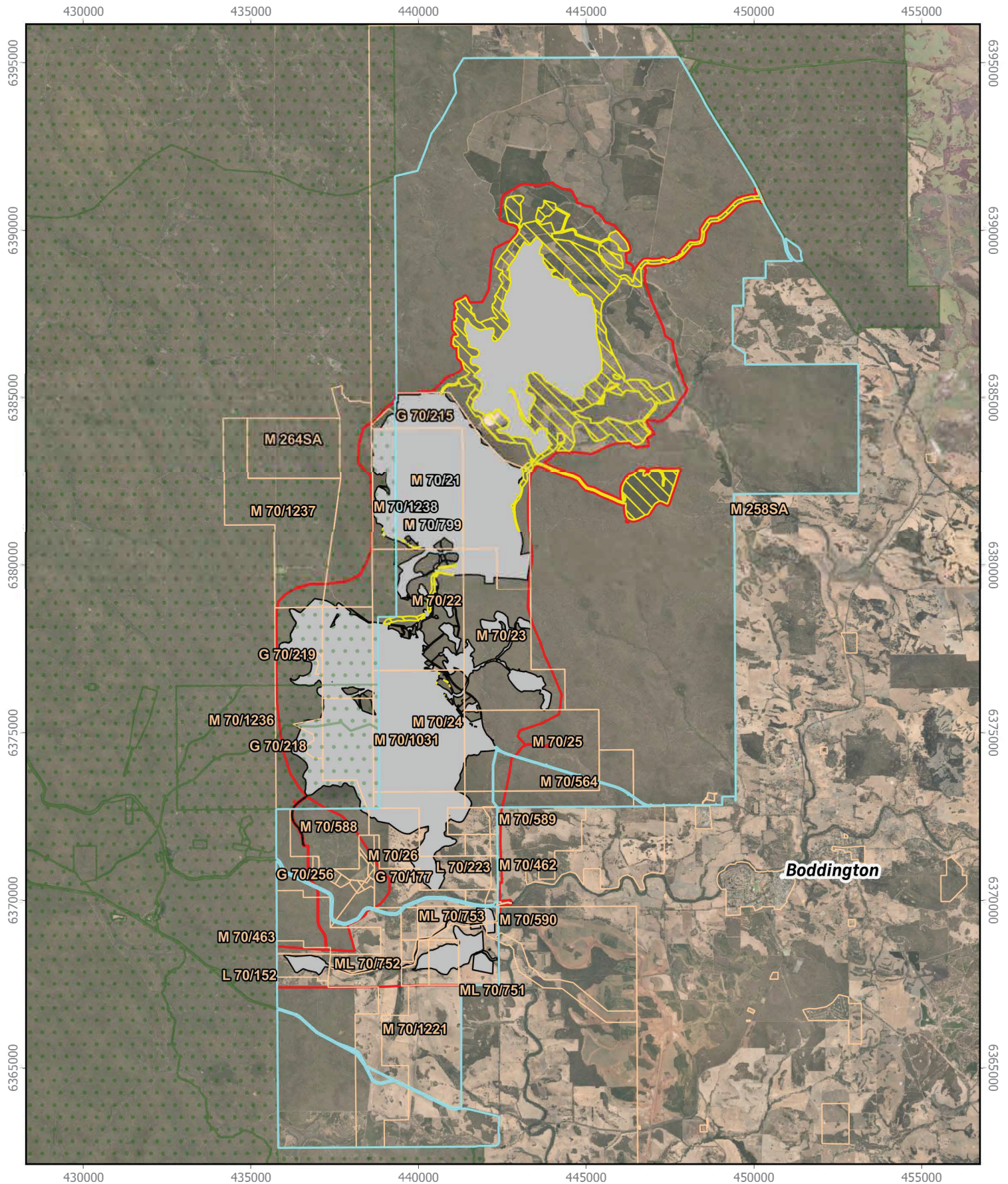


Figure 4-1: Regional Location

LEGEND

- Proposal Footprint
- Revised Development Envelope
- Approved Disturbance Footprint
- Newmont Freehold Land Boundary
- Mining Tenements (DMIRS-003)
- Legislated Lands and Waters (DBCA-011)
- State Forest



0 2 3 km

Scale @A4 1: 150000
Projection: GDA94 / MGA zone 50

Client: Newmont Australia
Project and Phase: 1001665
Data: Newmont Australia (2024), Data WA (2024)
Imagery Esri Satellite



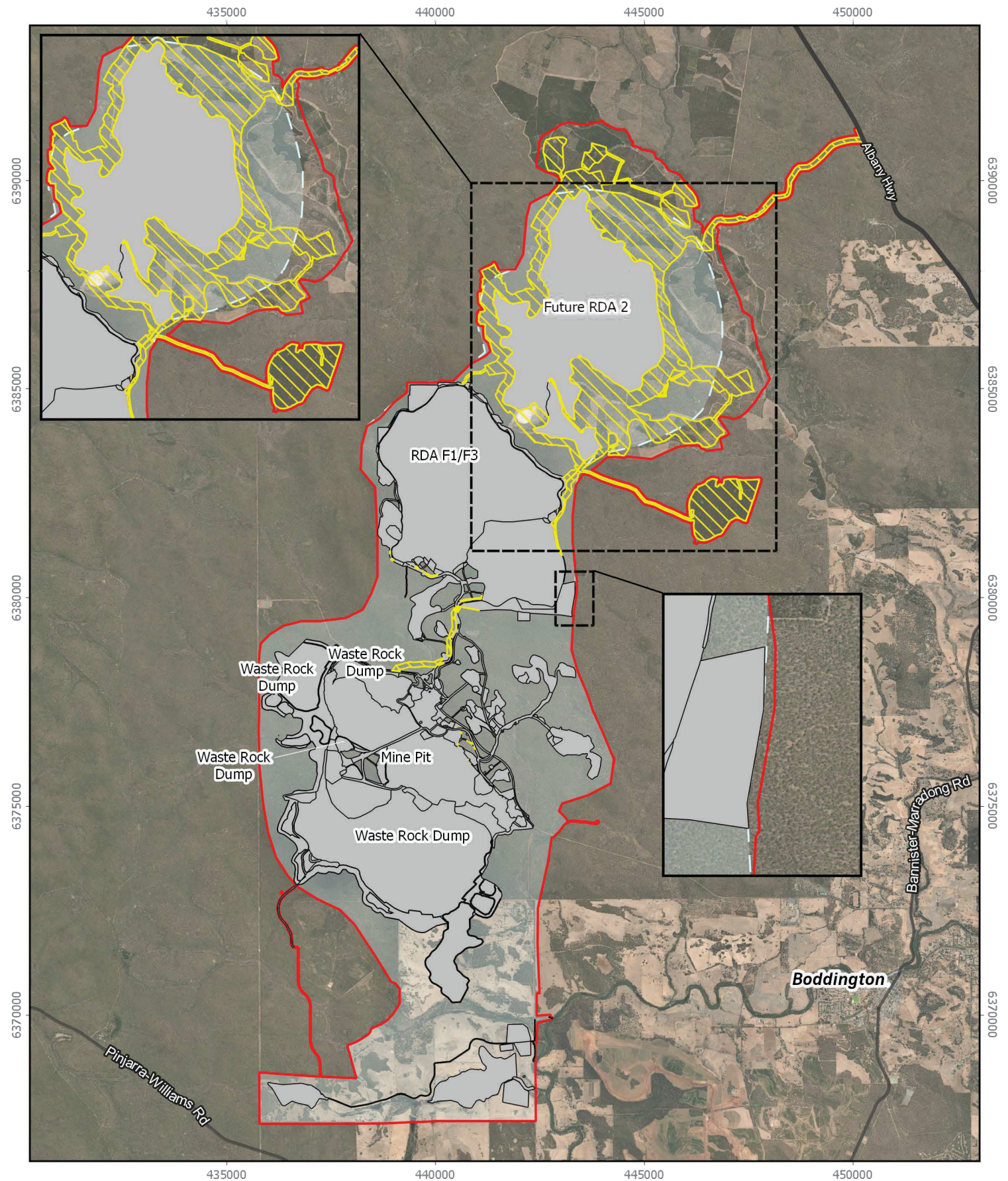


Figure 4.2: Footprints and Infrastructure Revised Proposal

LEGEND

- Main Roads and Highways
- Proposal Footprint
- Approved Disturbance Footprint
- Revised Development Envelope
- Approved Development Envelope



Client: Newmont Australia
Project and Phase: 1001665
Data: Newmont Australia (2024), CDM
Smith Australia (2024)
Imagery: Esri Satellite

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5 SIGNIFICANT SPECIES

For the purposes of this BCMP, significant fauna has been defined as the three species of black cockatoos:

- Forest Red Tail Black Cockatoo (*Calyptorhynchus banksii naso*) (FRTBC) listed as Vulnerable under the EPBC Act and Vulnerable under the BC Act
- Baudin's Cockatoo (*Zanda baudinii*) (BBC) listed as Endangered under the EPBC Act and Endangered under the BC Act, and
- Carnaby's Cockatoo (*Zanda latirostris*) (CBC) listed as Endangered under the EPBC Act and Endangered under the BC Act.

In addition to directly managing impacts on CBC, BBC and FRTBC, management actions contained within this BCMP are designed to provide flow-on benefits for other significant avifauna species potentially occurring within the Revised Development Envelope. Significant avifauna with the potential to occur and their relevant ecological attributes are listed in Table 5-1. Potential habitat for FRTBC, CBC and BBC is shown in Figures 5.1 to 5.3, respectively. Potential habitat trees, roosting areas and water sources are shown in Figure 5.4.

Table 5-1: Significant avifauna species with the potential to occur within the Revised Development Envelope.

Species (taxon)	WA status	EPBC (Federal) status	Environmental attributes
Forest Red-tailed Black Cockatoo (<i>Calyptorhynchus banksii naso</i>)	VU	VU	Breeds and roosts in dense jarrah, karri and marri forests mainly in the hilly interior. Foraging habitat includes jarrah and marri woodlands and forest and the edges of karri forests (DAWE 2022).
Baudin's Cockatoo (<i>Zanda baudinii</i>)	EN	EN	Forest specialist, its range follows the distribution of its main food species, the marri tree (<i>Corymbia calophylla</i>) (DAWE 2022)..
Carnaby's Cockatoo (<i>Zanda latirostris</i>)	EN	EN	Breeding habitat restricted to eucalypt woodlands in the wheatbelt, jarrah-marri forests of the Darling Scarp and tuart forests of the Swan Coastal Plain. Foraging habitat includes banksia woodlands, marri and jarrah. Outside breeding season, the species generally roosts in tall eucalypts near riparian environments and permanent water sources(DAWE 2022).
Peregrine Falcon (<i>Falco peregrinus</i>)	OS	-	Habitat includes cliffs and gorges, inland drainage systems, lowland plains, acacia shrublands intersected by water courses.
Western Rosella (<i>Platycercus icterotis icterotis</i>)	P4	-	Habitat includes eucalypt and sheoak forests and woodlands. Marri, wandoo, salmon gum, flooded gum and York gum provide suitable hollows for nesting.

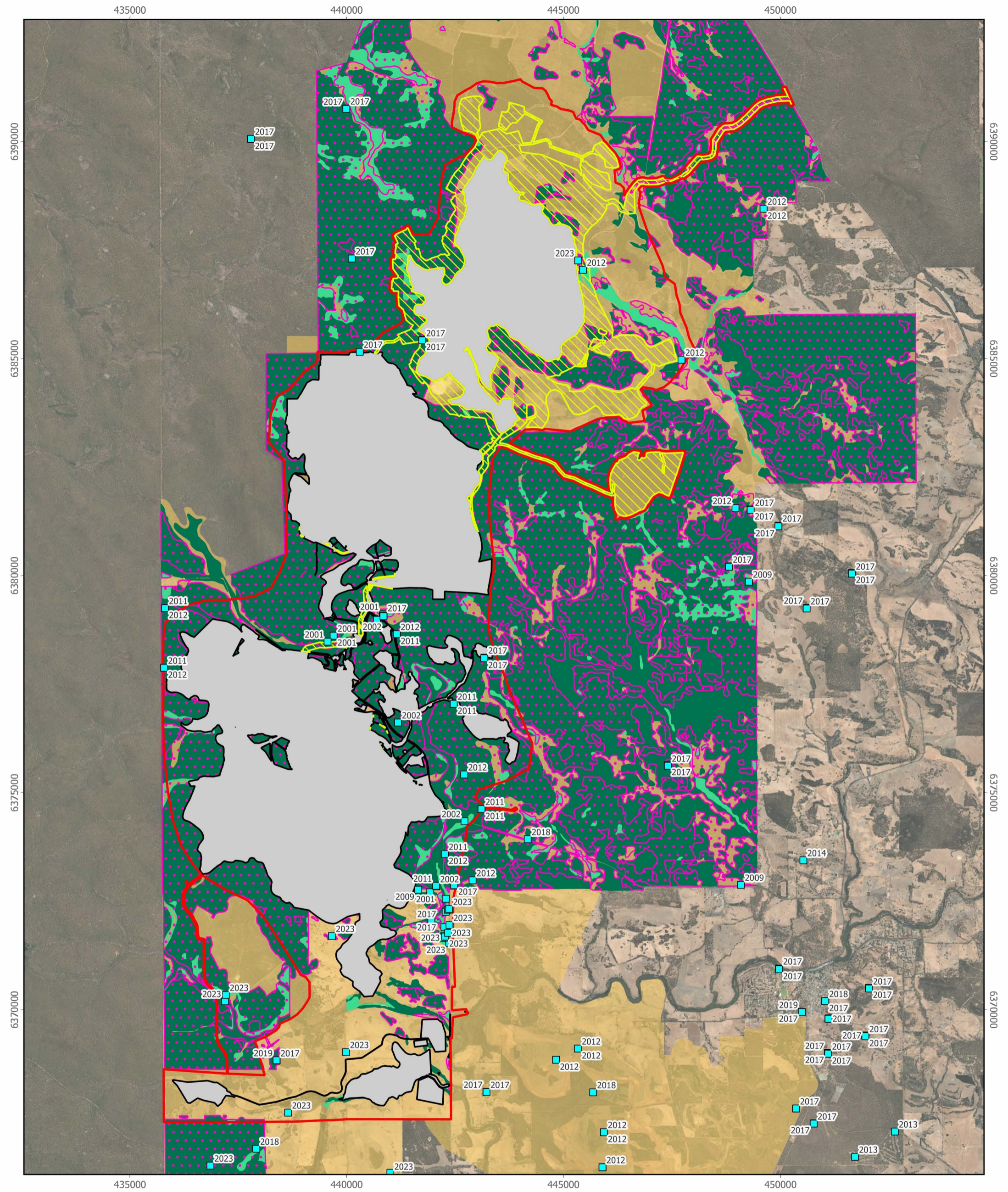


Figure 5-1 Forest Red-tailed Black Cockatoo Habitat

LEGEND

- Proposal Footprint
- Revised Development Envelope
- Approved Disturbance Footprint
- Forest Red-tailed Black Cockatoo (*Calyptrorhynchus banksii naso*) - VU
- Forest Red-tailed Black Cockatoo Breeding Habitat
- High Quality
- Forest Red-tailed Black Cockatoo Habitat
- High Quality
- Medium Quality
- No/Low Quality



0 1 2 km

Scale @ A3 1: 80000
Projection: GDA94 / MGA zone 50

Client: Newmont
Project and Phase: 1001665
Data: Newmont (2024), Mattiske
(2024), DBCA (2022), Ecologia
(2023)
Imagery ©Bing Aerial, Esri



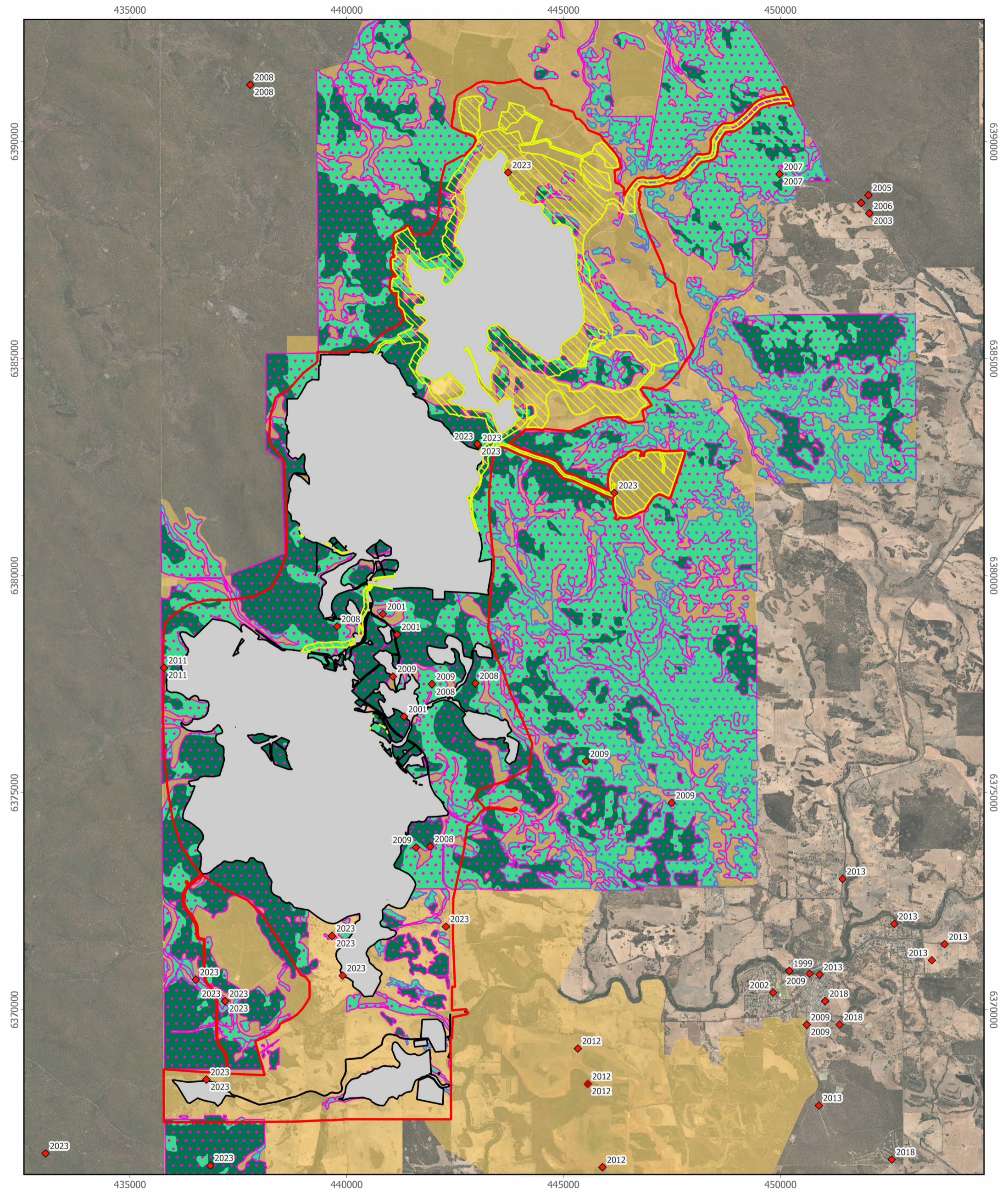


Figure 5-2 Carnaby's Black Cockatoo Habitat

- LEGEND**
- Revised Development Envelope
 - Proposal Footprint
 - Approved Disturbance Footprint
 - Carnaby's Black Cockatoo (*Zanda latirostris*) - EN
 - Carnaby's Black Cockatoo Breeding Habitat**
 - High Quality
 - Medium Quality
 - Carnaby's Black Cockatoo Foraging Habitat**
 - High Quality
 - Medium Quality
 - No/Low Quality



Client: Newmont
Project and Phase: 1001665
Data: Newmont (2024), Mattiske
(2024), DBCA (2022), Ecologia
(2023)
Imagery ©Bing Aerial, Esri



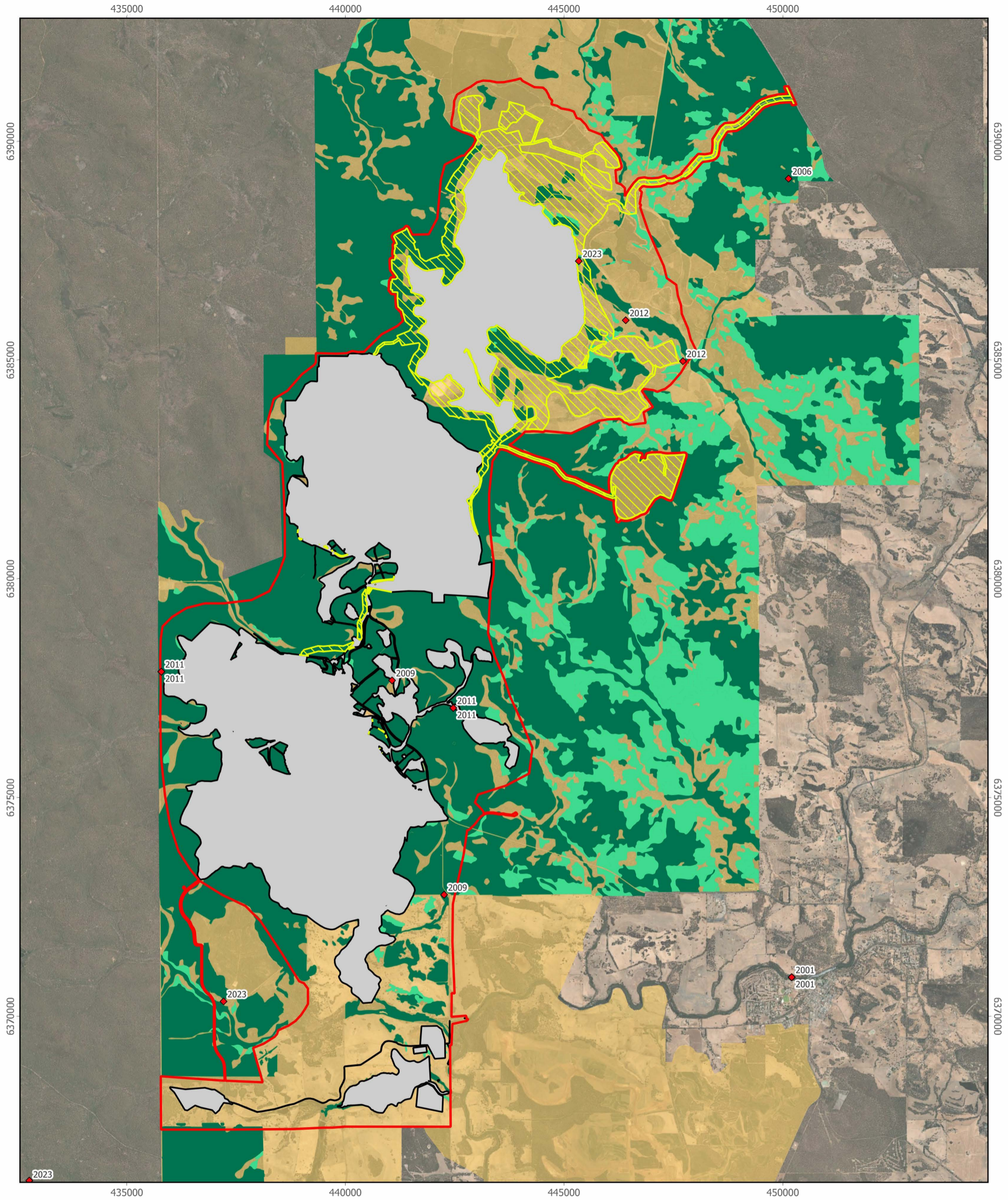


Figure 5-3 Baudin's Black Cockatoo Habitat

- LEGEND**
- Proposal Footprint
 - Revised Development Envelope
 - Approved Disturbance Footprint
 - Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) - EN
- Baudin's Black Cockatoo Foraging Habitat**
- High Quality
 - Medium Quality
 - No/Low Quality



Client: Newmont
Project and Phase: 1001665
Data: Newmont (2024), Mattiske
(2024), DBCA (2022), Ecologia
(2023)
Imagery ©Bing Aerial, Esri



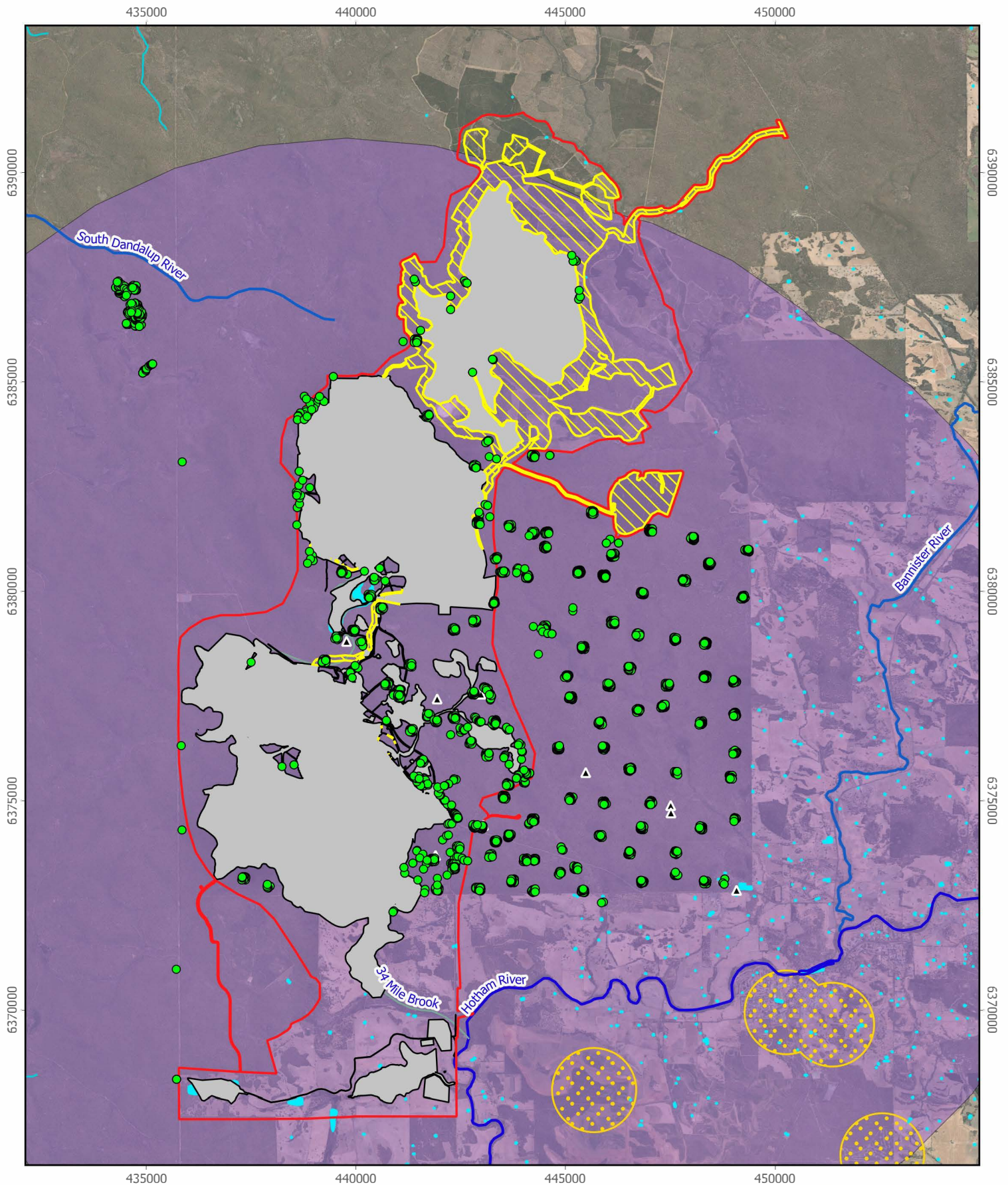


Figure 5-4 Black Cockatoo Potential Habitat Trees and Water Sources

LEGEND

- | | |
|--------------------------------|---|
| Proposal Footprint | Natural Nesting Hollows |
| Revised Development Envelope | Potential Habitat Trees |
| Approved Disturbance Footprint | Carnaby's Cockatoo Confirmed Breeding Areas |
| Watercourses | |
| Mainstream | Black Cockatoo Roosting Sites |
| Major River | Water Sources |
| Significant Stream | |
| Major Trib | |
| Minor Trib | |



0 1 2 km

Scale @A4 1: 120000

Projection: GDA94 / MGA zone 50

Client: Newmont Australia
Project and Phase: 1001665
Data: Newmont Australia (2024), Phoenix (2023), DPIRD (2023), DBCA (2018)
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5.1 Fauna Surveys

Several surveys have been completed over the last 25 years in the Boddington region for black cockatoos. Many of these have been completed specifically for Newmont Boddington. These surveys are discussed in Table 5-3.

Table 5-2: Previous fauna surveys undertaken in the Boddington region

Author	Title	Type of Survey	Outcome
Phoenix (2025)	Phoenix Environmental Sciences Pty Ltd (Phoenix)	Targeted significant mammal and black cockatoo survey for the Boddington Gold Project Prepared for Newmont Australia Ltd	Phoenix completed targeted significant mammal and black cockatoo survey of the Proposed Habitat Protection Offset.
Ecologia Environment (2024a)	Newmont Boddington Gold Future Tailings Detailed and Targeted Fauna Assessment	Ecologia undertook a detailed terrestrial vertebrate fauna assessment and targeted significant fauna survey of future tailing storage areas. Additional targeted survey effort extending into adjacent forest was undertaken to provide context for significant fauna species occupancy and habitat utilisation.	Seven significant fauna species were recorded, being BBC, CBC, Forest Red-tailed Black Cockatoo FRTBC, Chuditch, Western Rosella, Brush-tailed Phascogale, Quenda and Western Brush Wallaby.
Ecologia Environment (2024b)	Newmont Boddington Gold Hotham Wind Farm Detailed and Targeted Fauna Assessment.	Pre-clearing fauna salvage and relocation survey	Nine significant fauna species have been recorded within the survey area during the surveys, including BBC, CBC, FRTBC, Chuditch, Peregrine Falcon, Western Rosella, Brush-tailed Phascogale, Quenda and Western Brush Wallaby.
Phoenix (2023a)	Black cockatoo breeding habitat assessment for the Worsley Mine Expansion Project Prepared for South32 Ltd	Phoenix completed black cockatoo breeding habitat assessment of Worsley Primary Assessment Area.	Confirmed breeding events are of either FRTBC or CBC. It is considered that BBC may still breed throughout the Primary Assessment Area in low numbers.
Phoenix (2023b)	Black cockatoo habitat assessment for the Worsley Bauxite Alumina Project Prepared for South32 Ltd	Phoenix completed regional black cockatoo habitat assessment of the Worsley Primary Assessment Area.	FRTBC was the most frequently recorded followed by CBC and BBC. The overwhelming majority of remnant vegetation assessed was considered high quality foraging habitat for all three species.

Author	Title	Type of Survey	Outcome
Ecologia Environment (2023)	Newmont Boddington Gold Mine: Fauna Management Plan Extended N05 Preclearing Trapping and Fauna Spotting	Pre-clearing fauna salvage and relocation survey	Trapping and relocation program updated. Recorded species included BBC, CBC and FRTBC.
BIOSTAT (2021)	Worsley Mine Expansion Primary Assessment Area (PAA) Desktop Fauna Assessment	Desktop Fauna Assessment. terrestrial vertebrate fauna survey and review of the proposed Worsley Mining Development Envelope (WMDE).	The fauna habitats present in the WDME are typical for the bioregion, representing and dominated by varying form of forest and woodland communities. The majority of the WMDE consists of a mosaic of agricultural and cleared areas.
Murdoch University (2019)	Black Cockatoo Conservation Project: Final update 2019	Tracked four birds by deploying a double-mounted transmitter system on three and a satellite transmitter on the fourth bird. This project's tracking of wild black cockatoo flocks has enabled us to obtain detailed flock movement data.	Data published as part of Ph.D. project.
Ninox Wildlife Consulting (2012a)	A Vertebrate Fauna Survey within the Saddleback Treefarm Area, Newmont Boddington Gold Mine: An Assessment of Potential Residue Disposal Areas	Level 2 vertebrate fauna survey of the proposed WRD expansion. The survey consisted of ten sampling sites that were sampled over two seasons (autumn and summer) during 2011/2012. Sampling sites comprised three previously sampled locations and seven new sites. Site selection ensured that all major fauna habitats were represented by the sampling sites and some of the 2001–2002 sites that had been affected by a wildfire were also replicated.	An ecological baseline study of black cockatoos in the Newmont Boddington mining tenements and adjacent areas. The study consisted of a general distribution survey and behavioural observations. Presence of habitat types recorded.
Ninox Wildlife Consulting (2012b)	Monitoring of Vertebrate Fauna within Forest & Rehabilitation at the Boddington Bauxite Mine 2009-2011 including	A Level 2 fauna survey was conducted in 2012 over summer and autumn in the RDA2 area and Saddleback Tree Farm. Native vegetation, including Wandoo Woodland and creek line communities, was targeted to	Findings included eucalypt and pine plantations, some native flora (Wandoo Woodland) and along a creek line.

Author	Title	Type of Survey	Outcome
	Comparisons with Previous Sampling	assess habitats and potential conservation-significant fauna.	
Ninox Wildlife Consulting (2012c)	Vertebrate Fauna Survey Within Newmont Boddington Gold Mine:2012c An Assessment of Potential Waste Rock Disposal Areas	A vertebrate fauna survey carried out over two seasons during 2011-12. Sampling of ten sites including bat surveys, pit traps and bird observations.	The northeastern proposed WRD area had the highest number of significant fauna but all four sections supported a range of significant vertebrate fauna species.
Lee <i>et al.</i> (2012)	Ecology of Black Cockatoos at a Mine-site in the Eastern Jarrah Marri Forest, Western Australia.	An ecological baseline study of black cockatoos in Newmont's mining tenements and adjacent areas was undertaken. The study consisted of a general distribution survey and behavioural observations.	Connected to School of Biological Sciences & Biotechnology at Murdoch University ongoing studies.
Finn (2011)	Assessment of habitat values for black cockatoo species within the eastern acquired lands at Newmont Boddington Gold Mine January 2011	Black cockatoo habitat assessment in the area to the east of the Newmont Boddington mine site (eastern acquired lands). The area was assessed for its value as feeding and breeding habitat for Carnaby's Black-Cockatoo, Baudin's Cockatoo and Forest Red-tailed Black-Cockatoo.	Presence of habitat types recorded. All three black cockatoo species were observed within the acquired lands and observations of feeding residues also suggest that all three species use the acquired lands as a feeding habitat. Nesting activity for two species, for CC and FRTBC was also observed.
Ninox Wildlife Consulting (2003)	The Vertebrate Fauna of the Boddington Gold Mine	Baseline surveys during autumn, winter and spring of 1984 defining the bird, mammal, amphibian, and reptile species at Boddington (fauna, vegetation, and soil). Additional surveys in 2001 and 2002 additional baseline data for the Newmont Boddington area and to compare species numbers with those recorded in the original 1984 survey.	The report includes a summary of data from the original baseline study, a comparison with the new results and a review of conservation significant fauna.

6 POTENTIAL ENVIRONMENTAL IMPACTS AND RISKS

The identification, evaluation, and management of environmental impacts in this BCMP are based on a risk management approach, consistent with the Australian Standard for Risk Management (AS/NZS ISO 31000:2018).

6.1 Key Assumptions/Uncertainties

This BCMP and associated potential impacts and risks have been based on the survey and study findings outlined in Table 6-2. Fauna surveys conducted:

- Determined the likelihood of occurrence
- Identified and mapped fauna habitat values
- Described the climatic conditions experienced during fauna surveys were in line with survey guidance for recording fauna, unless otherwise specified
- Surveys undertaken within the last 5 years have been completed as per relevant EPA technical guidance for terrestrial vertebrate fauna surveys for environmental impact assessment (EPA, 2020). Historical surveys met the key regulatory requirements at that time.
- The likelihood and severity of predicted impacts are described accurately
- Field surveys, undertaken by suitably qualified individuals with experience in the fauna taxa likely to be encountered, provide sufficient information to confirm the presence and abundance of significant fauna taxa with the potential to occur within the Revised Development Envelope and surrounds, and
- BBC, CBC and FRTBC are highly mobile with large home ranges, and that point locations of records represent usage of available foraging/breeding habitat rather than permanent locations of individuals

Key uncertainties include:

- The size and extent of BBC, CBC and FRTBC populations
- The extent to which external factors outside of Newmont Boddington's control (such as climate, fire, dieback, weeds and introduced fauna) will impact on the fauna and the health and extent of habitat present in the wider region, and
- Cumulative impacts to BBC, CBC and FRTBC habitats resulting from third-party operations are based on publicly available information and may not represent the most accurate levels of disturbance.

6.2 Rationale for Choice of Management Approach

The management approach in this BCMP is based on the mitigation hierarchy to avoid, minimise, rehabilitate and offset to ensure potential impacts to fauna habitat have been avoided and minimised where possible. The management approach is informed by the results of surveys and studies as detailed in Table 6-2 and in consideration of regional data, and key assumptions and uncertainties (Section 6.2).

Periodic review of the management approach will be undertaken based on monitoring results and incident data. Adaptive management measures will be implemented (Section 10) with a view of achieving continuous improvement in minimising impacts to fauna habitat.

A combination of outcome-based management and objective-based management have been used to ensure impacts to conservation significant fauna are adequately addressed. Outcome-based management actions using a risk-based approach are used to ensure the greatest effort is applied to activities with the highest likelihood of causing impacts to conservation significant fauna. For this BCMP outcome-based management actions have been developed to manage and mitigate impacts to conservation significant fauna habitat. Environmental criteria are defined to assess performance against the environmental outcome. These are:

- Trigger criteria - measures are set at a conservative level to forewarn the approach of threshold criteria and ensure trigger level actions are implemented well in advance of the compromised environmental outcome.

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- Threshold criteria - framed to represent the limit of acceptable impact beyond which there is likely to be a significant effect on the environment. This indicates there is a risk that the environmental outcome will not be met.

Objective-based provisions have been applied where it is more effective to monitor an action, rather than a measurable impact or outcome. In this case, management targets are established to measure the success of management actions in achieving the environmental objective.

The rationale for the choice of provisions is based on implementing the management approach described above to avoid, minimise and rehabilitate the potential impacts of the Revised Proposal on fauna habitat, particularly medium to high value breeding and foraging habitat for BBC, CBC and FRTBC. A critical component to this management approach is identifying and quantifying the potential direct and indirect impacts of the Revised Proposal described in Table 7-4.

7 RISK ASSESSMENT

The risk assessment includes identification from threats or unwanted impacts to the business, as well as analysis of potential causes, impact types, consequences, and potential likelihood of the risks eventuating. Risk treatments were then applied. Risk rankings for identified impacts were evaluated on the basis of the maximum reasonable outcome consequence and the likelihood of that consequence occurring. The risk matrix risk ranking is provided in Table 7-1, while the categories used to determine the likelihood and consequence are provided in Table 7-2 and Table 7-3.

Potential impacts have been assigned to the relevant stage of the Revised Proposal (pre-construction, construction, and operation) based on the nature and timing of the impact:

- **Pre-construction phase:** impacts related to baseline conditions, planning, and preparation; these impacts occur before any ground disturbance.
- **Construction phase:** impacts associated with site preparation, resource use, emissions, and disruptions, reflecting the direct activities associated under the EPBC approval (EPBC 2012/6370) and MS 971. This also includes any impacts relating to any changes occurring during this period.
- **Operational phase:** impacts associated with the long-term effects such as ongoing environmental considerations, energy consumption, waste management, and community interaction.

Impacts on BBC, CBC and FRTBC from the Revised Proposal will be avoided, minimised and managed through the implementation of management measures outlined in Section 8.

Table 7-1: Risk Matrix Rating

		Consequence				
		1 - Minor	2 - Moderate	3 - High	4 - Major	5 - Critical
Likelihood	5 – Highly Likely	High (11)	High (16)	Extreme (20)	Extreme (23)	Extreme (25)
	4 - Likely	Medium (7)	High (12)	High (17)	Extreme (21)	Extreme (24)
	3 - Possible	Low (4)	Medium (8)	High (13)	Extreme (18)	Extreme (22)
	2 – Unlikely	Low (2)	Low (5)	Medium (9)	High (14)	Extreme (19)
	1 - Rare	Low (1)	Low (3)	Medium (6)	Medium (10)	High (15)

Table 7-2: Risk likelihood

Level	Qualitative measure of likelihood	How likely is it that this event/issue will occur after control strategies have been put in place
5	Highly Likely	Is expected to occur in most circumstances

Level	Qualitative measure of likelihood	How likely is it that this event/issue will occur after control strategies have been put in place
4	Likely	Will probably occur during the life of the project
3	Possible	Might occur during the life of the project
2	Unlikely	Could occur but considered unlikely or doubtful
1	Rare	May occur in exceptional circumstances

Table 7-3: Risk Consequence

Level	Qualitative measure of consequence	What will be the consequence/result if this issue does occur rating
5	Critical	Severe widespread loss of environmental amenity and irrecoverable environmental damage
4	Major	Major loss of environmental amenity and real danger of continuing
3	High	Substantial instances of environmental damage that could be reversed with intensive efforts
2	Moderate	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts
1	Minor	Minor incident of environmental damage that can be reversed

Table 7-4: Risk Assessment

	Impacts	Consequence	Likelihood	Risk Rating
Direct Impacts				
Clearing activities	Loss of significant fauna habitat due to clearing.	Moderate	Likely	13-High
Clearing activities	Injury or mortality from vehicle/equipment strike	Minor	Possible	4 -Low
Indirect Impacts				
Clearing activities General construction and operational activities	Habitat degradation as a result of introduction or spread of dieback	Moderate	Possible	9-Medium
General construction and operational activities	Alterations to fauna behaviour as a result of increased light spill, noise, dust and/or vibration.	Minor	Likely	7 -Medium
General construction and operational activities	Habitat degradation as a result of establishment or spread of weed species / populations	Minor	Possible	4-Low
General construction and operational activities	Increased predation or competition from introduced fauna	Minor	Unlikely	5-Low

8 ENVIRONMENTAL MANAGEMENT MEASURES

This section of the BCMP identifies the provisions that Newmont Boddington will implement to ensure the defined environmental outcomes and objectives are met during the Revised Proposal. Outcome based provisions are detailed in Table 8-1 and objective-based provisions described in Table 8-2. These provisions have been designed to meet the EPA’s objective for terrestrial fauna and comply with the conditions outlined in EPBC 2012/6370.

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Table 8-1 Outcome-based Management Actions

EPA Factor: Terrestrial Fauna				
Key Environmental Value: Forest Red-tailed Black Cockatoo (FRTBC), Carnaby’s Black Cockatoo (CBC) and Baudin’s Black Cockatoo (BBC) foraging habitat				
Key Impacts and Risks: <ul style="list-style-type: none">• Ground disturbance, machinery or vehicle movements/fauna interactions• Clearing activities, and• General construction and operational activities.				
Indicators: Trigger criteria Threshold criteria	Response actions: Trigger level actions Threshold contingency actions	Monitoring	Timing/frequency of actions	Reporting
Outcome 1: No more than 528 ha of native vegetation cleared for the Proposal including no more than the following: <ul style="list-style-type: none">• 489 ha of foraging habitat for BBC• 475 ha of medium to high quality breeding habitat for CBC and 475 ha of foraging habitat, and• 479ha of medium to high quality breeding habitat and 503 ha of foraging habitat for FRTBC.				
Trigger Criteria 1 Boddington Site Disturbance Permit system indicates development of the Proposal will result in clearing of more than 528 ha of native vegetation.	Trigger level actions 1 and 2 Site disturbance permit application is rejected. Review planned disturbance to ensure it complies with existing approvals and submit revised site disturbance permit that does not exceed trigger criteria.	Indicator Site disturbance permit total clearing limits and approved clearing footprints. Site disturbance permit permitted boundaries Method Review site disturbance permit clearing extent Review aerial images and ground truthing as required. Location of monitoring sites Cleared sites as defined by site disturbance permit.	Clearing limits and locations assessed with each site disturbance permit application. Annual land clearing reconciliation Review of aerial imagery and ground truthing during clearing activities.	The environmental outcome will be reported on against the trigger criterion for each calendar year in the Annual Compliance Assessment Report (ACAR). If any trigger criterion was exceeded during the reporting period, the ACAR will discuss potential reasons for exceedance of the trigger criterion and include a description of the effectiveness of trigger level actions. Reporting on exceedance of threshold criteria to the EPA within 72 hrs.
Trigger Criteria 2 Boddington Site Disturbance Permit system indicates development of the Proposal will result in clearing more than the following black cockatoo breeding and foraging habitat: <ul style="list-style-type: none">• 489 ha of foraging habitat for BBC• 475 ha of medium to high quality breeding habitat for CBC and 475 ha of foraging habitat, and• 479ha of medium to high quality breeding habitat and 503 ha of foraging habitat for FRTBC.				
Threshold Criteria 2 More than 528 ha of native vegetation cleared attributed to the Proposal.	Threshold contingency actions 1 and 2 Cease clearing operations. Conduct incident investigation into the extent of potential exceedance of clearing. Complete rehabilitation of impacted native vegetation			
Threshold Criteria 2 More than the following black cockatoo breeding and foraging habitat cleared for the Proposal: <ul style="list-style-type: none">• 489 ha of foraging habitat for BBC• 475 ha of medium to high quality breeding habitat for CBC and 475 ha of foraging habitat, and• 479ha of medium to high quality breeding habitat and 503 ha of foraging habitat for FRTBC.				
Outcome 2: Rehabilitation of fauna habitat is in compliance with the requirements of the Mine Closure Plan (MCP)				
Trigger Criteria 1 Rehabilitation not meeting expected closure outcomes based on monitoring.	Trigger level action 1 Temporarily cease rehabilitation operations. Investigate reasons for rehabilitation not achieved expected closure outcomes.	Indicator Compliance with the MCP	Annual monitoring of rehabilitated areas.	The environmental outcome will be reported on against the trigger criterion for each calendar year in the ACAR. If any trigger criterion was

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EPA Factor: Terrestrial Fauna				
Key Environmental Value: Forest Red-tailed Black Cockatoo (FRTBC), Carnaby’s Black Cockatoo (CBC) and Baudin’s Black Cockatoo (BBC) foraging habitat				
Key Impacts and Risks: <ul style="list-style-type: none">• Ground disturbance, machinery or vehicle movements/fauna interactions• Clearing activities, and• General construction and operational activities.				
Indicators: Trigger criteria Threshold criteria	Response actions: Trigger level actions Threshold contingency actions	Monitoring	Timing/frequency of actions	Reporting
	Conduct investigation into the extent of rehabilitation area affected. Conduct remedial actions in rehabilitation area impacted. Review rehabilitation planning to ensure no other areas would be affected in the future. Review adequacy of Mine Closure Plan	Method Inspections of rehabilitation areas. Audit rehabilitation against the specific completion criteria detailed in the MCP Location of monitoring sites Rehabilitated sites as defined by mine planning and closure review.		exceeded during the reporting period, the ACAR will discuss potential reasons for exceedance of the trigger criterion and include a description of the effectiveness of trigger level actions. Reporting on exceedance of threshold criteria to the EPA within 7 business days.
Threshold Criteria 1 Rehabilitation not completed in compliance with the MCP.	Threshold contingency action 1 Temporarily delay closure and rehabilitation operations Investigate reasons for non-compliance with the MCP. Conduct investigation into the extent of area affected. Review closure planning to ensure no other areas would be affected in the future. Review adequacy of closure plan design and revise if required.			

Table 8-2: Objectives based management provisions

Potential Impact	Management Action	Management Target	Monitoring	Timing/Frequency of Monitoring	Reporting
Objective: Minimise direct impacts to fauna related to vehicle strike					
Injury or mortality of fauna due to vehicles or machinery strike	<ul style="list-style-type: none">• Speed limits are established and monitored• Fauna deaths are reported as event and investigated• Unauthorised off road driving prohibited• Installation of signage at high vehicle traffic roads noting presence of Black Cockatoos• Site inductions include information on conservation significant fauna.	Minimise fauna deaths as a result of vehicle strikes by ensuring speed restrictions are in place and promoting driver awareness.	Fauna deaths are monitored through event records.	Annual, or as appropriate, during the life of mine.	<ul style="list-style-type: none">• All vertebrate fauna deaths will be recorded as events in the event management system• Any conservation significant vertebrate fauna deaths will be reported to the Department of Biodiversity, Conservation and Attractions (DBCA) and DEECCW.
Objective: Ensure approved disturbance is carried out in a manner that minimise direct and indirect impacts to black cockatoos					
Loss of conservation significant fauna habitat from clearing/ disturbance outside approved boundaries	<ul style="list-style-type: none">• Adherence to Boddington Site Disturbance Permit system• Implementation of the Construction Environmental Management Plan (CEMP) for RDA2• Survey and demarcate areas to be cleared prior to disturbance• Pre-clearance inspection of potential black cockatoo hollows undertaken prior to commencement of native vegetation clearing• Identification and marking of known breeding hollows and establishment of buffer zone, to prevent disturbance until fledglings have left the nest• Suitably qualified fauna personnel will be present	All clearing and ground disturbance works undertaken in accordance with Boddington Site Boddington Site Disturbance Permit system.	<ul style="list-style-type: none">• Monitoring conditions established as part of site disturbance permit• Annual land clearing reconciliation against footprint approved under EPBC Act and EP Act.• Review of aerial imagery and ground truthing as required• Pre-clearing black cockatoo monitoring and fauna spotting undertaken by fauna specialists.	<ul style="list-style-type: none">• Clearing limits and locations assessed within each site disturbance permit application prior to works commencing onsite• Annual land clearing reconciliation• Review of aerial imagery and ground truthing during clearing activities• Pre-clearance checks completed prior to commencement of native vegetation clearing.	<ul style="list-style-type: none">• Results of monitoring activities and clearing to be described in the ACAR.• Weekly reporting when fauna specialist is on site.

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Potential Impact	Management Action	Management Target	Monitoring	Timing/Frequency of Monitoring	Reporting
	during clearing activities. Fauna personnel hold a Fauna Taking (Relocation) Licence granted under Regulation 28 of the <i>Biodiversity Conservation Regulations 2018 (WA)</i> to allow for the handling and movement of conservation significant fauna, if encountered. Any required handling or movement of conservation significant fauna is undertaken subject to the guidance of consulting ecologists. Newmont Boddington will have access to a care facility that can be used to rehabilitate any injured fauna and a procedure in place developed in consultation with DBCA.				
Objective: Ensure rehabilitated habitat is suitable for use by BBC, CBC and FRTBC					
Conditions: EPBC 2012/6370 Condition 10(b), Condition 10 (c)					
Reduced foraging value for conservation significant fauna in rehabilitated areas.	Implement measures to improve foraging value of rehabilitated areas: <ul style="list-style-type: none">Incorporating food plant (such as proteaceous shrubs) and hollow-producing tree species (such as wandoo, marri and jarrah) into rehabilitation seed mixes.	Implement measures to ensure rehabilitated habitat is suitable for foraging by BBC, CBC and FRTBC	<ul style="list-style-type: none">Monitoring program to ensure successful establishment of black cockatoo foraging species in rehabilitation as it developsEstablishment of monitoring program to assess feeding activity of black cockatoos in mine site rehabilitation	As required by monitoring program	As required by Mine Closure Plan.
Objective: Minimise the potential risk of a decline in fauna habitat condition due to spread of declared weeds and forest disease					
Indirect habitat degradation associated with construction or mining activities, including transmission of weeds and spread of <i>Phytophthora cinnamoni</i>	<ul style="list-style-type: none">Boddington Site Disturbance Permit systemImplementation of hygiene procedures outlined in the Weed and Forest Disease Monitoring and Management Plan:<ul style="list-style-type: none">Personnel awareness via site induction programSite entry checks and clean down requirementsRegular dieback assessment surveysClean down of vehicles when leaving known infestationsSignage delineating infestation and dieback unknown area boundariesDelineation of infested and uninfested material stockpiles.Weed survey and control program will include a review to identify and target high risk areas (e.g., environmental value, existing weed presence, status of weeds that are present, and potential for further transfer/dispersal e.g., waterways and high trafficable areas).	Compliance with Weed and Forest Disease Monitoring and Management Plan	<ul style="list-style-type: none">Annual targeted weed monitoring and management in high-risk areasTriennial Dieback assessment surveyForest disease boundary re-checks in accordance with DBCA guidance prior to clearing.	<ul style="list-style-type: none">Annual weed monitoring and control recordsTriennial dieback assessment survey	<ul style="list-style-type: none">Results of the survey and outcomes of weed management will be reported annually in the ACAR.Results of boundary recheck and triennial dieback assessment survey will be reported in the ACAR.
Objective: Minimise indirect impacts to conservation significant fauna related to increased predation and competition from introduced predators					

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Potential Impact	Management Action	Management Target	Monitoring	Timing/Frequency of Monitoring	Reporting
Increased predation or competition from introduced fauna.	<p>Feral animal control measures (baiting and trapping) will be implemented annually in collaboration with DBCA, PHCC and Shire of Boddington:</p> <ul style="list-style-type: none"> Rabbit baiting and disease management strategies in collaboration with PHCC Continuation of 1080 baiting programs within adjacent state forest and Newmont owned forested areas inclusive of identified potential biodiversity offset areas Traditional trapping utilised as required in readily accessible areas (e.g. accommodation and waste storage facilities). <p>Feral animal presence will be discouraged on site by:</p> <ul style="list-style-type: none"> Implementation of waste management procedures (e.g. regular covering of putrescible waste, secure lids on bins) to avoid attracting feral animals. Prohibiting feeding of feral animals and keeping of pets onsite Ongoing education for all personnel working for, or with, Newmont Boddington on the risks posed by introduced fauna and the procedures in place to manage them. This includes recognising invasive species, reporting sightings, and understanding how their activities can minimise impacts. 	Feral animal control actions are implemented and presence discouraged.	<ul style="list-style-type: none"> Opportunistic feral fauna sightings will be recorded and assessed on an annual basis. Camera trapping and secondary evidence (scats and/or tracks) recorded during fauna surveys 	Annual feral fauna control	<ul style="list-style-type: none"> Annual feral fauna control report. Records of occurrences of feral fauna, during general and targeted searches.
Objective: Reduce related light, noise and dust emissions with the potential to alter fauna behaviour					
Alterations to fauna behaviour as a result of increased dust.	<ul style="list-style-type: none"> Implement standard dust management measures. This will include but not be limited to the use of a water cart and speed limits for vehicles. Schedule of tailings deposition implemented to prevent dust lift off during summer. 	Compliance with air quality management plan.	<ul style="list-style-type: none"> Visual assessment of dust during regular workplace inspections. Monthly dust deposition monitoring Continuous TSP, PM2.5 and PM10 dust monitoring and weather conditions. 	Continuous TSP, PM2.5, PM10 dust monitoring and weather conditions.	As required by Boddington Air Quality Management Plan
Alterations to fauna behaviour as a result of increased noise and light.	<ul style="list-style-type: none"> Lighting limited to levels required to maintain safe work environment during construction and operation. Ensure all vehicles and machinery are serviced and maintained to minimise machinery noise. Speed limits are established and all personal must comply with these. 	No excessive noise or light outside of active operational areas.	Noise and light monitoring to be undertaken opportunistically outside of active operational areas.	Opportunistic	As required by Construction Environmental Management Plan and Boddington Environmental Monitoring Management Plan.
Objective: Minimise direct impacts to conservation significant fauna related to fauna entrapment					
Entrapment or death of fauna individuals within mine infrastructure and equipment.	<ul style="list-style-type: none"> Operational water sources (tanks, ponds, dams) will be fenced and/or have fauna egress mats installed. Freshwater drinking troughs provided around s to encourage fauna away from tailings dams. Caro's acid cyanide destruction installed to reduce WAD-Cyanide levels to below 50 ppm. 	Minimize fauna deaths as a result of entrapment by ensuring there are aids in place for fauna to safely escape and management actions being undertaken	<ul style="list-style-type: none"> Daily inspection of RDA facility and reporting of observed fauna including animal status (dead/alive) Fauna deaths are reported and monitored through event records. 	<ul style="list-style-type: none"> Opportunistic As per site inspection schedules. 	<ul style="list-style-type: none"> All vertebrate fauna deaths shall be recorded as events in the incident management system Any conservation significant vertebrate fauna deaths will be reported to the Department of Biodiversity, Conservation and Attractions (DBCA) and DEECCW.

9 IMPLEMENTATION

9.1 Roles and Responsibilities

Implementation of the BCMP will be through management systems that incorporate processes, procedures, and work instructions relating to the management, monitoring, and reporting components of the BCMP. All employees and contractors must comply with the requirements of this BCMP and associated procedures. Roles and responsibilities are outlined in Table 9-1.

Table 9-1: Roles and Responsibilities.

Role	Responsibilities
All Personnel	<ul style="list-style-type: none"> Comply with all requirements of this BCMP Report fauna sightings and events to their Supervisor or Site Environment Team. Attend site inductions covering legal requirements and fauna management as required.
General Manager	<ul style="list-style-type: none"> Overall accountability to ensure compliance with this BCMP Provision of resources and personnel required to implement this BCMP.
Boddington Environmental Director	<ul style="list-style-type: none"> Maintain the BCMP and review the effectiveness and implementation of as required. Provide advice, including procedures and requirements, to all key parties to ensure compliance with legal requirements, achievement of environmental objectives and improving environmental performance. Provide support to all personnel as required ensuring the BCMP is implemented and complied with.
Environment Lead	<ul style="list-style-type: none"> Implement monitoring and risk based inspection program. Report on the implementation of the BCMP. Provide advice, including procedures and requirements, to all key parties to ensure compliance with legal requirements, achievement of environmental objectives and improving environmental performance. Provide inductions on fauna management as outlined in this BCMP.

9.2 Environment Training

Newmont Boddington requires all personnel to complete workplace inductions based on risk level and work duration. Employees and fixed-term workers must complete online inductions as well as a half-day site induction before starting. These include training on environmental impact, particularly concerning threatened species such as BBC, CBC and FRTBC. The induction includes an environment module covering fauna identification, forest disease management, land clearing protocols, heritage considerations, spill response, and fauna management procedures. This includes requirements to report any interactions with black cockatoos to the Environment department, which maintains records of observations and events. Induction content is periodically reviewed and delivered by subject matter experts.

Training records include participant details, date, trainer name, and training summary are retained in the training management system.

9.3 Monitoring

Monitoring activities will be undertaken by Newmont Boddington in accordance with the schedule and timeline provided in Table 8-1 and Table 8-2. At a minimum, an annual review of management actions will be

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undertaken to ensure compliance with legal requirements, identify whether targets and key performance indicators have been met and ensure that monitoring obligations have been fulfilled. Monitoring actions will be undertaken by the Environment Department or suitably qualified contractor authorised to undertake fauna monitoring activities in accordance with Newmont Boddington's protocols.

9.4 Reporting

The environmental outcomes and objectives will be reported against their associated trigger, threshold criteria and management targets in the ACAR.

A stand-alone report will be produced for DWER within 21 days and to the DCCEEW (where appropriate) within 21 business days of any reporting against non-compliance of a management target. A follow-up report detailing the adequacy of the response actions will also be submitted to the DWER within 12 months of the initial notification.

9.4.1 Incidents and corrective actions

Environmental events related to the Revised Proposal include non-adherence to management targets and procedures outlined in Table 8-1 and Table 8-2 of the BCMP. These events will be reported, recorded, and classified in accordance with internal procedures, ensuring relevant personnel are informed and notification to regulators completed if required.

A thorough investigation will be conducted, and corrective actions implemented to prevent recurrence and improve compliance with the Revised Proposal's environmental targets and procedures in the BCMP.

9.5 Emergency Response Procedures

In the event that a black cockatoo was found injured, Newmont Boddington would transport the injured or orphaned animal to a suitable wildlife carer, following appropriate fauna management guidelines. Additionally, Newmont will report the event to DBCA and DCCEEW as soon as practicable and investigate all incidents.

In the event of a death of a black cockatoo individual, the death will be reported to DBCA and DCCEEW, and in consultation with DBCA, the body may (pending its condition) be collected, vouchered, appropriately stored and sent to the WA Museum or Perth Zoo for research.

10 ADAPTIVE MANAGEMENT AND REVIEW

To effectively meet the objectives of the BCMP, adaptive management is utilized to respond to issues identified in implementation of management measures, monitoring or evaluation against the management targets. Adaptive management approach is based upon information gathered from:

- Evaluation of monitoring data
- Reviewing new information about significant fauna species
- Incident reports, and
- Any new considerations as a result of changes to operations.

Adaptive management typically includes:

- Implementing mitigation measures
- Monitoring and evaluation against management targets and environmental objectives
- Systematically adapting management, mitigation measures, and monitoring to meet environmental objectives.

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10.1 Environment Auditing

Through the RMS, Newmont implements an assessment and assurance framework for verification of performance. There are three levels of assurance:

- Verification Activities - LOD1 (First line of defense): includes site risk performance reviews, self-checks, inspections, critical control verifications and other relevant business unit checks.
- Assurance Activities - LOD2 (Second line of defense): includes the safety and sustainability verification program, independently assesses implementation of risk management frameworks, critical controls, performance criteria, systems and processes. These are conducted on a two-year frequency across the global operations.
- Audit Activities – LOD3 (third line of defense): includes independent assessments completed by the Internal Audit function on RMS and the operational risk management model, as well other external audits and checks completed by regulatory and compliance bodies.

10.2 Environmental Management Plan Review

To facilitate an adaptive management the BCMP will undergo a comprehensive review if any of the following occurs:

- Modification to relevant state and federal approvals
- Changes to state and federal legislation relevant to the BCMP
- Relevant findings or actions identified through monitoring, audits and event reporting
- Finding of any additional significant fauna species or populations within the development envelope and or change in conservation status, and
- The effectiveness and relevance of management actions and targets against environmental objectives, on an annual basis, to determine if any changes to actions, targets or monitoring are required.

10.3 Changes to BCMP

A summary the key changes in the BCMP (Version 2) compared to the version currently endorsed will be provided in the final version of the BCMP.

11 STAKEHOLDER CONSULTATION

The Revised Proposal will be referred under Part IV of the EP Act and also to the EPBC Act. In line with the DCCEEW and DWER expectations for this BCMP, and to ensure consistency with principles of environment impact assessment, Newmont Boddington will consult with key stakeholders during the assessment process and the BCMP may be updated as a result of this feedback.

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12 ABBREVIATIONS

Abbreviations	
BCMP	Black Cockatoo Management Plan
BBC	Baudin's Cockatoo
CBC	Carnaby's Cockatoo
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, the Environment, Energy and Water
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EPBC	Environment Protection and Biodiversity Conservation
FRTBC	Forest Red-tailed Black Cockatoo
LOM	Life of Mine
Revised Development Envelope	Revised Development Envelope
MNES	Matters of National Environmental Significance
PHCC	Peel Harvey Catchment Council
RDA	Residue Disposal Area
TFMP	Terrestrial Fauna Management Plan
WA	Western Australia

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14 APPENDIX A: SUMMARY OF KEY CHANGES TO EMP

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