Edna May Operations

Compliance Report

Clearing Permit 8550/3

1 April 2024 to 31 March 2025

Edna May Operations

22 Wolfram St Westonia WA 6423

Ph: (08) 9046 8000

Compliance Report Edna May Operations
Clearing Permit 8550/3
1 Apr 2024 - 31 Mar 2025

Distribution:

Department	Copies
Department of Mines, Industry Regulation and Safety	Submitted via email

Document Status	Authors	Date of issue	Review
Final	RW	14/04/2025	

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1. CLEARING PERMIT

This report has been prepared to satisfy the requirements of Department of Mines, Industry Regulation and Safety (DMIRS) issued clearing permit 8550/3 (the permit) and describes the clearing of native vegetation and all other activities undertaken pursuant to the permit by the permit holder, Edna May Operations Pty Ltd.

Permit Details			
Area Permit Number	8550/3	**File Number:**	A 1748/201901
Duration of Permit	From 26 October 2019 to 25 October 2038		
Permit Holder			
Edna May Operation Pty Ltd			
Land on which clearing is to be done			
Mining Lease 77/88, Mining Lease 77/124			
Authorised Activity			
Clearing of up to 16.6ha of native vegetation within the area cross-hatched yellow in Figure 1 of Schedule 1 of the Permit			

2. PERIOD IN WHICH CLEARING IS AUTHORISED

The period to which clearing is permitted, 25 October 2025, has not yet expired.

3. WEED CONTROL WHEN UNDERTAKING CLEARING

When undertaking any clearing or other activity authorised under this Permit, Edna May Operations (EMO) is following steps to minimise the risk of the introduction and the spread of weeds:

- Site personnel clean and check earth-moving machinery for soil and vegetation prior to entering and leaving the area intended to be cleared;
- Site personnel ensure that no weed-affected soil, mulch, fill or other material is brought into the area to be cleared; and
- Supervisors restrict the movement of machines and other vehicles to the limits of the areas intended to be cleared.

Weed monitoring and eradication programme (annual spraying) will continue to be implemented and all site personnel will continue to be educated on weed identification.

Machinery and vehicles used to conduct clearing will be inspected for weeds and cleaned where appropriate prior to commencement of works.

4. AVOID, MINIMISE ETC CLEARING

When Vegetation is required to be cleared as authorised by this permit EMO has been regarding the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

An EMO internal Clearing Form is required to be completed prior to any ground disturbance onsite. The form outlines the specific conditions relating to the clearing to ensure that EMO is compliant with the permit 8550/3. The form is signed by the surveyor to ensure the area is adequately pegged, by the Mining Superintendent to ensure that the clearing is necessary for development of the mine project, and by the Environmental Coordinator to ensure all appropriate approvals are in place. The works supervisor and operator need to sign and acknowledge requirements of the form before any clearing takes place.

In addition, EMO has created the "Greenfinch Project Implementation Compliance Procedure" which documents the environmental approvals and permits obtained for the Greenfinch Project. It is a requirement that all personnel working on the Greenfinch Project be trained in this procedure and sign-off on their understanding of requirements, competency and acknowledging their responsibilities.

No clearing was completed during the reporting period. EMO have commenced revegetation works as outlined in the Offset proposal and Revegetation Plan as required by the permit.

5. OFFSET

EMO has implemented and adhered to the documents "Clearing permit offset proposal form" and the "Edna May Operations Offset Rehabilitation Plan". The latter document was updated in 2022, due to a change in the shape of the offset boundary and submitted to DMIRS for review. DMIRS had acknowledged the updated document and requested that the Clearing permit offset proposal form to be also resubmitted with the boundary change and to provide more detail on the timeframe for a conservation covenant to protect the area.

EMO has not yet submitted the amended proposal form as information and a decision on a suitable covenant program is still being finalised. EMO has received positive indication from the National Trust that their covenant program may be suitable. Though it should be noted that the National Trust would not establish a covenant until the rehabilitation areas have met their completion criteria.

The National Trust have indicated that they may be prepared to provide a pre-acceptance letter into the covenant program. However, they will not do so until after the first review of completion criteria in 2025 has been undertaken.

Details on the Offset Rehabilitation are outlined in Section 6.

6. RECORDS TO BE KEPT

6.1 CLEARING

EMO commenced clearing of native vegetation on the 24th of January 2020 for the purpose of the Greenfinch project.

All clearing to date took place during the 2019-2020 and the 2020-2021 reporting period.

No clearing was completed during the reporting period.

The following records have been maintained in relation to the clearing of native vegetation authorised under CPS 8550/3.

Table 1: Native Vegetation Clearing completed under CP8550/4

Purpose	Date Completed	Tenement	Total Area Cleared (Ha)	GPS Coordinates
Native vegetation previously cleared under this permit	2020 - 2020		14.274	See Figure 1
		Total	**14.274**	

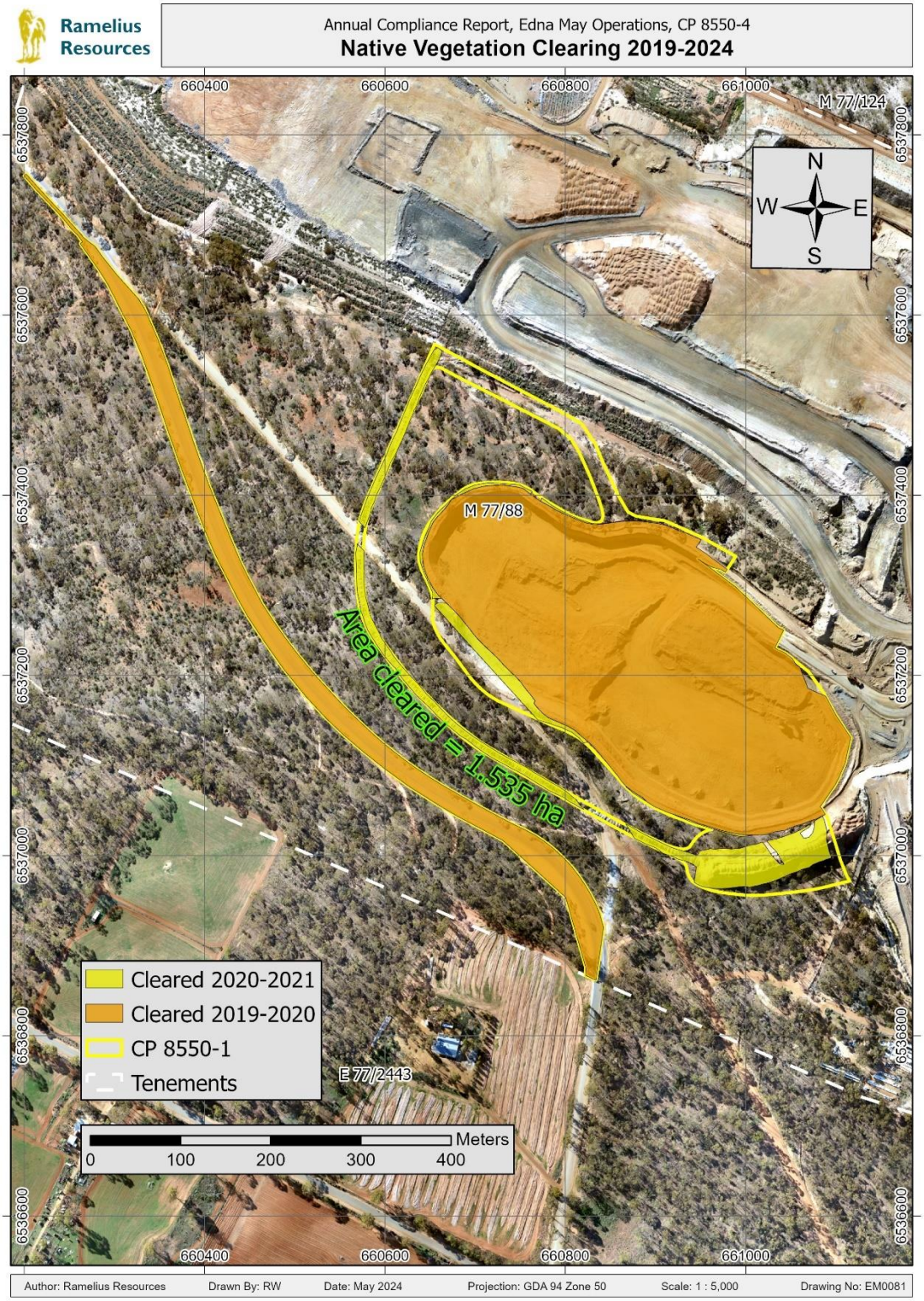


Figure 1: Native Vegetation Clearing completed under the permit. Yellow: 2020-2021, Orange: 2019-2020

6.2 FARMLAND REVEGETATION

A condition of the clearing approval granted for the Greenfinch project is that 75 ha of ex-farmland (Lot 1578, Lot 161 and Lot 162) will be rehabilitated with Red Morrel woodland TEC species. In addition to this a degraded 15 ha remnant at the north-east corner of the Lot 162 will be improved with the additional planting as required.

The Offset Rehabilitation Plan for the EMO Offset area has been developed to enable EMO to continue the high standard of annual woodland rehabilitation activities on ex-farmland that commenced in 2015. The purposes of the Rehabilitation Plan are to:

- ensure that annual planning and budgeting of ex-farmland rehabilitation continues to be integrated into the mine planning and operational activities;
- provide technical information and procedures on the rehabilitation of ex-farmland; and
- demonstrate to Government regulators that EMO follows a well-understood process based on monitoring results from trials and research that maximises the success rate of woodland rehabilitation.

Implementation of this Offset Rehabilitation Plan will maintain the linkage between the eastern and western natural vegetation blocks of the Westonia Common to avoid fragmentation, widen biodiversity corridor plantings already implemented on ex-farmland on Lots 161 and 162, and maintain and improve the biological diversity and ecological integrity of flora and vegetation protected under the EPBC Act (*E. resinosa* and the TEC woodland).

6.2.1 Lot 1578

The revegetation of 13.65 ha of ex farmland on lot 1578, known as Greenfinch Farm, commenced in early 2020. The site is split into two paddocks by Stoneman Road which is a public road intersecting the site.

Site preparation activities on northern paddock included the removal of internal fencing and clean-up of historical scrap and wire from various areas of the site. The agricultural land was then ploughed as a form of weed control and to level the surface. Topsoil from the Greenfinch pit was windrowed in situ by dozer and then transported and applied to the site by tipper truck. Once application was complete the fresh topsoil was shaped by a grader forming 6 m-wide bands of topsoil with 3 m-wide tracks between for vehicle access to allow for future weed management activities (Figure 2).

Figure 2: Greenfinch farm Paddock 1 (Northern Paddock) after topsoil was placed from the Clearing of the Greenfinch project

Figure 3: Photos of Greenfinch farm Paddock 1 (Northern Paddock), March 2024

Site preparation for the southern paddock consisted of herbicide weed control, followed by ploughing several weeks later as a form of effective weed control and to level the surface.

Seedlings of woodland species were grown by Chatfield's Tree Nursery from local provenance seed (Table 2). The seed was collected in December 2019 from the vegetation areas which were to be cleared to make way for the Greenfinch pit and realignment of Warrachuppin Road and from the surrounding woodland area. A total of 17,437 local provenance seedlings were planted into Lot1578 in 2020. In the northern paddock 6,300 seedlings were hand planted using a potti-putki into rows pre-prepared by the

Chatfields Tree planter. In the southern paddock 11,137 seedling were planted using the Chatfields Tree planter.

Table 2: Species list of seedlings planted in Lot 1578

Acacia aestivalis	*Eucalyptus longicornis*	*Eremophilla decipiens*
Acacia acuminata	*Eucalyptus loxophleba subsp. lissophloia*	*Melaleuca pauperiflora*
Acacia erinacea	*Eucalyptus salmonophloia*	*Pittosporum angustifolium*
Acacia hemiteles	*Eucalyptus yilgarnensis*	*Senna artemesioides*
Acacia deficiens	*Eucalyptus salubris*	*Solanum orbiculatum*
Acacia merrallii		*Templetonia sulcata*

Infill planting of the existing rehabilitation offset area on Lot 1578 occurred during the winter season over the course of several weeks. Rip lines were trenched in the spaces between the existing rows with seed sown into every second line. Seedlings from Chatfields Tree Nursery were planted in the remaining rows, the seedling list can be found in Table 5.

As vegetation becomes established it will improve connectivity of the remnant vegetation of the surrounding Westonia Common, which is primarily a Red Morrel woodland TEC. Vegetation Transects have been established in both the paddocks to monitor progress. Further detail in Section 6.5.

Management of the site this year included weed spraying and maintenance of firebreaks around both sites and infill planting as discussed above.

6.2.2 Lot 161 and 162

During planning of the 2021 revegetation works it was decided to change the shape of the revegetation area on Lot 161 & Lot 162 to account for possible expansion of mining landforms. The revegetation area was amended to move it further away from the current mining operation to account for any future expansion of the Waste Rock Landforms or an additional Tailings Storage Facility (TSF) if required.

The revegetation areas were removed from north of the TSF and concentrated to the northeast corner of Lot 162. This new shape increases the width of vegetation near the 15ha of remnant native vegetation, northeast corner of the block, which EMO have committed to improve as part of the offset. The amended location retains the main goals and merits of the rehabilitation plan which were:

- maintaining the linkage between the eastern and western natural vegetation blocks of the Westonia Common and to avoid fragmentation; and
- maintaining and improving the biological diversity and ecological integrity of flora and vegetation protected under the EPBC Act (namely, Eremophila resinosa and the TEC woodland).

These changes were raised initially in the 2021 Annual compliance report and EMO have also informed DMIRS of the changes in a Secondary Approval Notice submitted in November 2021.

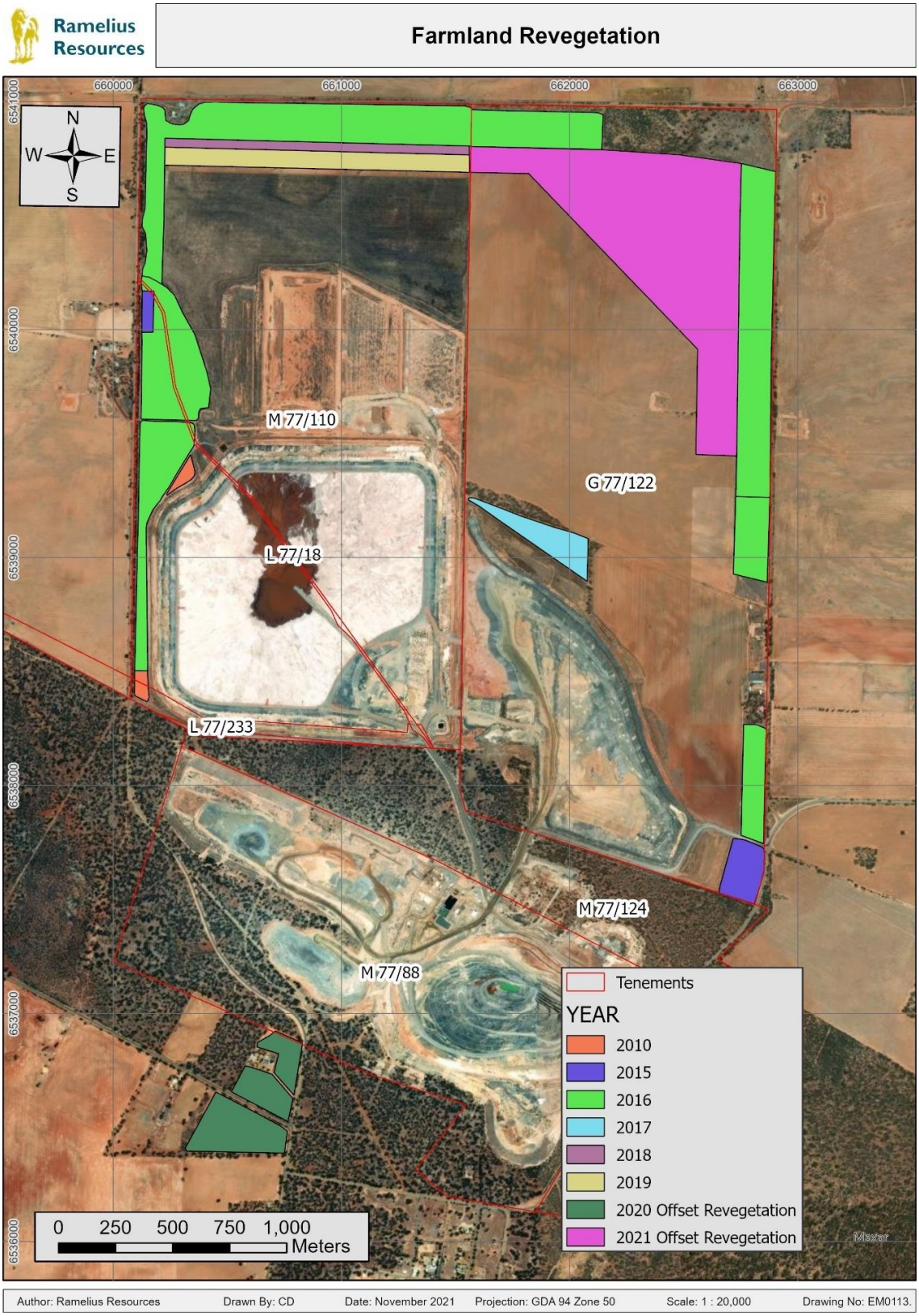


Figure 4: Location of Farmland revegetation sites and the year they were established. Infill planting was completed on the 2020 and 2021 Offset Revegetation Sites.

A Native plant Agronomist was engaged to organise and plan the works. Restoration of the farmland included a mix of direct seeding and planting. Species mix and planting densities were determined using information from the analogue flora surveys completed by Botanica (2018), and the consultant's onsite experience.

Collected and purchased seed was supplied to a local Tammin-based business, Chatfield's Tree Nursery, in October 2020. The seedling order of 34,800 for the 62ha consists of a mix of *Eucalyptus* and *Melaleuca* species, and other plants that are difficult to establish from direct seed (Table 3).

Table 3: Seedling order for the 2021 farmland revegetation project

Genus	Species	Seedlings
Eucalyptus	*longicornis*	8,000
Eucalyptus	*salubris*	6,000
Eucalyptus	*salmonophloia*	2,000
Eucalyptus	*yilgarnensis*	6,000
Melaleuca	*pauperiflora. ssp fastigiata*	8,000
Melaleuca	*eleuterostachya*	1,000
Melaleuca	*uncinata*	1,000
Eucalyptus	*loxopheba*	1,000
Calothamnus	*gilesii*	1,200
Pittosporum	*angustifolium*	600
	Total	**34,800**

Figure 5: Seedlings growing at Chatfield's Tree Nursery for Offset Planting, taken 18th February 2020

In addition, seed was applied at a rate of 1.5kg per hectare to the paddocks. The seed required for the project (seed list in Table 4) was treated accordingly prior to application.

Table 4: Seed List for 2021 farmland revegetation project

Genus	Species	Genus	Species
Acacia	*acuminata (narrow)*	*Eucalyptus*	*longicornis*
Acacia	*aestivalis*	*Eucalyptus*	*salubris*
Acacia	*colletioides*	*Eucalyptus*	*yilgarnensis*
Acacia	*hemiteles*	*Grevillea*	*paradoxa*
Acacia	*lasiocalyx*	*Hakea*	*preissii*
Acacia	*longispinea*	*Hakea*	*recurva*
Acacia	*merallii*	*Hibbertia*	*exasperata*
Acacia	*microbotrya*	*Maireana*	*carnosa*
Acacia	*murrayana*	*Maireana*	*tomentosa*
Acacia	*prainii*	*Maireana*	*triptera*
Acacia	*ramulosa*	*Melaleuca*	*pauperiflora. ssp fastigiata*
Acacia	*steedmanii*	*Olearia*	*muelleri*
Acacia	*yorkrakinensis ssp acrita*	*Pittosporum*	*angustifolium*
Acacia	*coolgardiensis*	*Ptilotus*	*drummondii*
Acacia	*erinacea*	*Ptilotus*	*exaltatus (nobilis)*
Acacia	*tetragonophylla*	*Ptilotus*	*holosericeus*
Allocasuarina	*huegeliana*	*Santalum*	*acuminatum*
Calothamnus	*gilesii*	*Santalum*	*spicatum*
Dianella	*revoluta*	*Senna*	*artemesioides ssp filifolia*
Enchlylaena	*lanata*	*Senna*	*pleurocarpa var pleurocarpa*
Eremophila	*decipiens*	*Solanum*	*orbiculatum*
Eremophila	*resinosa*	*Templetonia*	*sulcata*
Eriochyton	*sclerolaenoides*	*Vittadinia*	*gracilis*

Rehabilitation of the 62.280 ha on Lot 162 commenced in 2021. To prepare the site prior to planting a weed spray and pest spray were completed. This included a glyphosate spray in April and then just before planting, in May, the area was sprayed with glyphosate and Bifenthrin (pest spray).

Direct seeding of the site commenced in late May 2021 utilising a CommVeg Direct Seeder. This machine is pulled along by a tractor and scalp, rip and sows in one pass. Room was left between each of the seeding rows for either access, seedling row, or *Eremophila Resinosa* direct seeding row. The seedlings were planted in June 2021 using the Chatfields Tree Planter. In July 2021, Eremophila Resinosa seed was planted using the Commveg direct seeder. At this time any remaining seedlings were planted using potti-putki in some of the seeded rows.

A selective broad leaf and grass herbicides were applied to the area in September. In November the site was sprayed with Fipronil to stop any grasshoppers feeding on the emergent natives.

Vegetation monitoring plots were established in the site in Spring 2021 to monitor the progress of the site.

Figure 6: Direct Seeding of Lot 162, May 2021, using the CommVeg Direct Seeder.

Figure 7: Planting of Seedlings in Lot 162, June 2021, using the Chatfields Tree Planter

During June, July and August of 2023, further infill planting was undertaken over several weeks on Lot 162 using potti-putki seedling planters and the CommVeg seeder during ripping. A total of 15,000 seedlings were prepared for the season with an additional 2600 seedlings included from another project. Seed and seedling rows were ripped alternately across the whole offset area, with seedlings planted approximately every 2 metres.

Table 5: Species list of seedlings planted in Lot 162, Winter 2023

Genus	Species
Eucalyptus	salubris
Eucalyptus	longicornis
Eucalyptus	loxophleba lissophloia
Eucalyptus	yilgarnensis
Eucalyptus	salmonophloia
Melaleuca	lateriflora
Melaleuca	pauperiflora
Melaleuca	eleuterostachya

Table 6: Species list of seed sown into Lot 162, Winter 2023

Genus	Species
Acacia	acuminata
Acacia	aestivalis
Acacia	colletioides
Acacia	hemiteles
Acacia	merralli
Acacia	microbotrya
Acacia	tetragonophylla
Acacia	yorkrakinensis ssp acrita
Eucalyptus	salubris
Pittosporum	angustifolium

Weed management included periodic applications of glyphosate and selective herbicides between rows and in ripped rows in preparation for seeding. Pesticide sprays were also applied to sections of the offset area that displayed parasitic bug activity. Additionally, firebreaks were sprayed with glyphosate in August in preparation for the summer season.

No further planting programs have taken place on the farmland rehabilitation area since 2023 but will be re-assessed in 2025 depending on the success of the 2023 seedlings. If optimal density is not achieved by the 2023 program then further infill planting may be looked at if required. Soil quality in some areas of the farmland has been noted as a contributing factor to the failure of some patches of seedlings and may not be viable for rehabilitation.

Weed management has continued into 2025 with grass selective sprays on rows and across the firebreaks.

Figure 8: Photo of Lot 162 rehabilitation, March 2024

6.3 REMNANT 15HA BLOCK OF RED MORREL (LOT 162)

A requirement of the Offset Plan is the protection, management and improvement (interplanting, weed control) of a remnant 15ha block of Red Morrel on Lot 161. In July 2021, EMO planted out some of the bare areas within the block. This was completed by plantings seedlings with a potti-putki in rows prepared by the Chatfields tree planter.

64 leftover seedlings from the 2024 TSF rehabilitation program were planted across the remnant block in areas where density was lower.

Figure 9: Seedling planted in the remnant 15ha block, July 2021. Picture taken April 2024

6.4 WESTONIA TOWN COMMON

The Westonia Town Common is made up of 15 remnant vegetation reserves that surround the Town of Westonia and is located next to the EMO Greenfinch Project. It covers approximately 2,500 ha and it is an important reserve as it contains a large area of Eucalypt Woodlands of the Western Australian Wheatbelt TEC. A conservation management plan (CMP), Westonia Common Conservation Management Plan 2016-2021, has been developed to protect the reserve from threats including feral animals and weeds and preserve the site for the future (Eco Logical Australia 2016).

To assist the Shire of Westonia implement and achieve the objectives of the CMP, EMO provided $10,000 per year for two years from the start of the Greenfinch project. The first of these annual payments was made to the Shire of Westonia in July 2020 and the second payment was made in July 2021.

6.5 MONITORING AND COMPLETION CRITERIA

The farmland revegetation areas surrounding the mining project are monitored annually to assess their performance against completion criteria (Table 7 and Table 8). Analogue sites of remnant Eucalypt woodland vegetation are used as a benchmark. Monitoring is conducted on species richness, species diversity, plant density, vegetation cover, relative weed cover and presence of significant weeds.

Annual monitoring took place in October 2023 (Figure 10). The survey was completed by Botanica Consulting (2024) and the full report can be found in Appendix B.

Table 7: Completion Criteria for Flora/Vegetation in the farmland revegetation

Aspect	Closure Objectives	Closure Indicators	Completion Criteria	Management/ Measurement Approach
Flora/ Vegetation	Revegetation of disturbed areas are the best achievable with available rehabilitation resources and are rehabilitated using local provenance species to reflect the surrounding Westonia Common	Vegetation comprised of local provenance species in a self-sustaining and resilient community comparative to natural landscape	Vegetation cover (total percentage cover of live vegetation) and species density (total no. perennial plants) levels ≥50% of the mean value from the analogue sites in the target ecosystem[1]. Species diversity (total no. perennial species) levels ≥50% of the mean value from the analogue sites in the target ecosystem	Landscape/Vegetation monitoring on rehabilitated landforms and target ecosystems in Spring to measure biodiversity. Reporting of monitoring results annually in AER
		Weed species not impacting upon the recruitment and growth of indigenous flora	Percentage cover of weeds of National Significance (listed by DotEE) or Declared Plants (listed by DPIRD) on rehabilitated landforms no greater than 0%[2].	Weed monitoring during landscape/ vegetation monitoring and/ or WRL assessments. Management of weeds as per Weed Management Plan

[1] Completion criteria based on the minimum biodiversity and landscape function (critical threshold as described by Tongway & Hindley (2003) based on three successive years of monitoring data) at which a landform is self-sustaining (Beyond the critical threshold, the ecosystem becomes increasingly more self-sustaining and able to survive stress and disturbance, both natural and human induced the ecosystem becomes increasingly more self-sustaining and able to survive stress and disturbance, both natural and human induced (Tongway, & Hindley 2003). Will be compared against analogue site/s to ensure target biodiversity values are representative of the natural environment and consistent with the Westonia Common. Rehabilitation will be conducted using best practices for the site and will aim to achieve higher values than the minimum targets/ threshold specified.

[2] Completion criteria targets for weed coverage better than those that are based on published literature which suggests that weed cover (non-naturalised weeds) exceeding 40% impedes native vegetation growth. The target has been set at lower threshold to ensure weeds identified/ managed before native vegetation impacts occur

Table 8: Completion Criteria Targets

Completion Criteria	Completion Criteria Target
Species Diversity (400 m^2)	>80% of the analogue mean
Plant Density (plants/ha)	50% of the analogue mean
Vegetation Cover (%)	50% of the analogue mean
Weeds of National Environmental Significance (%)	<0%
Declared Plants (%)	<0%

Figure 10: Farmland Rehabilitation and Vegetation Monitoring Transect Locations (Botanica 2024)

6.6 LOT 162 MONITORING

At Lot 162 there are two transects which were installed in 2021, T7 & T8. Results against completion criteria are presented in Table 9. All measures rated poorly, and weed presence was high, however no WoNS or declared plants were recorded. (Botanica 2025).

Infill planting took place during the 2023 winter alongside weed / pest control measures while new and existing seedlings continued to mature. No further planting has been completed but weed management is ongoing.

Table 9: Assessment of Lot 162, transect 7-8, against completion criteria for 2024 monitoring (Botanica 2025)

	Plant Density (m^2)	Species Richness ($25m^2$)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
Completion Criteria Target	50% of the analogue mean (2.6)	>80% of the analogue mean (8)	50% of the analogue mean (62)	<20% of the analogue mean (0)	0%	0%
=	1.4	6.4	30.5	0	0%	0%
T7	0.1	2	5	94.26	0	0
T8	0.4	2	7	90.52	0	0

6.7 LOT 1578 MONITORING

At Lot 1578 there are two transects installed in the northern paddock, T9 & T10, and two transects in the southern paddock, T11 & T12. In 2024, a total of 16 taxa were recorded within transects, twelve of these were native plants, and four weed species were present. Species richness had remained stable from previous years and plant density had decreased to 2021 levels. Vegetation cover has increased since previous years and weed cover has decreased slightly since 2023. Note that vegetation cover had decreased for the analogue sites. T10 met the completion criteria target for plant density (m2), no sites met the completion criteria target for species richness (25m2), three sites met the criteria for vegetation cover (%). All sites met the completion criteria for not having any WoNS or declared plants present. Relative weed cover had decreased slightly since 2023 results. Similar to 2023 results, weedy grasses were dominant at T10, T11 and T12, seed of these grasses is likely blown in from adjacent agricultural areas. (Botanica 2024).

Table 10: Assessment of Lot 1578, transect 9-12, against completion criteria for 2024 monitoring (Botanica 2025)

	Plant Density (m^2)	Species Richness ($25m^2$)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
Completion Criteria Target	50% of the analogue mean (2.6)	>80% of the analogue mean (8)	50% of the analogue mean (62)	<20% of the analogue mean (0)	0%	0%
=	1.4	6.4	30.5	0	0%	0%
T9	1.2	6	32	68.87	0	0
T10	2.2	6	48	2	0	0
T11	0.4	3	38	47.95	0	0
T12	0.4	5	19	52.38	0	0

6.8 WEED MANAGEMENT

Weed management is undertaken at the Edna May Project to minimise the adverse impacts from weeds on the environment including local fauna and flora communities. EMO has a Flora Management Plan and Fauna Management plan which provides a management framework for the implementation, monitoring and review of actions which specifically aims to:

- Maintain the abundance, diversity, geographic distribution and productivity of terrestrial flora at species and ecosystem levels.
- Protect and minimise impact to DRF and Priority Flora located within the Edna May Operations leases.
- Disturb land only within approved clearing envelopes.
- Ensure that land rehabilitation is implemented progressively.

Note that the Weed and Vertebrate Pest Management Plan which was previously referenced has been retired in 2023 and details and management actions have been incorporated into the Flora Management Plan and Fauna Management Plan.

Activities completed during the reporting period have included:

- Inspections of Mining and surrounding areas for the presence of weeds.
- Specific weed control activities to control populations of Ruby dock (*Acetosa vesicaria*) and Skeleton weed (*Chondrilla juncea*).
- Mapping of significant weed populations in GIS (Figure 11).
- Reporting of Skeleton weed monitoring and control to DPIRD.
- Inspection of earthmoving equipment to ensure they are clean and free of soil material before entering site and undertaking clearing activities.
- Control of weeds and grasses in Offset Rehabilitation areas to ensure successful revegetation to Eucalypt woodland

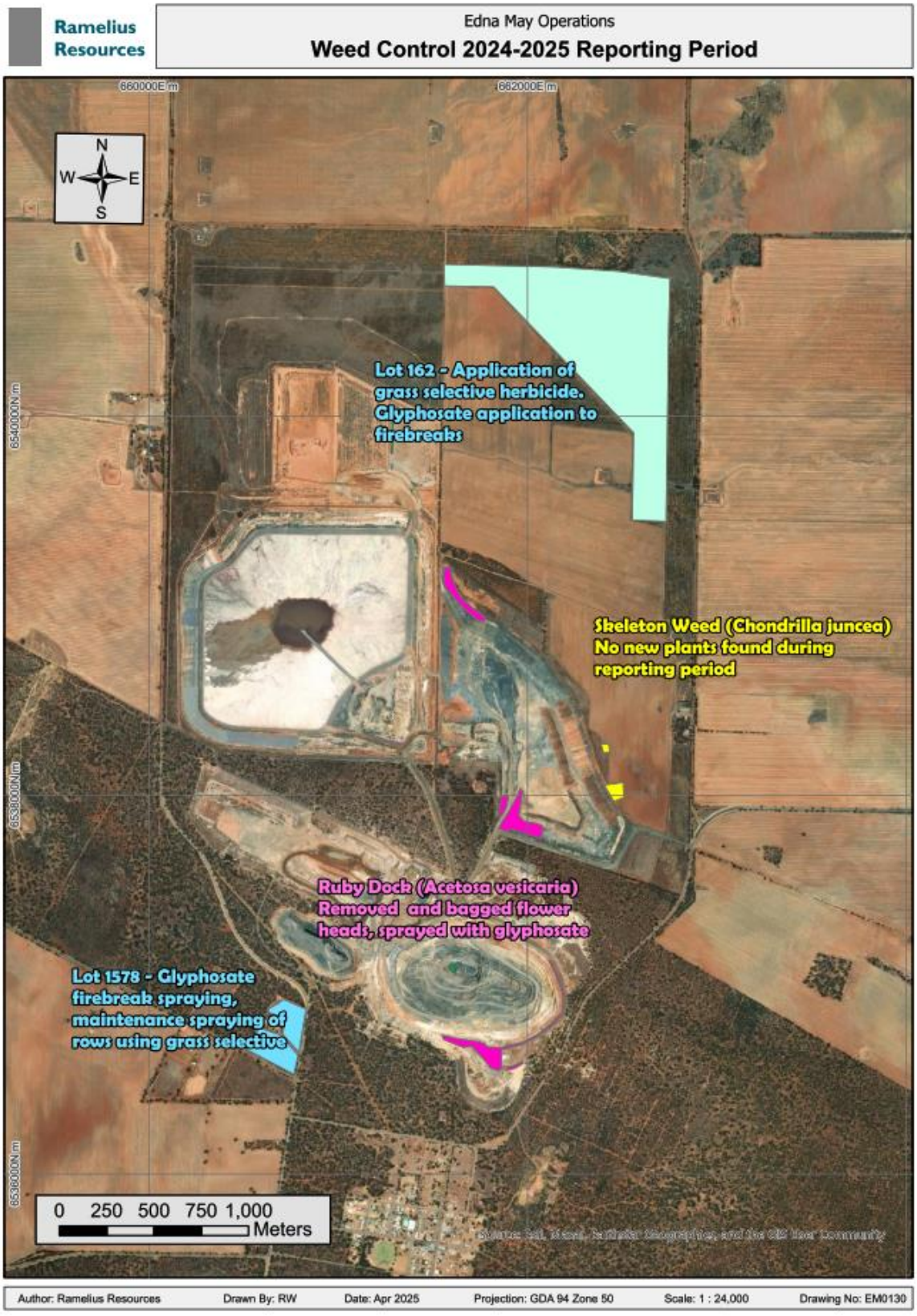


Figure 11: Weed Management completed during the 2024-2025 reporting period.

6.9 FAUNA MANAGEMENT

To protect native fauna and control feral animals at the project EMO have continued to implement their Fauna Management Plan. The objectives of the management plan are to:

- Maintain the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels.
- Minimise impacts to fauna habitats.
- Adopt practices aimed at minimising impacts on fauna, including controlling the extent of open excavations; regularly checking areas where animals could become trapped; actively managing features such as water storages, domestic waste storages, processing water storage, tailings supernatant pond and lighting which may attract fauna.
- Disturb land only within approved clearing envelopes.
- Ensure that land rehabilitation is implemented progressively.

Actions implemented during the reporting period to Manage Fauna onsite have included:

- Adhering to all clearing and ground disturbance permits by following all internal related procedures.
- Recording sightings of any species of conservation significance and feral animals on the mining lease.
- Relocation of snakes and reptiles from work areas by trained personnel.
- Injured fauna or deaths have been reported to the Environment department and treated as appropriate.
- Ensuring landfill waste is regularly covered to prevent attracting feral fauna.
- Managing and monitoring dust onsite.
- Monitoring levels of cyanide (CN) in the TSF decant and recording fauna sightings in the TSF.
- Regularly monitoring sumps and water storage dams to ensure adequate egress points are in place and there is no trapped fauna.

7. SUMMARY

EMO did not complete any clearing during the reporting period. A total of 14.274 hectares of native vegetation has been cleared under the permit. Permit duration is from 26 October 2019 to 25 October 2038.

Revegetation works continued as per the approved Offset Proposal and Revegetation Plan.

EMO has complied with all conditions set out in CPS 8550/3.

8. REFERENCES

Botanica Consulting (2025). *Edna May Project Farmland and Offset Rehabilitation Monitoring Report 2024*. Unpublished report prepared for Ramelius Resources Ltd.

Eco Logical Australia (2016). *Westonia Common Conservation Management Plan 2016-2021*. Prepared for Shire of Westonia

9. APPENDICES

Appendix A: Clearing Permit CPS 8550/3

Australian Government
Department of the Environment and Energy

PROPOSED APPROVAL

Edna May Gold Project Expansion – Greenfinch Pit, Western Australia (EPBC 2018/8213)

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

Details

Person to whom the approval is granted (approval holder)	Edna May Operations Pty Ltd
ACN or ABN of approval holder	136 365 001
Action	Clearing of vegetation for the expansion of the existing Edna May Gold Project including the establishment of an open pit (the 'Greenfinch pit'), storage of non-reactive waste rock in an expanded North-North West waste rock landform, buttressing of an existing Tailings Storage Facility, development of a noise abandonment bund and construction of a haul road, site drainage works and storage of topsoil approximately 1 km north of Westonia, Western Australia [See EPBC Act referral 2018/8213].

Proposed Approval decision

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

Controlling Provisions

Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve

Period for which the approval has effect

This approval has effect until 30 December 2039.

Decision-maker

Name and position	Declan O'Connor-Cox Acting Assistant Secretary Environment Approvals Division Department of the Environment and Energy
Signature	Declan
Date of decision	22/1/2020

Conditions of approval

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

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

1. To minimise impacts to **EPBC Act listed species and ecological communities**, the approval holder must not clear more than 16.6 hectares of native vegetation within the **Clearing Permit Area**. Within the **Clearing Permit Area** the approval holder must not clear more than the following:

    a. 9.3 ha of **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**; and

    b. 9.3 ha of **foraging habitat** and no more than 38 **potential breeding trees for the Carnaby's Black Cockatoo**.

2. To minimise the impacts of fragmentation on the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**, the approval holder must retain and maintain the two corridors of native vegetation shown as '40m wide corridor' and '50m wide corridor' in Attachment A. The approval holder must maintain these corridors as self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**, integrated with **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** in the surrounding ecosystem. The '40m wide corridor' must be maintained so as to be at least 40 metres wide at its narrowest point for the **life of the approval**. The '50m wide corridor' must be maintained so as to be at least 50 metres wide at its narrowest point for the **life of the approval**.

3. To minimise the impacts of clearing, fragmentation and edge effects on the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** and **foraging habitat** and **potential breeding trees for the Carnaby's Black Cockatoo,** the approval holder must rehabilitate at least 1.9 hectares identified as 'Rehabilitation Areas (1.9ha)' in Attachment C. The rehabilitation must establish and maintain self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** in the Rehabilitation Areas, integrated with the surrounding **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** within ten years of the commencement of rehabilitation activities. In order to meet this objective, the approval holder must:

    a. Rehabilitate the Rehabilitation Areas using species representative of the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**;

    b. Commence rehabilitation activities in all Rehabilitation Areas within twelve months of the completion of construction of the abandonment bund;

    c. Implement sufficient monitoring and management of the Rehabilitation Areas to a standard that will ensure that the objective of condition 3 is met within ten years of the commencement of rehabilitation activities;

    d. Provide, within eleven years from the commencement of rehabilitation activities, a report prepared by an **independent and suitably qualified expert** verifying that the rehabilitation areas comprise self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community;** and

    e. Continue the same standard of monitoring and management of the Rehabilitation Areas until the **Department** advises in writing that it has reviewed and accepts the report of the **independent and suitably qualified expert**.

4. To minimise the impacts of **weeds** on the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community, foraging habitat** and **potential breeding trees for the Carnaby's Black Cockatoo**, the approval holder must implement the **Weed and Vertebrate Pest Management Plan** from the **commencement of the action** for the **life of the approval**.

5. To minimise the impacts of predation by **feral animals** on the **Carnaby's Black Cockatoo**, the **approval holder** must implement the **Fauna Management Plan** from the **commencement of the action** for the **life of the approval**.

6. To compensate for the residual significant impact on the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**, the approval holder must:

   a. Rehabilitate, to establish and maintain self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** on 70 ha comprising the portions of Lots 161 and 162 shaded in dark blue in Attachment D;

   b. rehabilitate, to establish and maintain self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** on 15 ha comprising the portions of Lot 1578 shaded in dark blue in Attachment D; and

   c. provide $10,000 per year for two years from the **commencement of the action** (indexed to the National Consumer Price Index value in 2019) to the Shire of Westonia for the purpose of funding activities in the **Westonia Common Management Plan 2016-2020** and subsequent versions. The first payment must be made within six months from the **commencement of the action**.

7. To provide for the establishment and ongoing management of the compensatory measures described in condition 6a and 6b, the approval holder must implement the **Rehabilitation Offset Plan** within 12 months of the **commencement of the action**. The purpose of the **Rehabilitation Offset Plan** will be to establish and maintain a self-sustaining native vegetation cover that is representative of the **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community** within twenty years from the commencement of rehabilitation activities.

   In addition the approval holder must:

   a. Commence rehabilitation activities in the offset areas described in Attachment C within 18 months of the date of this approval;

   b. Undertake a review by an **independent and suitably qualified expert** at five years, ten and fifteen years from the commencement of the rehabilitation activities. The purpose of the reviews will be to determine if the performance indicators and completion criteria as described in the **Rehabilitation Offset Plan** have been met. The approval holder must provide the results of each review to the **Department** within five months of the completion of each review;

   c. Provide to the **Department** details of corrective actions, including triggers and timeframes for the implementation of corrective actions, that will be undertaken by the approval holder in the event that the reviews undertaken under condition 7b show that rehabilitation activities are not meeting the performance indicators and completion criteria as described in the **Rehabilitation Offset Plan**;

   d. Provide the **Department,** within twenty years from the commencement of rehabilitation activities, a report prepared by an **independent and suitably qualified expert** verifying that

the rehabilitation areas comprise self-sustaining and fully functioning **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**;

e. Continue the same standard of monitoring and management of the rehabilitation areas identified in Attachment C until the **Department** advises in writing that it has reviewed and accepts the report of the **independent and suitably qualified expert**; and

f. Within 12 months of the advice notification in condition 7e, provide the **Department** with written evidence for the legal protection of the rehabilitation offset described in conditions 6a and 6b in perpetuity (for example, through a covenant agreed with the **Western Australian Department of Biodiversity, Conservation and Attractions**).

Part B – Standard administrative conditions

Notification of date of commencement of the action

8. The approval holder must notify the **Department** in writing of the date of **commencement of the action** within 10 **business days** after the date of **commencement of the action**.

Compliance records

9. The approval holder must maintain accurate and complete **compliance records**.

10. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

Note: **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department**'s website or through the general media.

Preparation and publication of plans

11. The approval holder must:

    a. submit **plans** electronically to the **Department** for approval by the **Minister**;

    b. publish each **plan** on the **website** within 20 **business days** of the date the **plan** is approved by the **Minister** or of the date a revised action management plan is submitted to the **Minister** or the **Department**, unless otherwise agreed to in writing by the **Minister**;

    c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public; and

    d. keep **plans** published on the **website** until the end date of this approval.

12. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under a **plan** is prepared in accordance with the **Department's** *Guidelines for biological survey and mapped data* (2018) and submitted electronically to the **Department** in accordance with the requirements of the **plan**.

Annual compliance reporting

13. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:

    a. publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period;

    b. notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within five **business days** of the date of publication;

c. keep all **compliance reports** publicly available on the **website** until this approval expires;

d. exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and

e. where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

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

Reporting non-compliance

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

    a. any condition which is or may be in breach;

    b. a short description of the **incident** and/or non-compliance; and

    c. the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.

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

    a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;

    b. the potential impacts of the **incident** or non-compliance; and

    c. the method and timing of any remedial action that will be undertaken by the approval holder.

Independent audit

16. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.

17. For each **independent audit**, the approval holder must:

    a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;

    b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and

    c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.

18. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

Completion of the action

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

Part C - Definitions

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

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

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

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

Clearing Permit Area is the Clearing Permit Area identified in Attachment A.

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

i. undertake pre-clearance surveys or monitoring programs;

ii. install signage and /or temporary fencing to prevent unapproved use of the project area;

iii. protect environmental and property assets from fire, weeds and pests, including **use** of existing surface access tracks; and

iv. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**.

Completion criteria means, but may not be limited to, the completion criteria to be achieved at ten years from the commencement of rehabilitation activities identified in the Edna May Operations Offset Rehabilitation Plan provided to the Department on 4 November 2019.

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

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

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

Compliance reports means written reports:

i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;

ii. consistent with the **Department's** *Annual Compliance Report Guidelines* (2014);

iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and

iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

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

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

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

EPBC Act listed species and ecological communities means the **EPBC Act** listed **Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community**, Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and **Resinous Eremophila** (*Eremophila resinosa*).

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

Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community means the **EPBC Act** listed Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community.

Fauna Management Plan means the *Fauna Management Plan* provided to the Department as part of preliminary documentation on 9 October 2019.

Feral animals includes, but may not be limited to, Red Fox (*Vulpes vulpes*), European Rabbit (*Oryctolagus cuniculus*), Cat (*Felis catus*) and Wild Dog (*Canis lupus familaris*)

Foraging habitat for the Carnaby's Black Cockatoo means the **EPBC Act** listed Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community.

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

Independent and suitably qualified expert means a person that:

a. does not have, an individual or by employment or family affiliation, any conflicting or competing interests with the approval holder; the approval holder's staff, representatives or associated persons; or the project, including any personal, financial, business or employment relationship, other than receiving payment for undertaking the role for which the condition requires an independent expert;

b. has professional qualifications relevant to the **protected matter(s)**;

c. is a recognised expert, supported by relevant peer reviewed publications, regarding the **protected matter(s)**; and

d. has at least 7 years of experience designing and undertaking surveys relevant to the **protected matter(s)**.

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

Life of the approval means the period for which the approval has effect.

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

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

Performance indicators means, but may not be limited to, the performance indicators to be achieved at five years from the commencement of rehabilitation activities identified in the Edna May Operations Offset Rehabilitation Plan provided to the Department on 4 November 2019.

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

Potential breeding trees for the Carnaby's Black Cockatoo means the breeding habitat for Carnaby's Black Cockatoo identified in Attachment B.

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

Rehabilitation Offset Plan means the EMO Offset Rehabilitation Plan provided to the Department as part of the preliminary documentation on 9 October 2019 and any subsequent revisions as approved by the **Department**.

Resinous Eremophila means the **EPBC Act** listed Resinous Eremophila (*Eremophila resinosa*).

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

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

Species representative of the Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community means Salmon Gum (*Eucalyptus salmonophloia*), Red Morrell (*Eucalyptus longicornis*) and Gimlet (*Eucalyptus salubris*) and/or species that will produce the following Eucalypt woodlands as described in the **Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt**:

- Mid woodland of Red Morrell (*Eucalyptus longicornis*) over isolated tall Boree (*Melaleuca pauperiflora* subsp. *fastigiata*) shrubs, low open chenopod shrubland Saltbush (*Atirplex*) species and open low forbland of Grey Copper Burr (*Sclerolaena diacantha*) on clay-loam plain; and/or

- Mid woodland of Gimlet over open mid shrubland of Desert Quandong (*Santalum acuminatum*) and open low shrubland of Tan Wattle (*Acacia hemiteles*) and Spiny Grevillea (*Grevillea acuaria*) on clay-loam plain.

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

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

Weed and Vertebrate Pest Management Plan is the *Weed and Vertebrate Pest Management Plan* provided to the Department as part of the preliminary documentation on 9 October 2018.

Weeds includes, but may not be limited to, Wild Oats (*Avena fatua*), Onion Weed (*Asphodelus fistulosus*) and Wild Raddish (*Raphanus raphanistrum*).

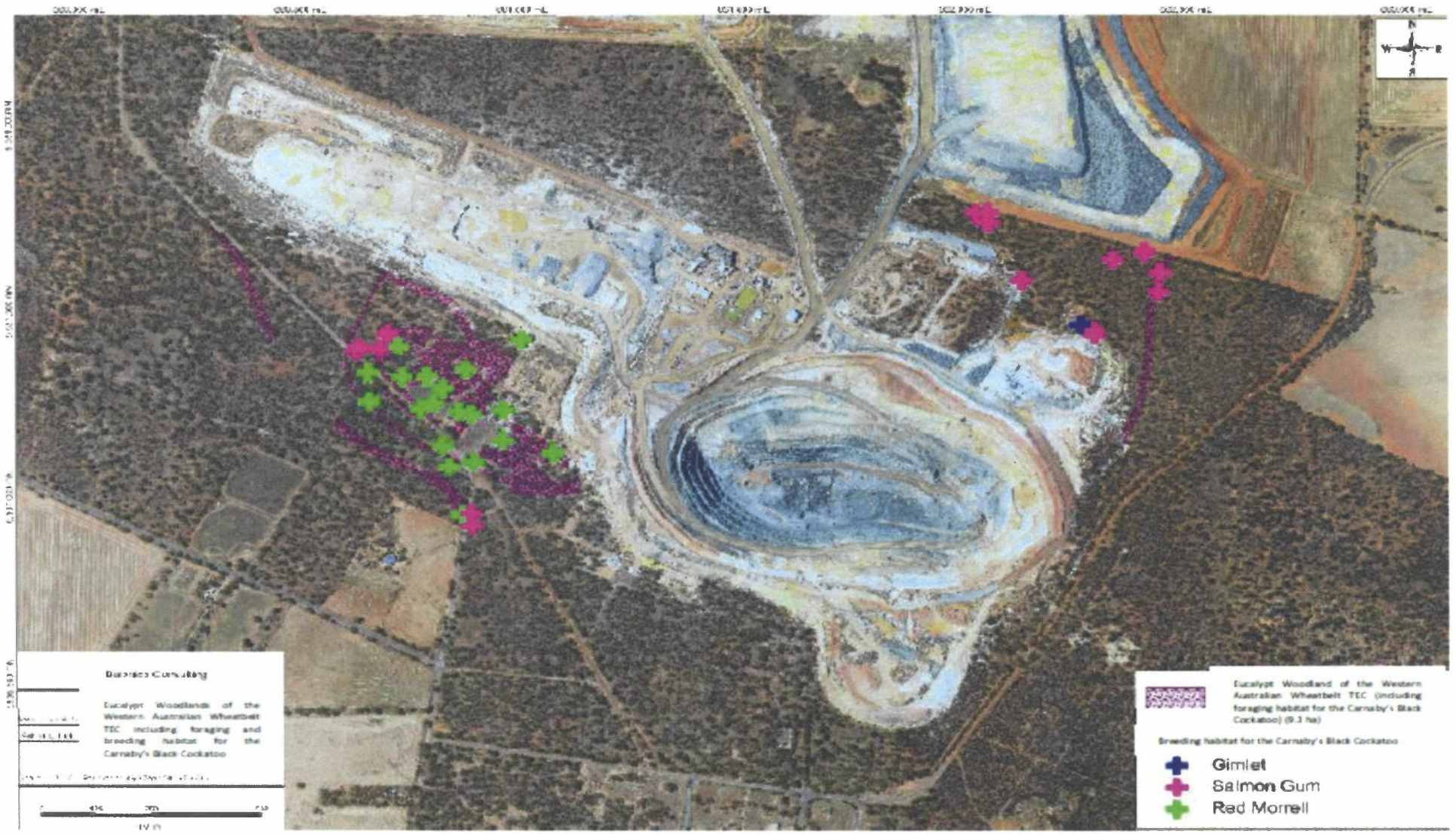
Western Australian Department of Biodiversity, Conservation and Attractions means the Western Australian Department of Biodiversity, Conservation and Attractions or any future agencies that retain its roles and responsibilities.

Westonia Common Management Plan 2016-2021 is the *Westonia Common Management Plan 2016-2021* provided to the Department as part of the preliminary documentation on 9 October 2018, or any subsequent versions.

ATTACHMENTS

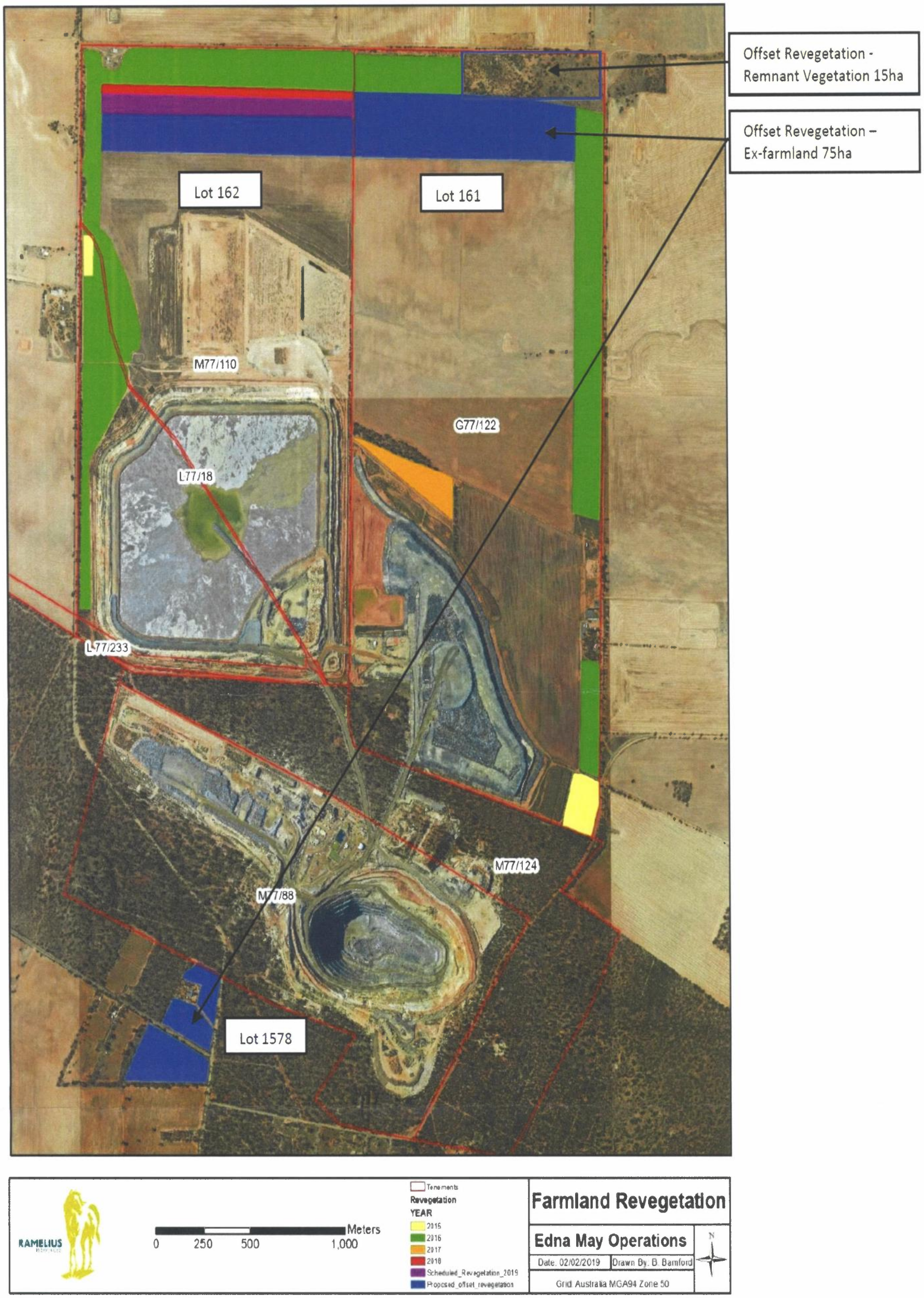
ATTACHMENT A – Map of Clearing Permit Area

ATTACHMENT B – Map of Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community and breeding and foraging habitat for the Carnaby's Black Cockatoo in the Clearing Permit Area.



ATTACHMENT C – Map of rehabilitation areas

ATTACHMENT D – Map of environmental offset areas (Lots 161, 162 and 1578)



Appendix B: Edna May Project Farmland and Offset Rehabilitation Monitoring Report 2024

EDNA MAY PROJECT

Farmland and Offset Rehabilitation Monitoring
November 2024

March 2025

Prepared by

BOTANICA CONSULTING

33 Brewer St PERTH WA 6000 | 0419 916 034

Document Information

Prepared for: Ramelius Resources Limited
Project Name: Edna May Project
Tenements: G77/122, M77/88, M77/110, M77/124, L77/18, L77/233
Job Reference: Farmland Rehabilitation Monitoring Report
Job Number: 2024/124
Date: 27 March 2025
Version: Final

Disclaimer

Quality Assurance

An internal quality review process has been implemented to each project task undertaken by BC. Each document and its contents are carefully reviewed by core members of the Consultancy team and signed off at Director Level prior to issue to the client. Draft documents are submitted to the client for comment and acceptance prior to final production.

Cover Photo: T4, transect 4 rehabilitated in 2016 (taken November 2024)

Prepared by: Jennifer Jackson
Senior Environmental Consultant
Botanica Consulting

Reviewed by: Andrea Williams
Director
Botanica Consulting

Approved by: Jim Williams
Director
Botanica Consulting

Contents

Tables

Figures

APPENDICES

1 INTRODUCTION

The Edna May Gold Mine is located in the Shire of Westonia, approximately 1 km north of the township of Westonia and approximately 280 km east-northeast of Perth Western Australia (Figure 1-1). Mining of the Edna May deposit has been conducted periodically since the early 1900s with current operations being conducted by Edna May Operations Pty Ltd (EMO), which is a wholly owned subsidiary of Ramelius Resources Limited (Ramelius).

EMO is located within the Merredin Subregion of the Avon Wheatbelt Bioregion, which has been subject to extensive clearing for agriculture. Remnant Eucalypt woodland vegetation within the region is protected under Commonwealth legislation as a Threatened Ecological Community (TEC) known as the 'Eucalypt woodlands of the Western Australian Wheatbelt'. EMO commenced a large-scale rehabilitation programme in 2015 with the intention of rehabilitating ex-farmland and agricultural land back to woodland, similar to that of the TEC.

In July 2017, Phoenix Environmental Sciences Pty Ltd (Phoenix) was engaged by EMO to undertake a rehabilitation assessment in areas rehabilitated in 2015 and 2016 surrounding the Edna May Gold Mine. Botanica Consulting (BC) took over the monitoring of these sites in 2018, and this is the fifth year of monitoring completed by BC. EMO has rehabilitated an additional 74.5 ha of farmland in 2020 and 2021 and additional monitoring sites have been added to these areas. For the 2023 monitoring there were 12 sites in the farmland rehabilitation areas and six analogue sites in nearby Eucalypt woodlands. One site that was established during the 2022 monitoring at the rehabilitated Warrachuppin Road was also monitored in 2023.

The objectives of the vegetation monitoring program were to:

- Undertake vegetation monitoring of each analogue and rehabilitation site and assess rehabilitation against baseline data and completion criteria.
- Present a report detailing the current status of the rehabilitated areas.

The 2024 monitoring was completed by Jennifer Jackson (Senior Botanist) and Amy Johnston (Environmental Consultant) on the 27th of November 2024.

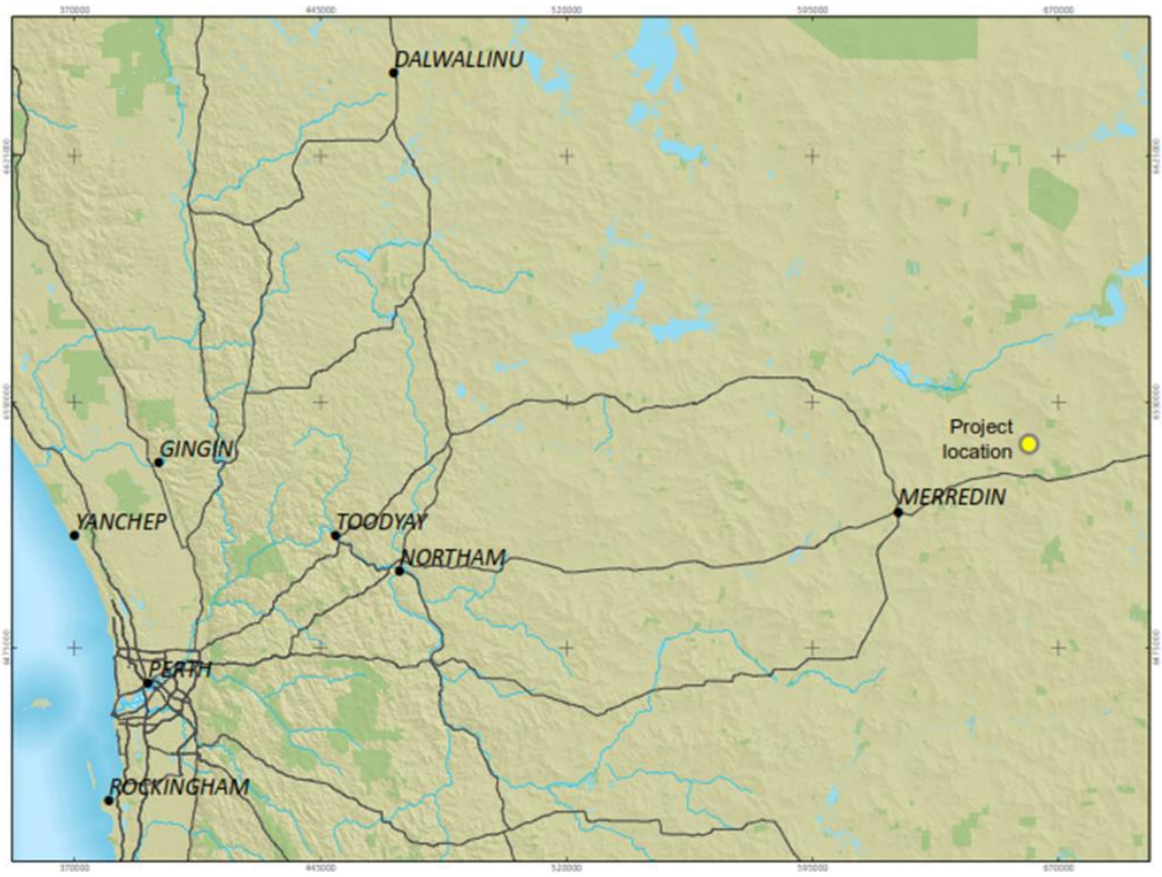


Figure 1-1: Regional Map – Project Location

1.1 Project Background

The EMO is located approximately one kilometre (km) north of the Westonia township in Western Australia (Figure 1-1), which is the administrative centre for the Shire of Westonia. The EMO is 52 km by road east of the regional population centre of Merredin. There is a sealed road to the town, which is serviced by scheme power and water, reliable telecommunications and mobile phone coverage. The EMO is located within the Yilgarn mineral field.

The EMO site has been subject to several phases of mining since 1911 over which time development of the town and mining operations have remained intimately linked. Currently, it is a medium-sized, gold mining operation that consists of conventional open cut pits, underground mining operation and a carbon-in-leach (CIL) processing plant. It processes approximately 2 million tonnes per annum (Mtpa) of oxide and primary ore. Tailings are discharged in a Tailings Storage Facility (TSF) located within the Integrated Waste Landform (IWL) (namely the TSF/IWL). The TSF/IWL has one cell, an associated decant tower and submersible pump which returns supernatant reclaim water to the process water pond (EMO, 2021).

The Edna May processing plant has exhausted its ore supply from the EMO underground, and the Tampia, Symes and Marda sites. The mill campaign finished at the end of February 2025 and is now under care and maintenance.

1.1.1 Farmland Vegetation Monitoring

Approximately 97 ha of farmland surrounding the Project was rehabilitated in 2015 and 2016 (Figure 1-2). These areas contain two sites that are 5 ha each, these sites are where the Threatened flora, *Eremophila resinosa*, was sown with the direct seeding mix. Revegetation was undertaken across six sites utilising direct seeding and planting of tubestock (Table 1-1).

Direct seeding was undertaken utilising a Commercial Native Vegetation Seeder (CommVeg seeder developed by Dr Geoff Woodall). In a single pass operation, the CommVeg seeder scalping blade produces a flat-bottomed scalp which is followed by a shallow rip (0.3 m) with a spring tyne followed by paired tillage disks and then the passage of the floating seeder arm which flattens the ripped and tilled soil then forms a seeding trench at a present depth, then places seed before closing the trench and pressing the soil.

In the majority of rehabilitated areas tubestock was hand planted utilising Pottiputki planters. For site 4 rehabilitated in 2016 tubestock was planted by a Chatsfield tree planter that in a one pass operation rips, scalps and plants a seedling (Bella Bamford pers. Comm.).

The seeding and planting methods result in parallel shallow trenches that have been seeded and/or planted interspaced by areas that are not tilled and received no native seed or plants.

EMO rehabilitated an additional 74.5 ha of farmland in 2020 and 2021, an area to the northeast that will connect two sites rehabilitated in 2016, and an area to the southwest, known as Slippery's Paddock. This brings the total of land rehabilitated to approximately 170 ha.

In July 2017 Phoenix Environmental Sciences Pty Ltd (Phoenix) was engaged by EMO to undertake a rehabilitation assessment in areas rehabilitated in 2015 and 2016 surrounding the Edna May Gold Mine. These sites were monitored in December 2018, 2019, and 2020 by Botanica Consulting (BC). In December 2020, BC established two transects on rehabilitated land in Slippery's Paddock to begin vegetation monitoring there. In 2021 an additional four transects were established; two in Slippery's Paddock and two between Sites 3 and 4. For the 2021 monitoring there were 12 sites in the farmland rehabilitation areas and six analogue sites in nearby Eucalypt woodlands (Figure 1-2).

1.1.2 Warrachuppin Road Rehabilitation

There are two features within the EMO which were required to be rehabilitated as per Federal Government EPBC (Environment Protection and Biodiversity Conservation Act 1999) approval conditions. This included the original Warrachuppin road, southwest of the EMO. This was rehabilitated in 2022.

Table 1-1: Revegetation methods

Site	Rehabilitation Year	Area (ha)	Methods
1	2015	4.1	Direct seeded using the CommVeg seeder, seedlings were hand planted into the direct seeding rows
2	2016	5	Site was direct seeded using the CommVeg seeder, seedlings were hand planted into the direct seeding rows. This site is also *Eremophila resinosa* translocation site
3	2016	5.3+21.4	Site was direct seeded using the CommVeg seeder, seedlings were hand planted into the direct seeding rows. This site is also *Eremophila resinosa* translocation site
4	2016	36.8	Site was direct seeded using the CommVeg seeder, seedlings were planted into separate rows to the direct seeding using the Chatsfield tree planter. This site is also *Eremophila resinosa* translocation site planted 2018– direct seeding and seedlings with CommVeg seeder, (established between existing rows)
5	2015	0.9	Direct seeded using the CommVeg seeder, seedlings were hand planted into the direct seeding rows. Previous failed revegetation attempts in 2011 & 2013
6	2016	9.8+13.2	Direct seeded using the CommVeg seeder, seedlings were hand planted into the direct seeding rows. Previous failed revegetation attempts in 2011 & 2013
7	2021	62	Direct seeding using the CommVeg seeder, Seedlings planted in separate rows using the Chatsfield tree planter. *Eremophila resinosa* seed sown in own rows using CommVeg seeder.
Slippery's Paddock	2020	5.7	Topsoil, sourced from Greenfinch Pit clearing, spread 200mm deep in rows. Seedlings hand planted into topsoil within rows created by the Chatsfield tree planter (See Appendix 5 for species composition)
Slippery's Paddock	2020	6.8	Seedlings planted with Chatsfield tree planter.
Warrachuppin Road	2022	1.06	Rehabilitation earthworks commenced in 2021 which consisted of removing the bitumen road surface and ripping the road base. In June 2022 EMO seeded and planted seedlings on the site. This was completed using the CommVeg direct seeder. Seedlings were planted using potti-putki in seeded and ripped rows.

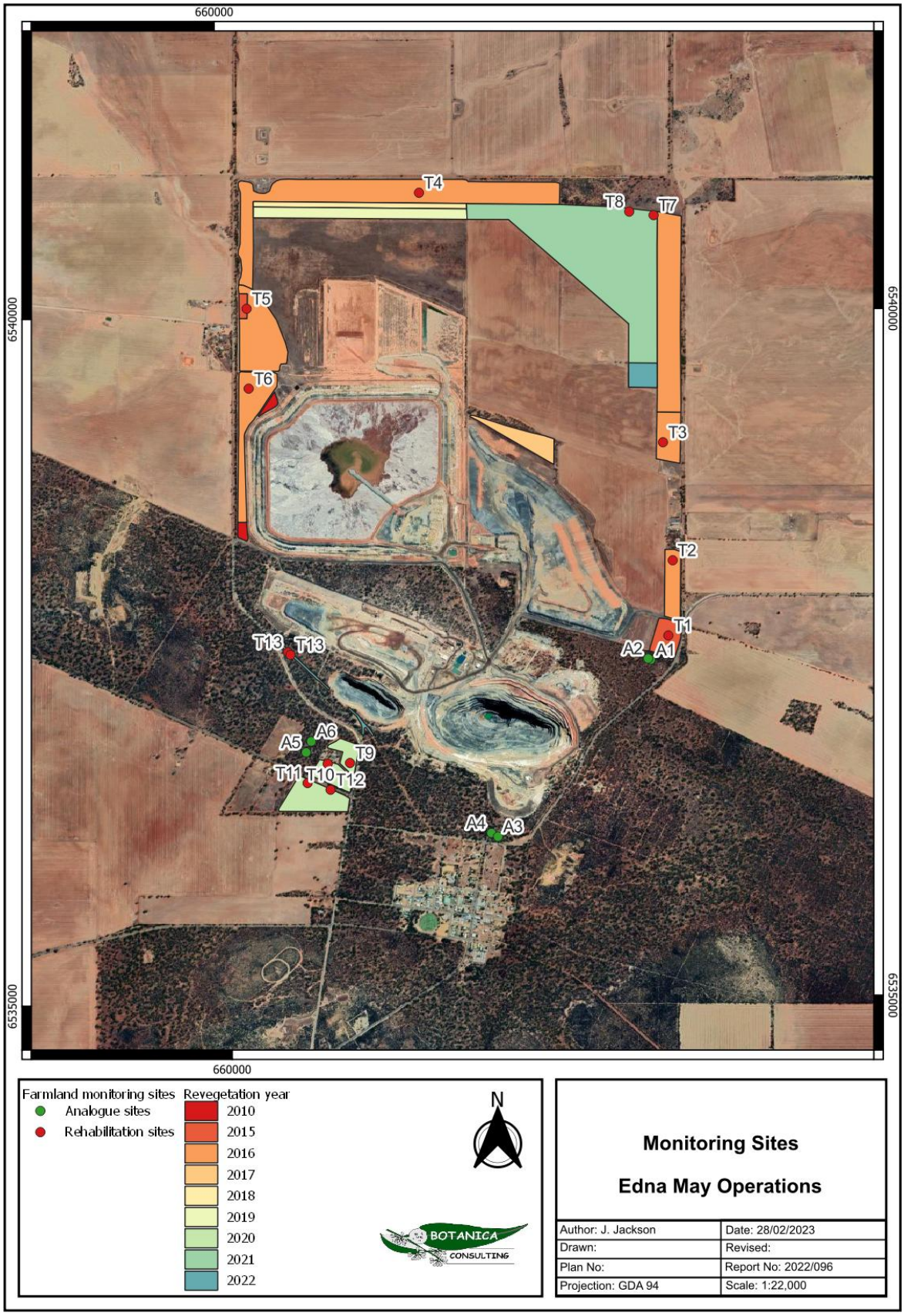


Figure 1-2: Farmland Rehabilitation and Vegetation Monitoring Transect Locations

1.2 Regional Setting

1.2.1 Vegetation

The Edna May Gold Mine is located within the Merredin Subregion of the Avon Wheatbelt Bioregion, which has been subject to extensive clearing for agriculture and grazed by stock. Remnant Eucalypt woodland vegetation within the region is protected under Commonwealth legislation as a Threatened Ecological Community (TEC) known as the 'Eucalypt woodlands of the Western Australian Wheatbelt'.

The Merredin subregion is characterized by gently undulating landscapes of low relief; proteaceous scrub heaths on residual lateritic uplands and mixed woodlands on quaternary alluvial soils. The region is dominated by mixed woodland of Mallee and Eucalyptus species. Remnant vegetation, riparian systems, populations of threatened native flora and fauna species and ecosystems are in poor condition, with the trend expected to decline (McKenzie, May and McKenna, 2002). Extensive clearing of native vegetation has led to salinity problems being experienced throughout the bioregion.

Multiple reconnaissance flora and vegetation surveys of native vegetation surrounding the Edna May Gold Mine have been conducted, including surveys conducted by MWH (2014), Phoenix Environmental Services (2016; 2017) and Botanica Consulting (2018). From these surveys, a total of five natural vegetation communities are present in the area surrounding the Edna May Gold Mine:

1. *Eucalyptus corrugata* Mallee Woodland
2. *Eucalyptus longicornis* Woodland
3. *Eucalyptus loxophleba* Mallee Woodland
4. *Eucalyptus salubris* Woodland
5. *Melaleuca/Acacia* Scrub

1.2.2 Land Systems

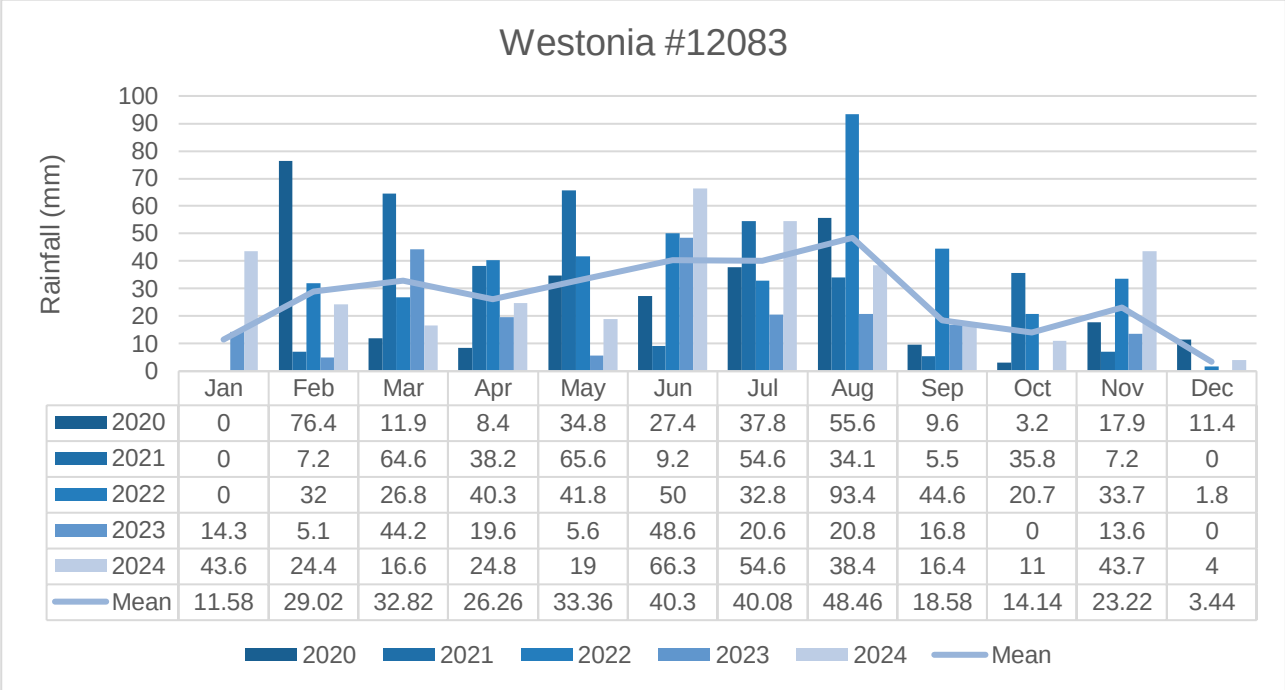
Land systems are defined by Tille (2006) as areas or groups of areas throughout which there are recurring patterns of topography, soil and vegetation. The Edna May Project farmland revegetation is located across four land systems as described in Table 1-2.

Table 1-2: Land Systems across the EMO Project area

Land System	Description
Baladjie	Valley floors and lower slopes, in the northern Zone of Ancient Drainage, with calcareous loamy earth and alkaline red loamy duplex (mostly shallow). Woodland.
Bencubin	Gently undulating gneissic and granitic terrain with rock outcrop surrounded by mallee-broom bush duplexs and yellow sandplain.
Holleton	Lateritic sandplain and other soil formations on low isolated often mafic hills. Isolated low hills and rises with yellowish red sandplain and Mallee and Gimlet duplexes on lower slopes.
Tandegin	Sandplain dominated interfluves with weakly indurated lateritised crests and upper slopes and long colluvial yellow sandplain upper to lower slopes. Unlateritised surfaces dominated by sodic and alkaline duplex soils.

1.2.3 Climate

The climate of the Merredin subregion is characterised as semi-arid warm Mediterranean and is characterised by hot dry summers and wet winters (Beard, 1990; Beecham, 2001). Rainfall data for the Westonia weather station (#12083), located approximately 1 km south-east of the Edna May Gold Mine, is shown in Figure 1-3(BoM, 2025). Rainfall for 2024 was above the annual average of 330.5 mm, with 315.1 mm recorded until the end of October 2024, with the months of June and July receiving above the monthly average (Figure 1-3) (BoM, 2025).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	0	76.4	11.9	8.4	34.8	27.4	37.8	55.6	9.6	3.2	17.9	11.4
2021	0	7.2	64.6	38.2	65.6	9.2	54.6	34.1	5.5	35.8	7.2	0
2022	0	32	26.8	40.3	41.8	50	32.8	93.4	44.6	20.7	33.7	1.8
2023	14.3	5.1	44.2	19.6	5.6	48.6	20.6	20.8	16.8	0	13.6	0
2024	43.6	24.4	16.6	24.8	19	66.3	54.6	38.4	16.4	11	43.7	4
Mean	11.58	29.02	32.82	26.26	33.36	40.3	40.08	48.46	18.58	14.14	23.22	3.44

Figure 1-3: Rainfall Data for the Westonia weather station (#12083) (BoM, 2025)

2 METHODS

For the 2024 monitoring there were 13 sites in the farmland rehabilitation areas, including a site at the old Warrachupin Road, and six analogue sites in nearby Eucalypt woodlands. Transect coordinates and year of rehabilitation are presented in Table 2-1.

Table 2-1: Monitoring Transect Details

Rehabilitation/ Analogue Site	Rehab year	Transect ID	GPS Coordinates (GDA 94, 32751)
Site 1	2015	T1	51J 91495 6530951
Site 2	2016	T2	51J 91501 6531500
Site 3	2016	T3	51J 91406 6532358
Site 4	2016	T4	51J 89807 6534117
Site 5	2015	T5	51J 88761 6533229
Site 6	2016	T6	51J 88797 6532647
Site 7	2021	T7	51J 91283 6534011
	2021	T8	51J 91129 6534031
Slippery's Paddock	2020	T9	51J 89538 6529943
	2020	T10	51J 89399 6529969
	2020	T11	51J 89278 6529787
	2020	T12	51J 89424 6529744
Warrachuppin Road	2022	T13	51J 89119 6530737
Analogue 1	-	A1	51J 91391 6530770
	-	A2	51J 91375 6530778
Analogue 2	-	A3	51J 90486 6529443
	-	A4	51J 90444 6529468
Analogue 3	-	A5	51J 89261 6530010
	-	A6	51J 89290 6530091

Each transect comprised of 1m x 1m quadrats (25 quadrats per transect) along the length of the transect (25m length).

Quantitative floristic data collected in each sequential 1 m x 1 m quadrat along the 25 m transect included:

- Identification of all vascular plants within the quadrat (species richness);
- Count of all vascular plants of each species recorded in the quadrat (plant density);
- Visual estimate of the perennial foliage cover of each species in the quadrat (vegetation cover); and
- Visual estimate of the weed cover in the quadrat (weed cover).

The following assessments were conducted on the quadrat data collected for each transect:

- Species Richness (total number of perennial species) within each transect
- Species Diversity (Shannon diversity index (H)) within each transect
- Plant Density (total number of perennial plants) within each transect
- Vegetation Cover (percentage of live perennial foliage) within each transect

- Relative Weed Cover (percentage of weed foliage[1]/total foliage cover X100) within each transect
- Weed cover (total percentage of foliage) for Weeds of National Environmental Significance (WONS) listed by the Department of Agriculture, Water and the Environment (DAWE, 2022) and Declared Plants listed by Department of Primary Industries and Regional Development (DPIRD, 2020) within each transect.

Annuals/ short-lived species and weed species were excluded from the biodiversity assessments (richness, diversity, density and vegetation cover).

Completion criteria has been taken from the EMO Offset Rehabilitation Plan 2020 – 2022 (2019) (Table 2-2). Completion criteria based on the minimum biodiversity and landscape function critical threshold as described by Tongway & Hindley (2003) based on three successive years of monitoring data at which a landform is self-sustaining (Beyond the critical threshold, the ecosystem becomes increasingly more self-sustaining and able to survive stress and disturbance), both natural and human induced the ecosystem becomes increasingly more self-sustaining and able to survive stress and disturbance, both natural and human induced (Tongway, & Hindley 2003). Results will be compared against analogue site/s to ensure target biodiversity values are representative of the natural environment and consistent with the Westonia Common.

Completion criteria targets for weed coverage are based on published literature which suggests that weed cover (non-naturalised weeds) exceeding 40% impedes native vegetation growth. Target has been set at lower threshold to ensure weeds identified/ managed before native vegetation impacts occur (<20% target for weeds not listed as WONS or Declared Plants; 0% target for weeds listed as WONS or Declared Plants).

The completion criteria targets were modified in the 2020-2022 Offset Rehabilitation Plan and are different to what has been presented in previous reports. Therefore, all previous years monitoring assessments can be found in Appendix C.

Table 2-2: Completion Criteria Targets

Completion Criteria	Completion Criteria Target
Species Richness (400 m²)	>80% of the analogue mean
Plant Density (plants/ha)	50% of the analogue mean
Vegetation Cover (%)	50% of the analogue mean
Weeds of National Environmental Significance (%)	<0%
Declared Plants (%)	<0%
Relative Weed Cover[3] (%)	<20% of the analogue mean

[1] Relative weed cover calculated for all weeds not listed as WONS or Declared Plants. Much of the weed cover was dry/ dying off at the time of assessment (summer) however distinction between live and dead weed foliage was not possible. As a result, the total coverage was recorded which provides a conservative/ over-estimation of the actual weed cover. Further monitoring in cooler climatic conditions (winter) will determine whether weeds have persisted.

2.1 Analogue Site Selection

The analogue sites were selected to represent native vegetation in close proximity to the rehabilitated areas that the rehabilitated areas could be expected to return to. The analogue sites were selected to replicate the species composition, biodiversity, and landscape function that probably existed at the site before mining disturbance. The analogue sites are within the Baladjie and Holleton landscape systems. There are four of the rehabilitated sites within the Baladjie system.

The rehabilitation transect monitoring results are compared against the analogue transect monitoring results to confirm that target biodiversity and landscape function values of the rehabilitation sites are comparative to the surrounding natural landscape.

3 RESULTS

3.1 Vegetation Monitoring

The total species list for the 2024 monitoring (including annuals/short-lived species and weed species excluded from the analysis) is provided in Appendix A. Photographic monitoring records for each transect is provided in Appendix B. The 2017-2024 results for each transect are summarised in Table 3-1.

No Weeds of National Significance or Declared plants have been recorded at any of the sites during the previous monitoring, and this data is not presented in this table.

Table 3-1: Monitoring Results Summary 2017-2024

Site	Site	Species Richness								Plant Density (m²)								Vegetation Cover %								Relative Weed Cover (%)							
		2017	2018	2019	2020	2021	2022	2023	2024	2017	2018	2019	2020	2021	2022	2023	2024	2017	2018	2019	2020	2021	2022	2023	2024	2017	2018	2019	2020	2021	2022	2023	2024
Site 1	T1	15	16	16	10	7	8	8	8	1.9	2.1	2.1	1.7	1.2	1.4	1.2	0.9	35	40	40	40	68.5	73	62	43	28	7	0	0	9	6.3	0	18.7
Site 2	T2	8	4	4	4	4	5	6	6	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.3	5	10	10	10	16	24.5	24	26	82	89	45	10	50	60	4	3.07
Site 3	T3	10	10	9	7	11	10	12	13	1.0	0.8	0.7	0.5	0.8	0.8	1.1	1.3	15	15	15	15	63	56	51	45.5	50	60	0	0	28	26.1	0	2.11
Site 4	T4	8	5	6	5	6	6	5	5	1.1	0.7	0.7	0.7	0.7	0.7	0.6	0.6	15	10	20	30	34	35.5	37	57	20	54	51	30	14	12.8	0	5.13
Site 5	T5	7	5	7	7	6	5	6	6	0.5	0.2	0.3	0.3	0.3	0.2	0.4	0.4	10	10	10	10	18	20.5	26	28	2	89	0	20	74	65.7	43.5	41.7
Site 6	T6	12	10	10	10	9	9	9	9	1.2	1.0	1.2	1.2	1.1	1.4	1.2	1.2	18	10	10	20	39	40.5	53	53	28	40	0	5	50	46.1	7.02	7.02
Site 7	T7					2	2	2	2					0.1	0.1	0.1	0.1					0.5	1	2	5					99	98.9	98	94.3
Site 7	T8					1	2	2	2					0.0	0.1	0.4	0.7					0	1	2	7					99	99	94.9	90.5
SLP	T9				5	9	7	6	6				1.8	2.3	2.6	3.2	1.2				10	25	24	30	32				20	59	59.7	70.9	68.9
	T10				3	8	7	7	6				0.8	1.4	2.0	2.4	2.2				10	20	19.5	33	48				10	62	64.9	2.63	2
	T11					2	2	4	3					0.2	0.4	0.6	0.4					1.5	20.5	27	38					97	82.1	56.5	48
	T12					3	2	3	5					0.2	0.2	0.2	0.4					3	5	11	19					71	92.2	56.4	52.4
Warra Rd	T13						3	3	5						3.0	2.8	3.1						5	36	58						1.92	15.5	0
A1T1	A1	11	11	11	6	12	10	10	10	4.4	5.0	2.2	0.4	3.6	5.4	3.2	2.2	50	50	50	50	56	67	54	50	0	0	0	0	0	0	0	0
A1T2	A2	14	12	12	6	9	10	10	10	2.8	2.5	1.4	0.4	1.8	2.2	2.0	2.7	80	70	70	65	67	67.5	63	64	0	0	0	0	0	0	0	0
A2T1	A3	7	6	6	6	7	7	8	9	2.8	2.4	0.2	1.9	1.8	1.7	1.8	1.9	100	100	100	100	84	76.5	77	78	0	0	0	0	0	0	0	0
A2T2	A4	6	6	6	5	5	5	5	6	1.4	1.9	1.7	1.3	1.0	0.9	1.4	1.4	75	70	70	70	37	37.5	40	42	0	0	0	0	0	0	0	0
A3aT1	A5				3	7	7	6	6				1.6	1.6	3.0	2.5	4.3				75	51	53.5	51	57				0	0	0	0	0
A3aT2	A6				4	8	7	7	6				2.0	3.4	5.0	4.7	4.2				80	71	91	88	75				0	0	0	0	0
Mean Analogue		**9**	**8**	**8**	**5**	**8**	**8**	**8**	**8**	**3.8**	**2.9**	**1.6**	**1.3**	**2.2**	**3.0**	**2.6**	**2.8**	**70**	**67**	**67**	**73**	**61**	**66**	**62**	**61**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

T* sites are rehab sites, A* sites are Analogue sites.

3.1.1 Completion Criteria Assessment

An assessment of the rehabilitation sites against completion criteria targets for 2024 monitoring is provided in Table 3-2. Completion criteria has been taken from the EMO Offset Rehabilitation Plan 2020 – 2022 (2019). All previous years monitoring assessments can be found in Appendix C.

The plant density (m²) met the completion criteria at two sites. Species richness (25m²) met the completion criteria at three sites. Vegetation cover (%) completion criteria was met at eight sites, an increase from six sites in 2023. One site met completion criteria for relative weed cover, this was a decrease from 2023, when three sites met the criteria. No WoNS or declared plants were present at any sites.

Overall, the assessments against completion criteria have been consistent for the six years of monitoring, with each site not varying greatly. However, the rehabilitation at the farmlands sites north of the Edna May operations has consistently rated better than the Slippery's Paddock rehabilitation (Appendix C).

Table 3-2: Assessment of rehabilitation sites against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
2015 Rehabilitation	T1	0.9	8	43	18.66	0	0
	T5	0.3	6	26	41.7	0	0
2016 Rehabilitation	T2	1.3	13	45.5	3.1	0	0
	T3	0.6	5	57	2.1	0	0
	T4	0.4	6	28	5.1	0	0
	T6	1.2	9	53	7.02	0	0
2021 Rehabilitation	T7	0.1	2	5	94.26	0	0
	T8	0.7	2	7	90.52	0	0
2020 Rehabilitation	T9	1.2	6	32	68.87	0	0
	T10	2.2	6	48	2	0	0
	T11	0.4	3	38	47.95	0	0
	T12	0.4	5	19	52.38	0	0
2022 Rehabilitation	T13	3.1	5	58	0	0	0

Green shading = site has met completion criteria target; Red shading = did not meet completion criteria target.

3.1.2 2015 Rehabilitation

In 2024, a total of 21 taxa were recorded within the transects in the 2015 rehabilitated areas (T1 and T5). 18 of these 21 taxa were native plants, including four species of native annuals. Three weed species were present, these results were similar to the 2023 results.

Species richness results were stable and recorded the same results from 2023, plant density had decreased from 2023 (Figure 3-1). Vegetation cover had decreased from 44% in 2023 to 36% in 2024. The analogues sites had also decreased slightly (Figure 3-2).

T1 met the completion criteria target for species richness (25m²) and vegetation cover (%). T5 did not meet any completion criteria targets in 2024. All sites met the completion criteria targets for not having any WoNS or declared plants present (Table 3-3).

Weed cover was 18.7% at T1 and 41.7% at T5, these had increased from the 2023 results. A weedy grass was dominant at T5, this is evident in the photo at Figure 3-3, and seed of this is likely blown in from adjacent agricultural areas. No WoNS or declared plants were present at these sites.

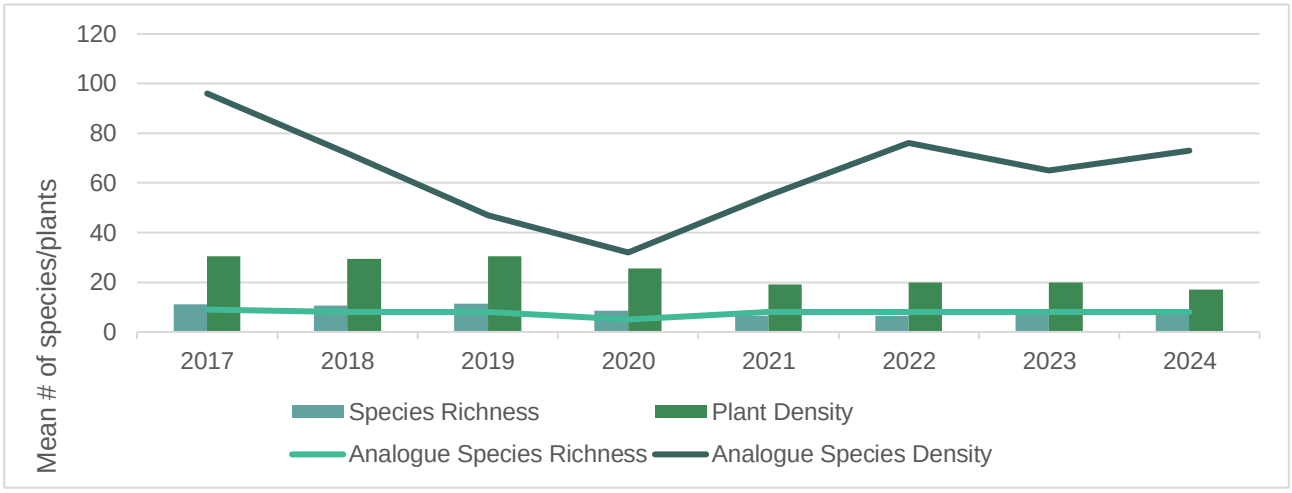


Figure 3-1: Mean species richness and total plant density of 2015 Rehabilitation sites

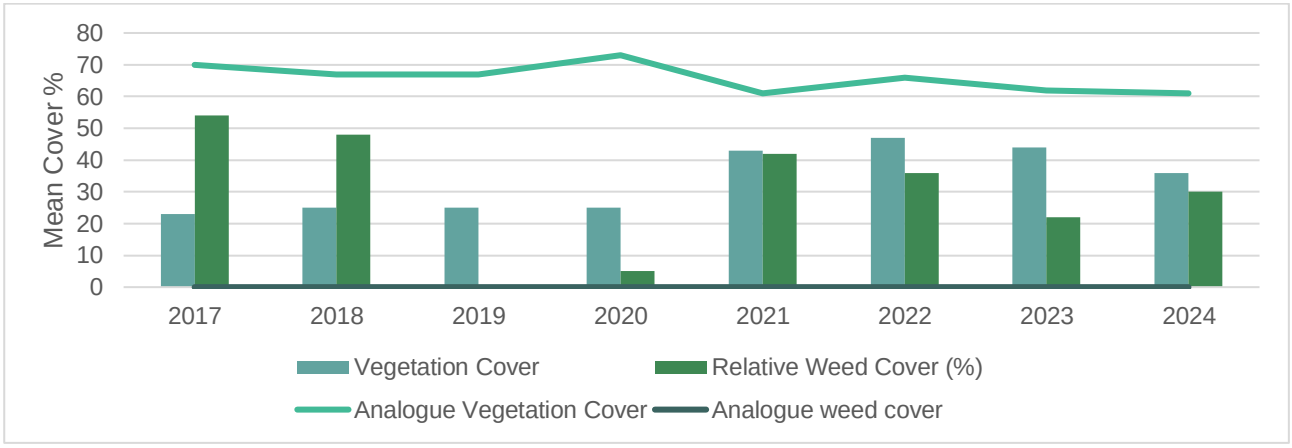


Figure 3-2: Mean vegetation cover and relative weed cover (%) of 2015 Rehabilitation sites

Table 3-3: Assessment of 2015 rehabilitation sites against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
2015 Rehabilitation	**T1**	0.9	8	43	18.66	0	0
	T5	0.3	6	26	41.7	0	0

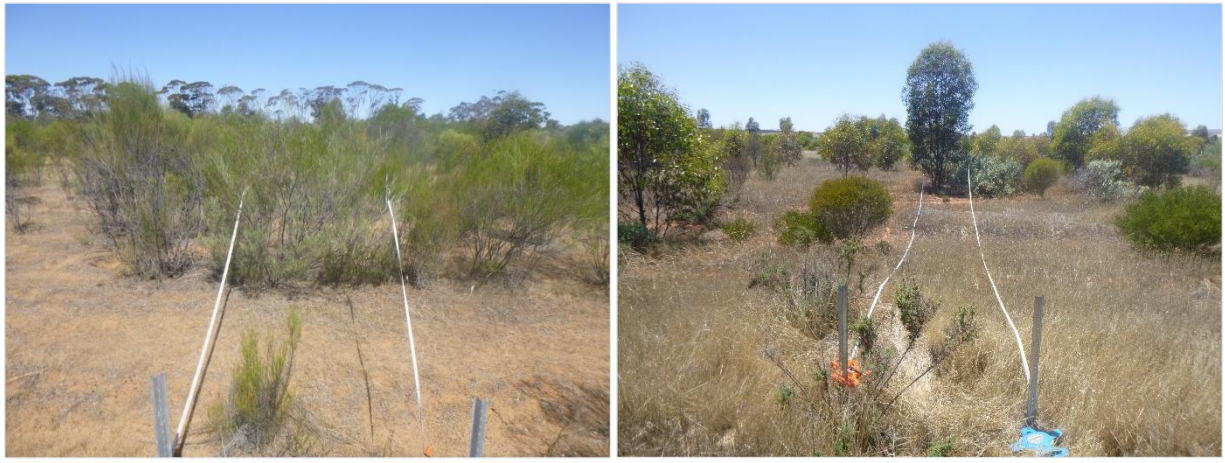


Figure 3-3: 2024 photos of transects T1 (left) and T5 (right)

3.1.3 2016 Rehabilitation

In 2024, a total of 23 taxa were recorded within the four transects in the 2016 rehabilitated areas (T2, T3, T4 and T6). 19 of these 23 taxa were native plants, with four weed species present, this is an increase from two weed species present in 2023. The Threatened flora *Eremophila resinosa* was present at T2 and T3.

Mean species richness had increased slightly from 2023 and plant density had increased slightly from previous years (Figure 3-4). Vegetation cover has increased slightly since 2023, weed cover has decreased since 2023 (Figure 3-5). Note that vegetation cover had decreased slightly for the analogue sites.

No sites met the completion criteria target for plant density (m²). Two sites met the completion criteria for species richness (25m²) and three sites met the vegetation cover (%) target. All sites met the completion criteria targets for not having any WoNS or declared plants present (Table 3-4).

Weeds had decreased slightly in 2024; however this result is much lower than the first six years after rehab. A daisy, Globe chamomile (*Oncosiphon piluliferum)* was a weed that was present at all 2016 rehab sites (Figure 3-6). No WoNS or declared plants were present at these sites.

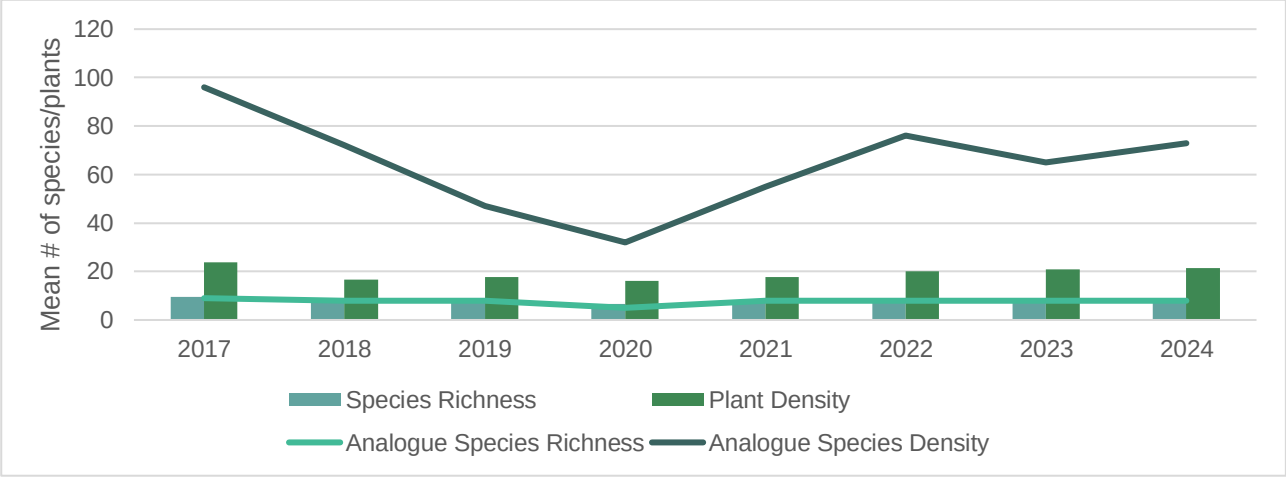


Figure 3-4: Mean species richness and total plant density of 2016 Rehabilitation sites

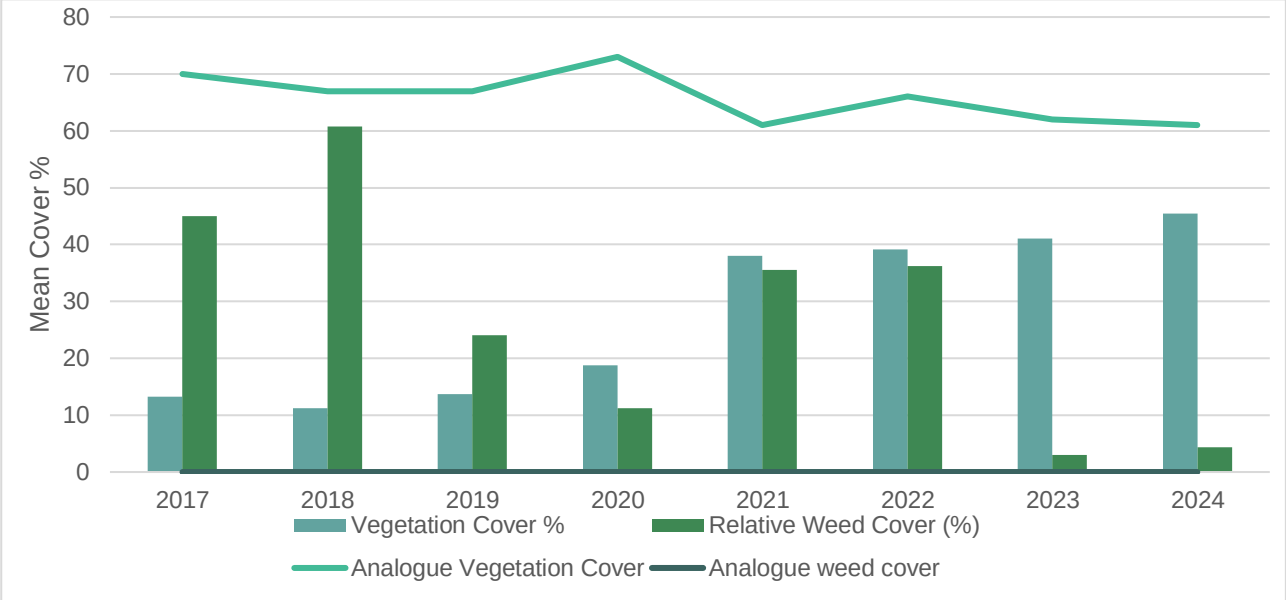


Figure 3-5: Mean vegetation cover and relative weed cover (%) of 2016 Rehabilitation sites

Table 3-4: Assessment of 2016 rehabilitation sites against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
2016 Rehabilitation	**T2**	1.3	13	45.5	3.1	0	0
	T3	0.6	5	57	2.1	0	0
	T4	0.4	6	28	5.1	0	0
	T6	1.2	9	53	7.02	0	0

Figure 3-6: 2024 photos of transects T2 (left) and T3 (right)

Figure 3-7: 2024 photos of transects T4 (left) and T6 (right)

3.1.4 2020 Slippery's Paddock Rehabilitation

In 2020, Slippery's Paddock transects were established and monitoring commenced at two sites (T9 and T10). In 2021 an additional two transects were added to the Slippery's Paddock rehabilitation (T11 and T12).

In 2024, a total of 16 taxa were recorded within the transects, twelve of these were native plants, and four weed species were present.

Species richness had remained stable from previous years and plant density had decreased to 2021 levels (Figure 3-8). Vegetation cover has increased since previous years and weed cover has decreased slightly since 2023 (Figure 3-9). Note that vegetation cover had decreased for the analogue sites.

T10 met the completion criteria target for plant density (m²), no sites met the completion criteria target for species richness (25m²), three sites met the criteria for vegetation cover (%). All sites met the completion criteria targets for not having any WoNS or declared plants present (Table 3-5).

Relative weed cover had decreased slightly since 2023 results. Similar to 2023 results, weedy grasses were dominant at T10, T11 and T12, seed of these grasses is likely blown in from adjacent agricultural areas, this is evident in the photos at Figure 3-10 and Figure 3-11.

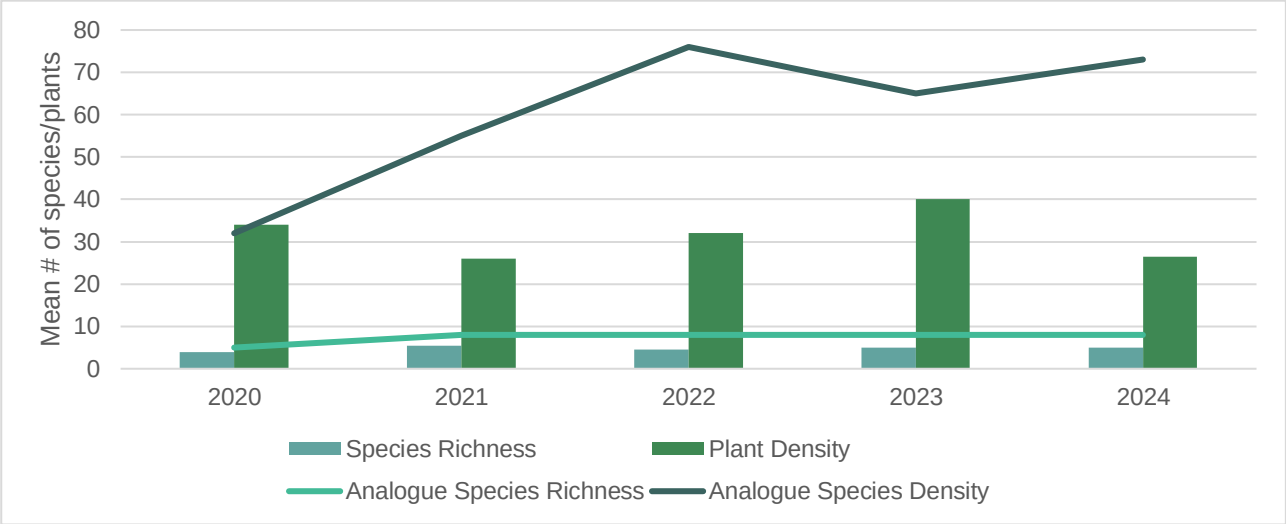


Figure 3-8: Mean species richness and total plant density of the Slippery's Paddock Rehabilitation sites

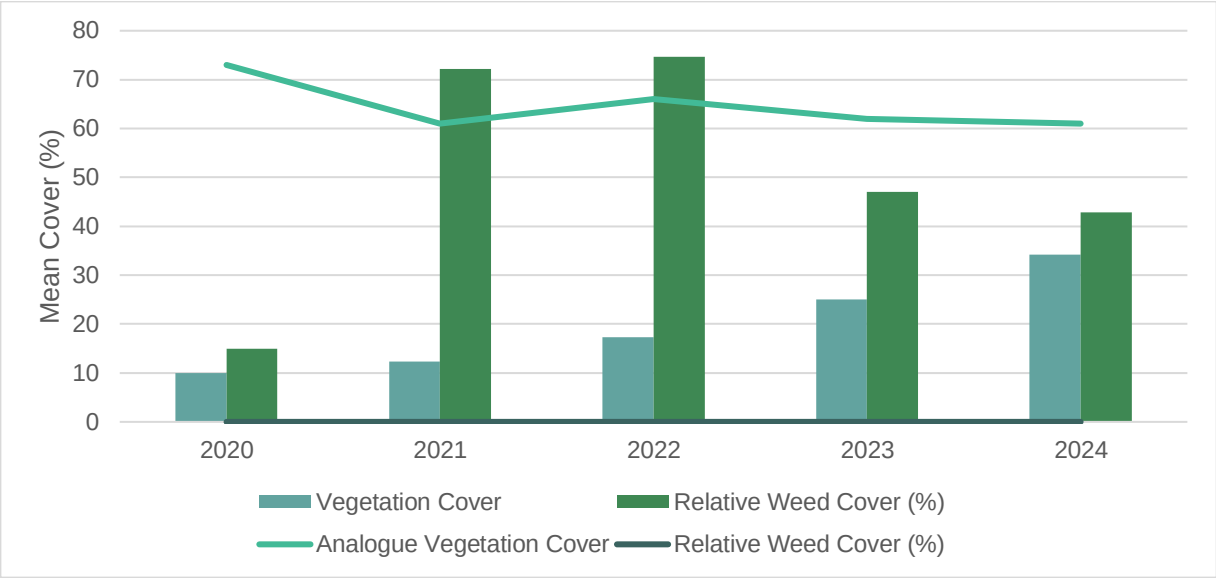


Figure 3-9: Mean vegetation cover and relative weed cover (%) of the Slippery's Paddock Rehabilitation sites

Table 3-5: Assessment of 2020 rehabilitation sites against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
2020 Rehabilitation	T9	1.2	6	32	68.87	0	0
	T10	2.2	6	48	2	0	0
	T11	0.4	3	38	47.95	0	0
	T12	0.4	5	19	52.38	0	0

Figure 3-10: 2024 photos of transects T9 (left) and T10 (right)

Figure 3-11: 2024 photos of transects T11 (left) and T12 (right)

3.1.5 2021 Rehabilitation

Approximately 62 ha was rehabilitated in 2021 and two sites were established here during the 2021 monitoring (T7 and T8). Results against completion criteria are presented in Table 3-6. As for previous years, all measures rated poorly, and weed presence was high (Figure 3-12, Figure 3-13), however no WoNS or declared plants were recorded.

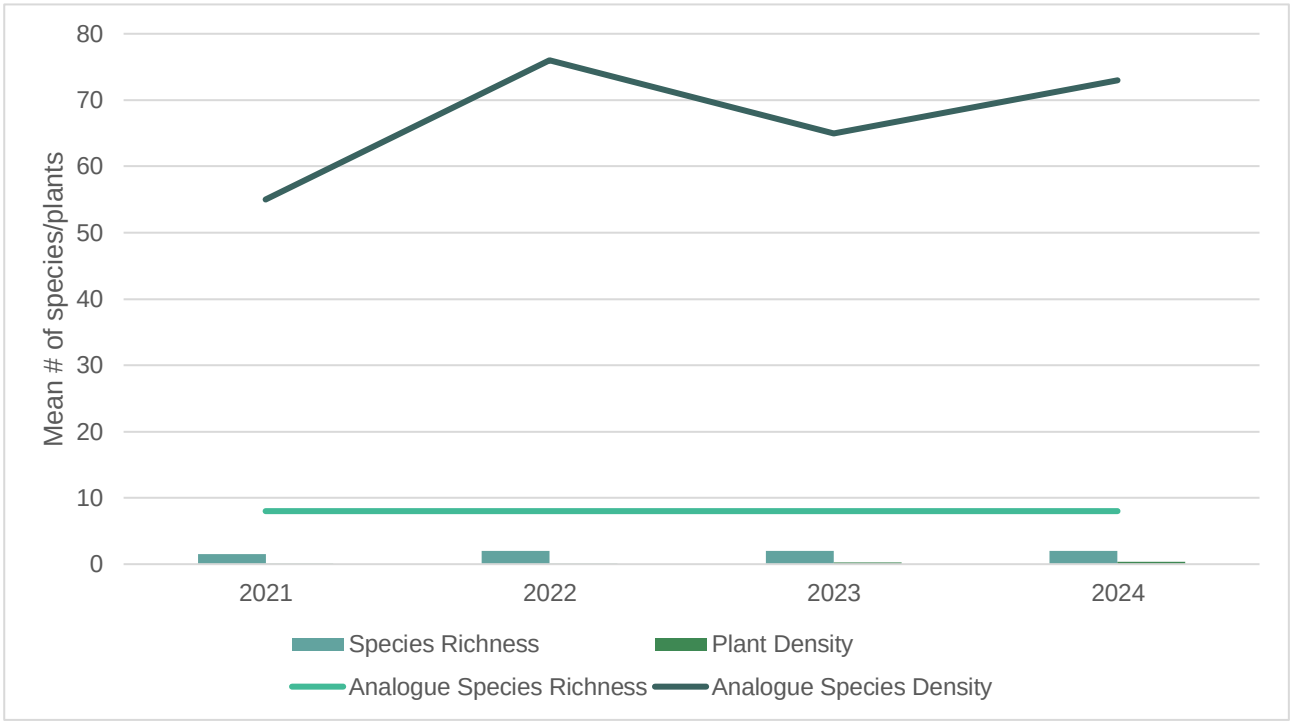


Figure 3-12: Mean species richness and total plant density of the 2021 Rehabilitation sites

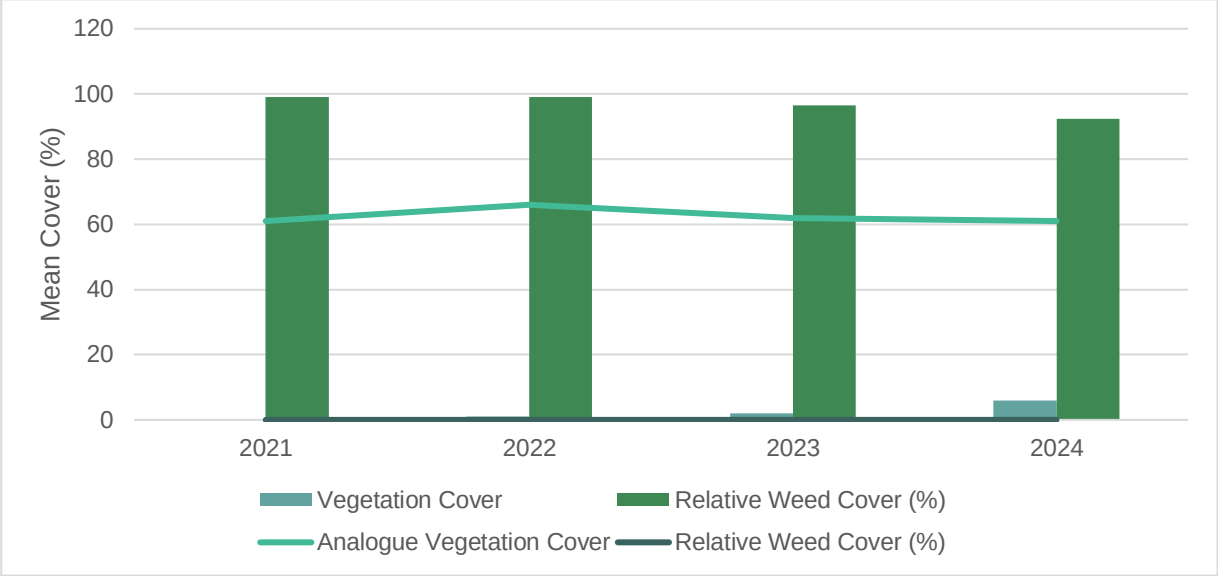


Figure 3-13: Mean vegetation cover and relative weed cover (%) of the 2021 Rehabilitation sites

Table 3-6: Assessment of 2021 rehabilitation sites against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
2021 Rehabilitation	**T7**	0.1	2	5	94.26	0	0
	T8	0.7	2	7	90.52	0	0

Figure 3-14: 2024 photos of transects T7 (left) and T8 (right)

3.1.6 2022 (Warrachuppin Road) Rehabilitation

Approximately 1.06 ha was rehabilitated in 2022 and one new site was established here during the 2022 monitoring (T13). Results against completion criteria are presented in Table 3-7. The site met the completion criteria target for plant density, vegetation cover (%) and relative weed cover (%). All results had increased from 2023, with weed cover at zero, this was the only rehab site with no weeds present (Table 3-8, Figure 3-15). As for all other sites, no WoNS or declared plants were recorded.

Table 3-7: Assessment of the Warrachuppin Road rehabilitation site against completion criteria for 2024 monitoring

		Plant Density (m²)	Species Richness (25m²)	Vegetation Cover (%)	Relative Weed Cover (%)	Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	<20% of the analogue mean (0)	0%	0%
	=	1.4	6.4	30.5	0	0%	0%
Warrachuppin Road	**T13**	3.1	5	58	0	0	0

Table 3-8: Results for 2022 rehabilitation sites (2022 to 2024)

	Species Richness			Plant Density		
Year	**2022**	**2023**	**2024**	**2022**	**2023**	**2024**
2022 Rehabilitation	3	3	5	76	69	77
Analogue Species Richness	8	8	8	76	65	73

	Vegetation Cover (%)			Relative Weed Cover (%)		
Year	**2022**	**2023**	**2024**	**2022**	**2023**	**2024**
2022 Rehabilitation	5	36	58	1.9	15.5	0
Analogue Species Richness	66	62	61	0	0	0

Figure 3-15: 2024 photo of transect T13

4 DISCUSSION

Vegetation cover and plant density criteria have not yet been met for the majority of rehabilitated sites; however, given the rehabilitation is at an early stage of development (less than ten years old) this result is not unexpected when compared to the very mature and stable environments of the analogue sites.

The plant density (m²) results met the completion criteria at two sites, this was a decrease from three sites in 2023. Species richness (25m²) met the completion criteria at three sites, this had decreased from four sites in 2023. Eight sites met the completion criteria for vegetation cover (%) this was an increase from six sites in 2023. One site (T13) met completion criteria for relative weed cover, this was the only site with no weeds present, however no WoNS or declared plants were present so they met these criteria.

Overall, the assessments against completion criteria have been consistent for the seven years of monitoring, with each site not varying greatly. However, the rehabilitation at the farmlands sites north of the Edna May operations has consistently rated better than the Slippery's Paddock rehabilitation, this is not unexpected given the Slippery's Paddock rehabilitation is four to five years younger (Appendix C).

Weed presence and density (none of which were listed as WONS or Declared Plants) of the rehabilitated sites had notably increased at most sites in 2024, and this could be the result of higher rainfall in 2024 compared to previous years. It is likely many of the weeds present are being blown in from seed from surrounding farms and will be difficult to manage in the long term, until more native plants establish and increase in vegetation cover. Given the current cover of weeds at all sites, continued weed management is advised.

Emergent Eucalypts identified in the first year of monitoring (2017) at the farmlands sites have continued to show good growth over the past 12 months and were in a healthy condition, yet were sterile and could not be identified to species level. Other chenopod species that were present at the analogue sites are consistently occurring and recolonising the rehabilitation sites.

5 BIBLIOGRAPHY

Beard, J.S., (1990). *Plant Life of Western Australia,* Kangaroo Press Pty Ltd, NSW.

Beecham (2001), *A Biodiversity Audit of Western Australia's 53 Biogeographical Region in 2001- Avon Wheatbelt Region (AW1 Merredin Subregion)*, Department of Conservation and Land Management.

Botanica Consulting (BC) (2018). R*econnaissance Flora and Vegetation Survey Greenfinch Project*. Prepared for Ramelius Resource Pty Ltd. January 2019.

Bureau of Meteorology (BOM) (2023). *Climate information for Westonia Weather Station*. Available WWW: http://www.bom.gov.au/climate/data/.

DAWE (2022). *Pest Animals and Weeds in Australia.* Available WWW: https://www.awe.gov.au/biosecurity-trade/pests-diseases-weeds/pest-animals-and-weeds

DPIRD (2020). *Declared Organism database search,* Department of Primary Industries and Regional Development, Western Australia. Available: http://www.biosecurity.wa.gov.au/

EMO (2021). *Edna May Operation Mine Closure Plan*. Prepared by Botanica Consulting for Edna May Operations.

McKenzie, N. L., May, J. E. and McKenna, S. (2002). *Bioregional summary of the 2002 biodiversity audit for Western Australia.* Department of Conservation and Land Management.

MWH Australia Pty Ltd (2014). *Evolution Mining Edna May and Greenfinch Project: Level 2 Flora and Vegetation Assessment.*

Phoenix (2016). *Flora and vegetation survey for the Edna May Greenfinch Project*. Prepared for Evolution Mining Ltd by Phoenix Environmental Sciences Pty Ltd. August 2016.

Phoenix (2017). Targeted *Eremophila resinosa* survey of the Edna May Gold Project. Phoenix Environmental Sciences Pty Ltd, Balcatta, WA. Unpublished report prepared for Evolution Mining Ltd.

Ramelius Resources (2019). *Edna May Operations Offset Rehabilitation Plan 2020-2022.*

Ramelius Resources (2021). Edna May Operations: *Eremophila resinosa* translocation sites, 2020 Report. January 2021.

Ramelius Resources (2023). *ASX Release*. Available WWW: https://www.rameliusresources.com.au/wp-content/uploads/bsk-pdf-manager/2023/01/Confirmation-of-Release-Edna-May-Stage-3-PFS-Update.pdf

Tille, P. (2006). *Soil Landscapes of Western Australia's Rangelands and Arid Interior*. Department of Agriculture and Food Western Australia

Tongway, D and Hindley, N (2003). *Landscape Function Analysis: Procedures for Monitoring and Assessing Landscapes, with special reference to Mine sites and Rangelands*. CSIRO Sustainable Ecosystems, Canberra. Updated February 2005.

Appendix A: Species list

*Green shading indicates weed species; blue shading indicates annual species; red shading indicates Threatened flora.

Taxon	Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7				Slippery's Paddock								Warra Rd		Analogue 1				Analogue 2				Analogue 3			
	T1		T2		T3		T4		T5		T6		T7		T8		T10		T9		T11		T12		T13		A1		A2		A3		A4		A5		A6	
	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover
Avena barbata (W)																	12	1	12	1	12	1	12	2														
Brassica tournefortii (W)																																						
Carrichtera annua (W)			12	<1																							4	<1										
Lolium rigidum (W)													1000	90	1000	80					30	4																
**Mesembryanthemum crystallinum (W)*					6	<1											80	2																				
**Oncosiphon piluliferum (W)*			50	1	30	1	60	2	50	<1	60	2	130	25	200	25																						
Poaceae sp wheat (W)									200	20	30	2					500	70			300	30	200	20														
Pentameris airoides (W)	200	10																																				
Sonchus asper (W)													2	<1																								
Acacia ?coolgardiensis	3	8																																				
Acacia acuminata	6	12			2	1													1	1							1	10										
Acacia colletioides	2	3			1	0.5	2	0.5			1	1																										
Acacia erinacea					1	1																																
Acacia hemiteles	2	3	1	1	3	6	4	6			2	4																										
Acacia merrallii			1	5	5	12	7	20			2	4											1	2					1	3								
Acacia microbotrya	1	2																																				
Acacia murrayana					1	1																																
Acacia spp.																									58	30												
Acacia steedmanii	4	2																																				
Allocasuarina campestris	4	10																																				
Aristida contorta (A)	4	0.5																																				
Atriplex amnicola									1	3																												
Atriplex bunburyana																									1	6												
Atriplex hymenotheca																																	1	<1				
Atriplex nummularia									1	6																												
Atriplex semibaccata (A)			1	<1															1	1					24	12												
Atriplex vesicaria											7	10			16	6													19	20	9	6			1	1		
Austrostipa elegantissima																											2	<1	6	1					2	1		
Austrostipa nitida											3	<1					2	<1									2	<1	6	<1	1	<1						
Calothamnus gilesii	1	3																																				
Convolvulus remotus															1	1																						
Enchylaena tomentosa					3	2																							1	1					4	4		
Eremophila decipiens																											1	1										
Eremophila ionantha																													3	2			3	2	1	4		
Eremophila resinosa			2	8	2	5																																
Eucalyptus ?salmonophloia			1	6	1	5	2	10																														
Eucalyptus ?salubris			1	6	1	6			2	14	2	6																										
Eucalyptus ?yilgarnensis											2	8																										
Eucalyptus longicornis																													2	50			2	30	3	30		
Eucalyptus salmonophloia																													1	10								

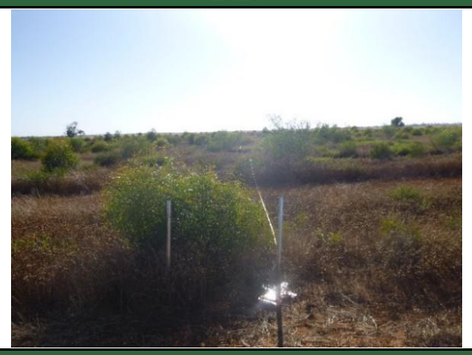
Taxon	Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7				Slippery's Paddock								Warra Rd		Analogue 1				Analogue 2				Analogue 3			
	T1		T2		T3		T4		T5		T6		T7		T8		T10		T9		T11		T12		T13		A1		A2		A3		A4		A5		A6	
	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover	No. plants	% Cover
Eucalyptus salubris																											1	20	1	10								
Eucalyptus spp.													1	3			1	2	5	24	8	34	3	10	6	10												
Exocarpos aphyllus																											1	6	2	3	1	3						
Maireana brevifolia			1	<1	2	1	1	0.5	2	1	10	16	1	2			4	22	1	1					6	2												
Maireana georgei																															1	<1						
Maireana tomentosa																	16	3	28	8											1	<1	3	<1	12	1	12	10
Maireana trichoptera																											30	2							30	6	60	15
Melaleuca eleuterostachya									1	3	1	4																										
Melaleuca pauperiflora					1	5																							2	30			2	30				
Melaleuca spp. *seedlings*					10	<1											1	1	7	4	1	4	2	4	5	10												
Olearia muelleri																											1	1										
Ptilotus exaltatus (A)																									28	6	7	1	12	<1	1	<1						
Ptilotus polystachyus (A)	2	<1																																				
Rhagodia drummondii																													2	1								
Rhodanthe floribunda (A)																											2	<1										
Salsola australis (A)			14	<1	8	1	30	<1	10	<1	6	<1	9	2	8	4	6	1	1	<1			8	1	4	1												
Sclerolaena diacantha																							1	2			35	2	43	4	19	1	17	4				
Sclerolaena uniflora									3	1							6	4	12	10															60	15	24	15
Senna artemisioides subsp. *filifolia*																											6	8										
Sida sp.																					2	<1	4	1														
Templetonia ceracea																															2	3						
Vittadinia gracilis																																						
Waitzia acuminata (A)	6	0.1																							1	<1												
Species richness (25m²)	**8**		**6**		**13**		**5**		**6**		**9**		**2**		**2**		**6**		**6**		**3**		**5**		**5**		**10**		**10**		**9**		**6**		**6**		**6**	
Plant Density (25m²)	**23**		**7**		**33**		**16**		**10**		**30**		**2**		**17**		**30**		**54**		**11**		**11**		**77**		**80**		**67**		**47**		**35**		**107**		**104**	
Species Richness (1m²)	**0.32**		**0.24**		**0.52**		**0.2**		**0.24**		**0.36**		**0.08**		**0.08**		**0.24**		**0.24**		**0.12**		**0.2**		**0.2**		**0.4**		**0.4**		**0.36**		**0.24**		**0.24**		**0.24**	
Perennial Plant Density (1m²)	**0.92**		**0.28**		**1.32**		**0.64**		**0.40**		**1.20**		**0.08**		**0.68**		**1.2**		**2.16**		**0.44**		**0.44**		**3.08**		**3.20**		**2.68**		**1.88**		**1.40**		**4.28**		**4.16**	
Total % Cover (excluding weeds)		**43**		**26**		**45.5**		**37**		**28**		**53**		**5**		**7**		**32**		**48**		**38**		**19**		**58**		**50**		**64**		**78**		**42**		**57**		**75**
Total % Cover (weeds)		**10**		**2**		**2**		**2**		**21**		**4**		**116**		**105**		**73**		**1**		**35**		**22**		**0**		**0**		**0**		**0**		**0**		**0**		**0**
Relative Cover of weeds (%)		**18.66**		**3.7037037**		**2.11**		**5.13**		**41.67**		**7.02**		**94.26**		**90.52**		**68.87**		**2.00**		**47.95**		**52.38**		**0.00**		**0**		**0**		**0**		**0**		**0**		**0**		**0**

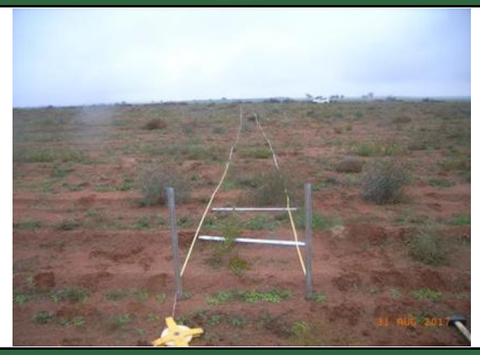
Appendix B: Photographs of Transects

	2017	2018	2019	2020
T1				
	2021	**2022**	**2023**	**2024**
T1				

	2017	2018	2019	2020
T2				

	2021	2022	2023	2024
T2				

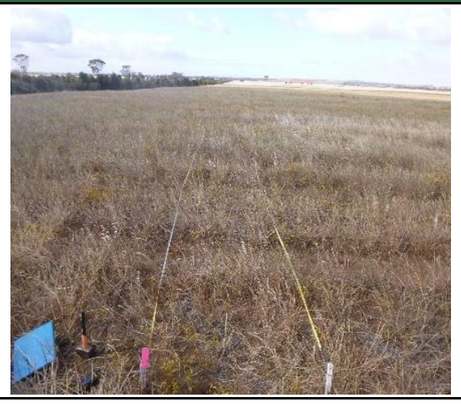
	2017	2018	2019	2020
T3				
	2021	**2022**	**2023**	**2024**
T3				

	2017	2018	2019	2020
T4				
	2021	**2022**	**2023**	**2024**
T4				

	2017	2018	2019	2020
T5				

	2021	2022	2023	2024
T5				

	2017	2018	2019	2020
T6				
	2021	**2022**	**2023**	**2024**
T6				

	2021	2022	2023	2024
T7				

	2021	2022	2023	2024
T8				

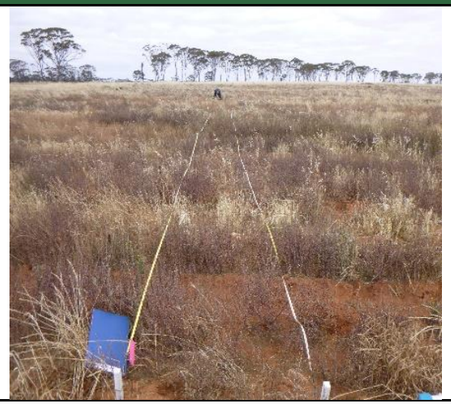
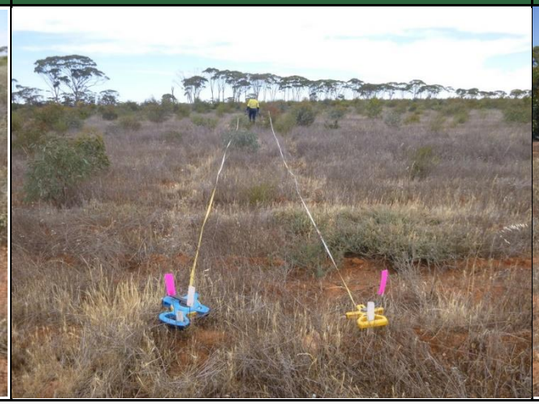
	2017	2018	2019	2020
T9				

	2021	2022	2023	2024
T9				

	2017	2018	2019	2020
T10				

	2021	2022	2023	2024
T10				

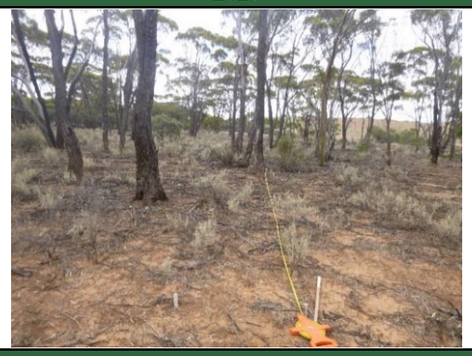
	2021	2022	2023	2024
T11				

	2021	2022	2023	2024
T12				

	2021	2022	2023	2024
T13				

	2017	2018	2019	2020
A1				
	2021	**2022**	**2023**	**2024**
A1				

	2017	2018	2019	2020
A2				
	2021	**2022**	**2023**	**2024**
A2				

	2017	2018	2019	2020
A3				
	2021	**2022**	**2023**	**2024**
A3				

	2017	2018	2019	2020
A4				
	2021	**2022**	**2023**	**2024**
A4				

	2017	2018	2019	2020
A5				*The original A5 was removed in 2020* 

	2021	2022	2023	2024
A5				

	2017	2018	2019	2020
A6				*The original A6 was removed in 2020* 

	2021	2022	2023	2024
A6				

Appendix C: Assessment of rehabilitation sites against completion criteria (2017 to 2020)

Measure	Target	Rehabilitation Category	2017						2018						2019						2020							
			2015 Rehabilitation		2016 Rehabilitation				2015 Rehabilitation		2016 Rehabilitation				2015 Rehabilitation		2016 Rehabilitation				2015 Rehabilitation		2016 Rehabilitation				Slippery's Paddock 2020 Rehabilitation	
			Site 1	Site 5	Site 2	Site 3	Site 4	Site 6	Site 1	Site 5	Site 2	Site 3	Site 4	Site 6	Site 1	Site 5	Site 2	Site 3	Site 4	Site 6	Site 1	Site 5	Site 2	Site 3	Site 4	Site 6	SLP T1	SLP T2
Plant Density (m^2)	≥2.4	Excellent	1.9	0.5	0.5	1	1.1	1.2	2.1	0.2	0.2	0.8	0.7	1	2.1	0.3	0.2	0.7	0.7	1.2	1.7	0.3	0.2	0.3	0.7	1.2	1.8	0.8
	≥1.2	Satisfactory																										
	<1.2	Requires review																										
Species Diversity Index	≥1.4	Excellent	2.3	1.6	2	2.2	1.9	2.2	2.4	1.6	1.3	2.2	1.4	2.1	2.4	2.1	1.3	2	1.5	2.1	1.9	1.9	1.2	1.8	1.4	2.1	1.4	0.8
	≥1.1	Satisfactory																										
	<1.1	Requires review																										
Species Richness	≥8	Excellent	15	7	8	10	8	12	16	5	4	10	5	10	16	7	4	9	6	10	10	7	4	7	5	10	5	3
	≥6	Satisfactory																										
	<6	Requires review																										
Vegetation Cover (%)	≥69	Excellent	35	10	5	15	15	18	40	10	10	15	10	10	40	10	10	15	20	10	40	10	10	15	30	20	10	10
	≥35	Satisfactory																										
	<35	Requires review																										
Relative Weed Cover (%)	0	Excellent	28	80	82	50	20	28	7	89	89	60	54	40	0	0	45	0	51	0	0	20	10	0	30	5	20	10
	<20	Satisfactory																										
	>20	Requires review																										
Weeds of National Environmental Significance (%)	0	Excellent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	Satisfactory																										
	>0	Requires review																										
Declared Plants (%)	0	Excellent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	Satisfactory																										
	>0	Requires review																										

Appendix D:Assessment of rehabilitation sites against completion criteria (2021 to 2024)

		Plant Density (m²)				Species Richness (25m²)				Vegetation Cover (%)				Relative Weed Cover (%)				Declared plants (%)	WoNS (%)
	Completion Criteria Target	50% of the analogue mean (2.2)	50% of the analogue mean (3.0)	50% of the analogue mean (2.6)	50% of the analogue mean (2.8)	>80% of the analogue mean (8)	>80% of the analogue mean (8)	>80% of the analogue mean (8)	>80% of the analogue mean (8)	50% of the analogue mean (61)	50% of the analogue mean (66)	50% of the analogue mean (62)	50% of the analogue mean (61)	<20% of the analogue mean (0)	<20% of the analogue mean (0)	<20% of the analogue mean (0)	<20% of the analogue mean (0)	0%	0%
		2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021-2024%	
	=	1.1	1.5	1.3	1.4	6.4	6.4	6.4	6.4	30.5	33	31	30.5	0	0	0	0	0%	0%
2015 Rehabilitation	**T1**	1.2	1.4	1.2	0.9	7	8	8	8	68.5	73	62	43	9	6.3	0	18.66	0	0
	T5	0.3	0.2	0.4	0.3	6	5	6	6	18	20.5	26	26	74	65.7	43.5	41.7	0	0
2016 Rehabilitation	**T2**	0.2	0.3	0.3	1.3	4	5	6	13	16	24.5	24	45.5	50	60	4	3.1	0	0
	T3	0.8	0.8	1.1	0.6	11	10	12	5	63	56	51	57	28	26.1	0	2.1	0	0
	T4	0.7	0.7	0.6	0.4	6	6	5	6	34	35.5	37	28	14	12.8	0	5.1	0	0
	T6	1.1	1.4	1.2	1.2	9	9	9	9	39	40.5	53	53	50	46	7	7.02	0	0
2021 Rehabilitation	**T7**	0.1	0.1	0.1	0.1	2	2	2	2	0.5	1	2	5	99	99	98	94.26	0	0
	T8	0	0.1	0.4	0.7	1	2	2	2	0	1	2	7	99	99	95	90.52	0	0
2020 Rehabilitation	**T9**	2.3	2.6	3.2	1.2	9	7	6	6	25	24	30	32	59	60	71	68.87	0	0
	T10	1.4	2	2.4	2.2	8	7	7	6	20	19.5	33	48	62	65	2.6	2	0	0
	T11	0.2	0.4	0.6	0.4	2	2	4	3	1.5	20.5	27	38	97	82	56.5	47.95	0	0
	T12	0.2	0.2	0.2	0.4	3	2	3	5	3	5	11	19	71	92	56.4	52.38	0	0
2022 Rehabilitation	**T13**		3	2.8	3.1		3	3	5		5	36	58		1.9	15.5	0	0	0

Green shading = site has met completion criteria target; Red shading = did not meet completion criteria target.

Appendix C: Flora Management Plan

Edna May Operations

Flora Management Plan

TABLE OF CONTENTS

1. INTRODUCTION

1.1 PURPOSE

The purpose of this plan is to detail the flora management requirements including weed management at Edna May Operations (EMO) with the aim of minimising or avoiding adverse impacts to the environment specifically the Declared Rare Flora (DRF), Priority Flora and vegetation communities. The objectives of this plan are to:

- Maintain the abundance, diversity, geographic distribution and productivity of terrestrial flora at species and ecosystem levels;
- Protect and minimise impact to DRF and Priority Flora located within the Edna May Operations Leases;
- Identify and control weed species which impact native flora and fauna;
- Clear vegetation only within approved areas and where possible minimise clearing activity; and
- Ensure that land rehabilitation is implemented progressively.

1.2 SCOPE

This plan applies to all activities undertaken at Edna May Operations and applies to all Ramelius employee, contractors and visitors.

1.3 BACKGROUND

In 2003, EMO prepared a management plan for DRF species Eremophila resinosa, which was endorsed by CALM (now DBCA). The management plan was subsequently updated in 2007 (Westonia Gold Mine Threatened Flora Management Plan, 2007) to include both the mining and exploration activities. Ongoing compliance with the plan will ensure that all due care is taken in preserving this species during planning and operational stages of the EMO.

This plan complements (but does not replace) the existing Westonia Gold Mine Threatened Flora Management Plan, 2007 (Outback Ecology, 2007).

Of the 767 ha which make up the mining leases of the Edna May Gold Project, over 50% of the area consists of cleared farmland. The farmland was cleared before the 1930's and has been regularly cropped. The remaining land consists of previously disturbed mined areas and natural bushland.

Eucalyptus Woodland is the dominant native vegetation type in the region, with Eucalyptus salubris (gimlet), E. salmonophloia (salmon gum) and E. longicornis (Red Morrell) the common tree and mallee species. The understorey composition and structure is variable in response to changing soil conditions, however typical associations are low chenopod shrubs or mid-tall Acacia/Melaleuca shrubs. Four vegetation 'map-units' (associations) have been identified within the tenement boundaries. These included; Mixed Eucalypt Low Forest, Gimlet Low Forest, Dense Thicket with various dominants, and Open Low Grass. Of the various vegetation map units identified, the Gimlet Low Forest is noted as having regional value.

The DRF species E. resinosa was identified within the vicinity of the operation. Nearly all the plants were found growing in areas of disturbance where the earlier vegetation had been removed, but where the topsoil had been left in place.

In addition to the DRF E. resinosa, ten Priority Flora species have been sampled within or very close to, the EMO tenements. These species include:

- Acacia ancistrophylla var. perarcuata (P3) – this species has been recorded approximately 10.7 km south of the Westonia mine on the Carrabin Nature Reserve (No. 16235). It is described as favouring undulating plains of red sand or clay loam.
- Acacia filifolia (P3) – this species has previously been identified approximately 17.5 km south–east of the mine site near Bodallin in remnant bushland adjacent to Great Eastern Highway. It is described as favouring yellow sand or gravely lateritic sand on sandplains.
- Dicrastylis corymbosa (P3) – has been recorded 10.7 km south of the mine in remnant vegetation near Carrabin (in or near Carrabin Nature Reserve No. 16235). It favours yellow/brown sand (Florabase, 2007).
- Dryandra horrida (P3) – the closest known occurrence of this species is 16.5 km to the southwest of the mine. This species occurs on sand, sometimes with gravel.
- Dryandra shanklandiorum (P4) – this species has been recorded 10.4 km south of the mine near Carrabin (in or near Carrabin Nature Reserve No. 16235). It is described as favouring white/yellow sand with lateritic gravel.
- Euryomyrtus leptospermoides (P3) – has been recorded approximately 12.3 km south-west of the mine in vegetation described as 'heath' within the Conservation of Flora and Fauna Reserve No. 16000. It favours undulating plains of yellow or white sand, clayey sand or gravel.
- Hibbertia glabriuscula (P2) - this species has been recorded approximately 13.1 km south-east of the Westonia mine. It favours yellow sand over laterite on sandplains with some laterite breakaways.
- Myriophyllum petraeum (P4) – according to the database search, this species has been identified 9.3 km west of the mine on Bullarragin Rock (a granite outcrop that lies within Parkland and Recreation Reserve No. 18273) near the corner of Warralackin Road and Leaches Road. Although surrounded by Westonia Mines exploration tenements, the reserve is excluded.
- Verticordia mitodes (P3) – this species has been recorded 10.7 km south of the mine in remnant vegetation south of Carrabin (in or near Carrabin Nature Reserve No. 16235). It favours yellow sand on undulating plains.
- Verticordia stenopetala (P3) – has been recorded 11.2 km south–west of the mine in or near Carrabin Nature Reserve No. 16235. It favours undulating plains of yellow sand, sometimes with gravel (Outback Ecology, 2007).

1.3.1 Distribution and Habitat Surrounding the Mining operations

E. resinosa favours sandy loams and clays and is found in areas of Open Mallee Woodland with mixed Acacia Scrub understorey. Species associated with E. resinosa include Eucalyptus salubris (Gimlet), E. salmonophloia (Salmon Gum), E. longicornis (Red Morrel), E. transcontinentalis (Redwood) and Acacia acuminata (Jam), A. erinacea, A. hemiteles and Eremophila oppositifolia (Weeooka) (Outback Ecology, 2007A).

The habitat surrounding the mine site supporting E. resinosa was described by Armstrong and Osborne (2003) as Mixed Eucalypt Low Forest of Eucalyptus longicornis, E. yilgarniensis, E. salubris and E. corrugata. The mid stratum was Scrub to Thicket dominated by Melaleuca lanceolata while the understorey consisted of Open Dwarf Scrub to Dwarf Scrub of Acacia, Eremophila, Dodonaea and Atriplex species. Patches of Open Low Grass dominated by Austrodanthonia sp. and Amphipogon strictus were occasionally present (Outback Ecology, 2007A).

Around EMO, E. resinosa tends to favour disturbed areas where there is a substantial part of the original vegetation and/or its associated soil present. Within the boundary of the tenements, a number of small populations (sometimes single plants) exist on road verges, exploration tracks and within areas cleared

for agricultural use. The greatest threat to such populations appears to be road maintenance and weed infestation.

1.3.2 Eremophila resinosa Translocation Program

As a result of mine planning, 15 plants of E. resinosa were removed in 2003 - 2004, after approval from the Minister for the Environment was obtained. While every attempt was made to limit the impact on DRF, it was necessary to remove the plants that occurred within the proposed location of the processing plant and expanded pit. Seed and tissue culture were utilised from these plants in a Translocation Program.

The translocation program for E. resinosa was started in 2004 by the Botanic Gardens and Park Authority (BGPA) and led by Bob Dixon. BGPA managed the translocation program up until the retirement of Bob Dixon in mid-2015. Environmental staff at EMO now maintain and monitor all of the Translocation Sites and a report is developed annually and submitted to DBCA.

There are currently seventeen translocation sites. This includes six trial sites located around the Westonia townsite and one in farmland North of the mine. In 2015, EMO commenced a revegetation program on farmland to the north of the town and the mining operation. One of the aims of the program was to try to establish E. resinosa using broadacre direct seeding methods and to integrate its establishment into a wider revegetation program. In 2016, E. resinosa seed was included for the first time in the revegetation program and this has continued on an annual basis across multiple sites (Sites 7-9, 13, 16). In 2018, EMO incorporated E. Resinosa seed within the seed mix for rehabilitation of mining landforms for the first time (Site 10 & 11). Other translocation sites include monitoring revegetation areas in which topsoil that may contain E. resinosa seed was used (Site 14 & 15).

An annual survey of E. resinosa on the mining lease and surrounds is undertaken and a report is submitted to the DBCA. This report provides information on the health of the population. In recent years the survey area has been extended and further searches conducted for new populations.

1.3.3 Biodiversity Corridor Project

This project was established with the aim of creating a wildlife corridor on EMO leases north of the pit, which consisted of cleared agricultural areas and mining infrastructure and link these to the Westonia Common and other remnant vegetation surrounding the mine site.

As part of the project Dr Geoff Woodall was engaged to provide advice and direct seeding services using a specialised machine he developed, the CommVeg seeder. A small trial area of approximately 5ha was directed seeded and hand planted with seedlings in winter 2015 and this was followed up by a further 92ha in 2016. Over 75,000 seedlings were planted in 2015-2016 by hand planting or a Chatsfield tree planter.

This project met a commitment which was made in a previous Mining proposal to establish a vegetation corridor along the western side of the Integrated Waste Landform (IWL). The project also trialled direct seeding 10ha of E. resinosa at two sites (Translocation Site 7 and 8) as part of the 92ha project.

1.3.4 Weeds

Weeds which may occur in the local area include:

- Double Gee (Emex australis);
- Paterson's Curse (Echium plantagineum);
- Skeleton Weed (Chondrilla juncea)
- Saffron Thistle (Carthamus lanatus);

- African Lovegrass (Eragrostis curvula);
- Prickly Pear (Opuntia stricta);
- Ward's Weed (Carrichtera annua);
- Ruby Dock (Acetosa vesicaria);
- Caltrop (Tribulus terrestris);
- Paddy melon (Cucumis myriocarpus);
- Afghan melon (Citrullus lanatus);
- Wild radish (Raphanus raphanistrum); and
- Maltese Cockspur (Centaurea melitensis).

Many of these species are agricultural weeds. Although baseline vegetation surveys undertaken for the Project to-date did not extend to the 40 m buffer surrounding the Eucalypt Woodlands of the Western Australia Wheatbelt TEC, it can be expected that some of these weeds may occur within this buffer.

Skeleton Weed was detected on General Purpose Lease G77/122 in December 2015. The lease is a property which was purchased by EMO in 2014 for the construction of a waste dump. The weed was detected over an area less than 1 ha and had been stripped of topsoil for the construction of the waste dump. The WA Department of Primary Industries and Regional Development (DPIRD) - Agriculture and Food, is notified as and when detection is made. DPIRD visited the site in this instance to view the plants. They also provided coordinates of other areas on the property where the plants had been detected in previous years. Adjacent landholders were also notified of the detection and invited to view the site, of which some took up the offer.

The detected plants were sprayed with herbicide at the label rate however some of the plants had already set seed (Figure 1). EMO signed a Landholder Acknowledgement of Obligations which details the control and monitoring commitments required. Ongoing monitoring of these areas is continuing.

Figure 1: Skeleton Weed Plants Detected on EMO Leace which had Set Seed

2. POTENTIAL IMPACTS

Potential impacts to flora resulting from mining activities including clearing and include:

- Establishment and spread of introduced species (weeds);
- Reduced habitat connectivity;
- Damage or loss of DRF or Priority Flora;
- Damage or loss of native flora
- Breach of legislation should clearing be undertaken without a permit to clear; and
- Breach of legislation should DRF be removed without a permit to remove.

3. MANAGEMENT AND IMPLEMENTATION STRATEGY

The management actions which are implemented at EMO are detailed in Table 1. These actions ensure EMO is compliant with relevant legal requirements and aim to minimise adverse impacts to native flora.

Table 1: Management Actions

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
General	FMIS 1	All land clearing activities and activities with the potential to impact on flora at Edna May will comply with Clearing Permits, Program of Works (POW), relevant local and state regulations and Australian standards.	Ongoing	Department Managers/ Superintendents	Procedure documentation. Clearing permit forms.
Stakeholder Consultation	FMIS 2	Where required, EMO will liaise with neighbours where land clearing, or activities which potentially impact upon the regions flora, may impact upon them.	Ongoing	General / Community Manager	Communications Register and records.
	FMIS 3	Complaints register to assist in indicating improvements or failings in flora management actions	Ongoing	Community Manager	INX Incidents. Summarised in AER.
Land clearing / ground disturbance	FMIS 4	Prior to clearing any remnant vegetation, the following should be undertaken: • Determine whether ground disturbance can be relocated to a previously disturbed area. • The clearing and ground disturbance procedure is followed. • Where an external Clearing Permit is required the Native Vegetation Assessment Branch (NVAB) of the DMIRS is contacted to discuss the requirement for a clearing permit. • A flora survey of the area to be cleared has been completed including a targeted survey for E. resinosa. • A Clearing Permit has been obtained and approved by the NVAB if required. The standard approval period for a clearing permit varies (2-6 months -it may exceed this), and it is essential that mine planning accommodate such time frames.	Ongoing	General Manager	Clearing Permit and relevant documentation. Survey records.
	FMIS 5	Vegetative material and topsoil removed by clearing is retained and the **EMO Topsoil Stripping Procedure** is followed. The topsoil and vegetative material is stockpiled in an area that has already been cleared. Top soil stockpiles should not exceed 2 m in bush land areas and 4 m in farmland areas. Signs are to be erected marking topsoil stockpiles.	Ongoing	Environment Department / Mining Supervisors	Evidence of topsoil stockpiles. Topsoil Register. Evidence of signage.
	FMIS 6	During clearing activities: • Earth moving machinery must be cleaned of soil and vegetation prior to entering and leaving the area to be cleared.	Ongoing	Environment Department / Mining Supervisors	Field Inspections

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
		• The clearing permit holder must ensure that no weed-affected soil, mulch, fill or other material is brought into the area to be cleared. **The movement of machines and other vehicles must be restricted to the limits of the area to be cleared.**			
	FMIS 7	Prior to exploration activities occurring within mining or exploration tenements; • A flora survey of the area should be undertaken during an appropriate period (spring) to identify locations of any DRF or Priority Flora. • Historic tracks and gridlines that require reestablishment for mining or exploration purposes should be searched for E. resinosa. • All localities of DRF and Priority Flora should be clearly demarcated to prevent accidental damage. • Prior to exploration activities occurring, it is an EMO requirement that a Pre-Exploration Vegetation Checklist be completed, to ensure the area has been searched for DRF and Priority Flora. • If DRF are identified within 50 m of disturbance or the disturbance is within an environmentally sensitive area (ESA) a clearing permit will need to be obtained. Otherwise, permission to clear can be obtained through a POW. • If drilling activities are to impact on Priority Flora, liaison with DBCA Merredin should be undertaken. • If DRF are identified in the proposed disturbance area the following actions should be taken: ○ Modify grid to avoid DRF; ○ If this is not possible, obtain a Permit to Take DRF from the DBCA ○ Liaison with DBCA Merredin should be undertaken. ○ Apply for a Clearing Permit. No clearing to be undertaken without the appropriate clearing permit, POW or Permit to Take DRF in place and a completed internal clearing form. The standard approval period for a clearing permit varies (2-6 months -it may exceed this), and it is essential that mine planning accommodate such time frames.	Ongoing	Geology Manager / Environment Department	Flora surveys. Pre-Exploration Vegetation Checklist. Correspondence Register.

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
Taking of rare flora	FMIS 8	Taking of protected flora will only occur when it is authorised by, and carried out in accordance with the terms and conditions of the licence issued by DBCA under section 23F of the Wildlife Conservation Act 1950.	Ongoing	Environment Department	Permit to Take Reports. Permit to Take licence.
	FMIS 9	A person shall not wilfully take any protected flora unless: • Written approval from the DBCA has been received; and Approval from the Environmental Advisor is received.	Ongoing	Environment Department	Permit to Take Reports Permit to Take licence
Vehicle usage	FMIS 10	In order to minimise disturbance and prevent unintentional impacts through the use of machinery and vehicles, no machinery or vehicle is to travel off designated roads and tracks.	Ongoing	All employees / contractors	Field Inspections
Waste dumping strategy	FMIS 11	To ensure that waste rock does not encroach on *E. resinosa*: • Dumping of waste rock on existing landforms and the old TSF is restricted to the approved clearing area and current toe; • Toe pegs will be put in place to indicate the extent of the waste dump and a design map will be available to all site personnel. **The dumping strategy will be checked by the Principal Engineer prior to dumping in new areas. Where dumping is to occur in areas in close proximity to *E. resinosa*, then mining crews are to be informed of the potential risks of operating in areas where *E. resinosa* are located.**	Ongoing	Mining Manager / Principal Engineer	Waste Dump Design
	FMIS 12	To ensure that operations do not encroach on *E. resinosa* during selective mining of low-grade stockpiles*:* • Access routes and buffer zones will be clearly marked for vehicles and machinery prior to work commencing; and The mining strategy will be checked by the Principal Engineer and mining crews informed of the potential risks of operating in areas where *E. resinosa* are located.	Ongoing	Mining Manager / Principal Engineer	Weekly Plan
Saline water and dust control	FMIS 13	To prevent the vegetation (including *E. resinosa)* from being adversely affected by saline water which will be used to suppress dust on haul and ancillary roads, the following will be undertaken: • Roads will be bunded in areas adjacent to E. resinosa to prevent saline water from draining into the surrounding environment.	Ongoing	Mining Manager / Environment Department	Vegetation Photo. Monitoring records. Water Cart operating procedures.

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
		• Where considered necessary, runoff from the roads will be directed to drainage sumps. • Operators of water trucks will be informed of the potential environmental consequences of over spraying onto vegetated zones along the side of roads; • Bunding, drains and sumps will be maintained. **Further information on the management actions for minimising dust emissions is presented in the EMO Air Emissions Management Plan**			
	FMIS 14	• All water pipelines carrying saline water will, wherever practically feasible, be located along major roads; • The pipelines will either be buried or bunded; • All buried pipelines will have leak detection measures in place; and The pipelines will be inspected weekly for maintenance requirements.	Ongoing	Processing Manager / Superintendent	Records of routine inspections, servicing and maintenance. Evidence of bunding / burial for entire length of pipeline.
Drainage	FMIS 15	Surface water management structures are required to affectively capture stormwater and allow for safe and efficient operations. Drainage must be designed to prevent the release of hazardous substances to the environment and protect flora and vegetation (particularly *E. resinosa)*. In order to achieve this: • All mine affected water is to be contained and utilised on site; • Hazardous storage areas are not to drain to vegetation or waterways; • Surface water drains are not to direct overflow to natural areas where vegetation is present (particularly where E. resinosa is known to occur); • Drainage is to be constructed so that runoff from rainfall does not cause erosion leading to sediment being spread over surrounding vegetation and in particular populations of E. resinosa situated next to waste landforms; Drains and sediment traps are to be regularly inspected and maintained.	Ongoing	Mining / Processing Managers	Field Inspections
Weeds	FMIS 16	Weeds will be managed and controlled by the relevant Area Supervisors with advice from the Environmental Advisor/s. Should weed problems be excessive in areas where *E. resinosa* are present, weed control will be carried out by hand.	Ongoing	Area Supervisors	Field Inspections records

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
		Should chemically control of weeds be necessary on the Mining Leases, spot spraying will be carried out and care taken to avoid the spraying on windy days. DO NOT spray near DRF.			
	FMIS 17	Weed control activities will follow current best practice.	Ongoing	All employees / contactors	Weekly, monthly reports
	FMIS 18	In order to minimise disturbance and prevent unintentional impacts through the use of machinery and vehicles, no machinery or vehicle is to travel off designated roads and tracks.	Ongoing	All employees / contractors	Field Inspections
Fire	FMIS 19	Control of bushfires in Western Australia is provided through the Bush Fires Act 1954 and its regulations. The management objective is to reduce the threat of fire to the public, site personnel, property and the environment. In order to achieve this, the following will be implemented: • Acquisition and maintenance of site based mobile firefighting equipment; • Each vehicle will contain a portable fire extinguisher; • The training of personnel in the use of firefighting equipment to combat a fire; • No fires are to be lit on the mine site without the approval of the General Manager; and • Adherence to the Bush fires Act 1954 and local government regulations. The sites Emergency Response Plan and related procedures contain further details regarding the management of the risk of fire.	Ongoing	HSE Superintendent	Maintenance and Training records
Rehabilitation	FMIS 20	As part of revegetation activities *E. resinosa* will be included in the native species seed mix to be applied to disturbed areas. Approval from the DBCA will be sought prior to: • Undertaking translocation of DRF; and Prior to the collection of any seed from *E. resinosa*.	Ongoing	Environment Department	Summarised in AER. Translocation Approval documents. Permit to Take reports.
	FMIS 21	Cleared areas will be progressively rehabilitated as they become available.	Ongoing	General Manager	Site Rehabilitation Plan. Summarised in AER.
Training and awareness	FMIS 22	General site inductions will be used to raise the awareness of the workforce about conservation issues and particularly the status of the DRF species *Eremophila resinosa*.	Ongoing	All employees / contractors	Induction Presentation. Delivery Inspection Sheet.

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
		Pertinent contractors coming onto site are aware of weed hygiene requirements and have cleaned down vehicles and equipment prior to arriving on site.			
Monitoring	FMIS 23	The monitoring requirements are as follows: • Annual recording of *E. resinosa* plant numbers and location, and health; and	Ongoing	Environment Department	Field Inspection Sheets. Survey Reports.
	FMIS 24	Photographic monitoring of vegetation surrounding the IWL to determine any impacts from mining such as groundwater alteration / dust: • Quarterly photographs every 50 m along the southern boundary of the IWL; and	Ongoing	Environment Department	Photopoint Monitoring Records. Summarised in AER.
	FMIS 25	Where signs of plant stress as a result of mining activities (e.g., smothering of vegetation from dust or damage to vegetation via the discharge of saline water) are observed, the Native Vegetation Assessment Branch of the DMIRS will be notified.	Ongoing	Environment Department	Photopoint Monitoring Records
	FMIS 26	Non-compliances can be identified through a variety of means including; inspections, audits, environmental monitoring and opportunistic observations. Non-compliances with this management plan, relevant legislation and permits will be addressed through: • Site based incident reporting system (INX), and remedial action tracking; • External reports to relevant regulatory authorities (DBCA, DMIRS) through correspondence and the AER; • Education of personnel through site-wide notifications, environmental alerts, inductions, toolbox talks, and newsletters; • Response to direct complaints from stakeholders as recorded in the "Complaints Register"; and Consultation with stakeholders on a regular basis to address issues at an informal level	Ongoing	Environment Department	INX Incident database. Inspection and audit reports. Complaints Register. Stakeholder consultation register.
	FMIS 27	Areas will be informally surveyed to detect the presence of weeds.	Ongoing	Environmental Department	INX Field Inspections
	FMIS 28	Significant weed populations will be recorded in GIS. If detected, this is the trigger for appropriate corrective actions for weed management as described in Appendix 12.1	Ongoing	Environmental Department	GIS Database, Property and Paddock Records submitted
	FMIS 29	Skeleton weed monitoring will occur as per the DPIRD Landholder Acknowledgment of Obligations	Ongoing	Environmental Department	Property and Paddock Records submitted

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
Auditing and reporting	FMIS 30	An annual report detailing monitoring and other activities at the translocation sites will be developed and submitted to DBCA on an annual basis, due by December 31st each calendar year.	Annually	Environment Department	Annual Reports
	FMIS 31	In the event that an incident occurs resulting in the disturbance of *E. resinosa* (or any other DRF or Priority Flora) and/or where land is cleared without prior authorisation and permits, the General Manager and Environmental Advisor are to be notified as soon as practicable. The Environmental Advisor is to ensure that the environmental incident has been contained and made safe, cleaned up if required and actions taken to prevent a similar event occurring. Should an environmental incident result in the damage to, or loss of plants of *E. resinosa* or any other DRF or Priority Flora, then the General Manager will report the incident to the regulatory authority within 24 hrs.	Ongoing	Environment Department	INX. AER.
	FMIS 32	If adverse impacts to flora and vegetation are observed, they will be reported to the Environment Department immediately. An incident report will then be prepared and submitted within 24 hrs. The incident report will identify contingency actions to be implemented and the date for completion of contingency actions.	Ongoing	All employees / contractors	INX Incident database
	FMIS 33	Breaches of license or tenement conditions will be reported to the relevant authority (DWER or DMIRS) within 24hrs, and summarised through the AER, as part of Operating License. External reporting of incidents is the responsibility of the General Manager with assistance from the Environmental Advisors.	Ongoing	General Manager	INX. AER. Correspondence Register.
	FMIS 34	Identification of any rare or endangered flora species will be reported to the DBCA for appropriate registration and management. For each new plant discovered the location will be accurately recorded by GPS and identified on site plans and maps. Appropriate management requirements for new plant/communities and/or populations will be developed in consultation with the DBCA.	Annually	Environment Department	Threatened Flora Report Forms
	FMIS 35	An annual flora (*E. resinosa*) report will be completed on the status of the mine site populations (external consultant).	Annually	Environment Department	Annual Reports
	FMIS 36	An annual report on the translocation sites will be developed and submitted to DBCA by January 31st each calendar year.	Annually	Environment Department	Annual Reports

REFERENCE		MANAGEMENT ACTION	TIMING	RESPONSIBILTY	EVIDENCE
Review and revision	FMIS 37	The General Manager will allocate resources to review and implement this Management Plan. They will ensure appropriate action is being taken on non-compliances, and offer support to environmental staff through directives to site personnel.	Ongoing	General Manager	Compliance Audits
	FMIS 38	The Flora Management Plan will be internally reviewed at least on a 2-yearly basis. Reviews will be conducted at key stages of the Edna May project based on planning requirements; review of incidents, audits and corrective actions; legal requirements; and analysis of monitoring results. The reviews will incorporate feedback from stakeholders including community and regulators.	Ongoing	Environment Department	Revision Record

4. STAKEHOLDER CONSULTATION

EMO aims to maintain a healthy relationship with neighbouring stakeholders by promoting open and honest communications. In the case that a complaint is received, EMO will record the complaint and the relevant corrective actions in the site Complaints Register.

Further detail regarding community consultation undertaken for EMO is provided in the **EMO Environmental Management Plan**.

5. TRAINING AND AWARENESS

Awareness information regarding the management of flora and specially the protection of the DRF E.resinosa is provided in the general site induction, toolbox meetings and pre-start meetings. Additional area specific training is undertaken where required.

Awareness information is also provided via alert and posters on noticeboards.

6. PERFORMANCE MONITORING

The following monitoring will be undertaken:

- Weekly inspection of saline water pipelines;
- Annual recording of E. resinosa plant numbers and location, density, cover and health.
- Quarterly photopoint monitoring every 50 m along the southern boundary of the IWL;
- An annual report detailing monitoring and other activities at the translocation sites will be developed and submitted to DBCA on an annual basis
- EFA monitoring (once rehabilitation is completed).
- Existing weed populations are monitored and controlled where required;
- Inspections by regulatory bodies such as the DWER and DMIRS;
- Regular area inspections; and

7. AUDITING AND REPORTING

This management plan will be audited and revised where required. The key management actions identified in Table 1 will be the basis for this audit.

The Edna May internal reporting system of INX will record any incidents relating to the management of flora, including corrective actions.

The results of inspections, audits, incident reports and complaints received will be included in the AER submitted to the statutory authorities.

Breaches of licenses, permits or tenement conditions which result in an adverse effect on the environment will be reported to DWER or DMIRS as soon as practicable but no later than 5pm of the next working day and summarised in the AER. External reporting of incidents is the responsibility of the General Manager with assistance from the Environmental Department.

Compliance assurance audits will be undertaken by Ramelius on an annual basis and may include this Management Plan.

8. REVIEW AND REVISION

This plan will be reviewed on at least a two-yearly basis or in the case of the following:

- Following a relevant incident;
- Signification operational scope changes;
- Changes to legal or other obligations (including licences and approvals).

9. ROLES AND RESPONSIBILITIES

Position	Responsibilities
General Manager	Ensure appropriate resources are allocated to the implementation of this plan.
Environment Department	Monitor and review the implementation of this plan and provide advice where required.
All employees	Comply the requirements of this plan.

10. REFERENCES

10.1 INTERNAL DOCUMENTS

- **EMO Environmental Management Plan**
- **EMO Air Emissions Management Plan**
- **EMO Hydrocarbon and Dangerous Goods Management Plan**
- **EMO Fauna Management Plan**
- **EMO Water Management Plan**
- **EMO Topsoil Management Plan**
- **EMO Stormwater Management Plan**
- **EMO Clearing and Ground Disturbance Procedure**
- **EMO Skeleton Weed Procedure**
- **EMO Photo Point Monitoring Procedure**
- **EMO Topsoil Stripping Procedure**
- **EMO Weed Spraying Procedure**

Other relevant documents include:

- DWER Site Operating Licence L8422/2010/2
- DWER WWTP Licence L8811/2014/1
- Westonia Gold Mine Threatened Flora Management Plan, 2007 (Outback Ecology, 2007);
- Permit to Take applications / reports
- E. resinosa Annual Survey reports
- EMO Mine Closure Plan and

10.2 RELEVANT LEGISLATION

- *Biodiversity Conservation Act 2016*
- *Mining Act 1978*
- *Work Health and Safety Act 2020*
- *Environmental Protection Act 1986*
- *Conservation and Land Management Act 1984*
- *Environmental Protection Regulations 1987*

- *Soil and Land Conservation Act 1945*
- *Environmental Protection and Biodiversity Conservation Act, 1999*

11. DEFINITIONS

Term	Definition
Actively Cleared	Remnant bushland and historically cleared areas that have been cleared legally as part of the development of the Edna May project. For example, the plant site, ROM and IWL.
Clearing Permit	Permit received from the Department of Mines, Industry, Regulation and Safety (DMIRS) Native Vegetation Branch to undertake clearing of specified areas.
Declared Rare Flora (DRF)	Threatened flora, which are native plant species that are at risk of extinction.
Ground Disturbance	Ground disturbance is any activity occurring on ground within the Project area that will result in the loss of vegetation. Examples of ground disturbance include: • Excavation • Removal of vegetation, topsoil, subsoil or gravel • Grading of a natural ground surface • Alteration of a surface water flow path • Creation of an exploration track • Driving vehicles off authorised roads and access tracks. Note that a dig permit may also be required for any excavation greater than 300 mm.
Ground Disturbance Form	Internal documentation to monitor and record clearing /ground disturbance and to minimise clearing incidents.
Historically Cleared Area	Areas that were previously cleared from historic mining but now supports vegetation regrowth. For example, vegetation on old waste dumps.
Remnant Vegetation	Ground covered by native vegetation in its natural state. This includes any vegetation that has had the ground disturbed around it. For example, an isolated large tree.
Weed	Any plant that requires some form of action to reduce its effect on the environment, economy, human health or amenity.

12. APPENDICES

12.1 CORRECTIVE ACTIONS TO MANAGED SIGNIFICANT WEED OUTBREAKS

The ex-farmland to be rehabilitated has historically been utilised for cropping (wheat, barley, canola) and pasture for sheep grazing. The site features a number of agricultural weeds given that has been the previous land use for a significant period of time. Of the comprehensive list of weed species occurring in the district, some of the more prevalent and common agricultural weeds which are present on the site and need to be controlled include:

- Matricaria (*Oncosiphon suffruticosum*);
- Roly Poly (*Salsola australis*);
- Marshmallow (*Malva parviflora*);
- Annual rye grass (*Lolium rigidum*);
- Sowthistle (*Sonchus oleraceus*);
- Burr Medic (*Medicago polymorpha*); and
- Windmill grass (*Chloris truncata*).

Skeleton weed (Chondrilla juncea) occurs in the district and has been detected previously on the farm. However, surveillance activities and chemical control has successfully limited the weed and an ongoing programme continues to monitor for this weed and results are reported to DPIRD in February of each year.

Weed control is a key site preparation activity. Weed control of identified revegetation areas is commenced as early as possible and target grasses and broadleaf weeds. Spraying generally commences a year prior to planting and seeding providing the area isn't being cropped. A spray during winter and early spring in the year prior is sometimes followed by another application in late summer if there has been sufficient rainfall for a germination. A follow-up weed spraying campaign is completed again in March / April, and then once more immediately prior to direct seeding, however again it is entirely rainfall-dependent.

Weed spraying in the year prior to seeding and planting generally consists of applying a non-selective chemical and applied by a tractor-mounted or towed agricultural boom spray. Weed applications are intended to preserve soil moisture and reduce competition between plants. Broadacre spraying of the site will take place on an as-needed basis post-planting and seeding and most successfully applied after the first rainfall event (>5 mm).

Appendix D: Fauna Management Plan

Fauna Management Plan

TABLE OF CONTENTS

1. INTRODUCTION

1.1 PURPOSE

The purpose of this plan is to detail the fauna management requirements (including pest management) at Edna May Operations (EMO) with the aim of minimising or avoiding adverse impacts to fauna and fauna habitats surrounding the operations. The objectives of this plan are to:

- Prevent or minimise impacts to the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels;
- Minimise impacts to fauna habitats;
- Identify and control species which impact native flora and fauna;
- Adopt practices aimed at minimising impacts on fauna, including: controlling the extent of open excavations; regularly checking areas where animals could become trapped; actively managing features such as raw water storages, domestic waste storages, processing water storage, tailings supernatant pond and lighting which may attract fauna;
- Disturb land only within approved clearing envelopes; and
- Ensure that land rehabilitation is implemented progressively.

1.2 SCOPE

This plan applies to all activities undertaken at Edna May Operetions and applies to all Ramelius Resources Ltd (RMS) employee, contractors and visitors.

1.3 BACKGROUND

From published records and observations, a wide variety of fauna may reside on the tenements where the Edna May Operation is located. The most recent fauna report (Outback Ecology/MWH, 2014) identified a total of 37 species (34 native species) comprising, 23 native birds, 8 native mammals, 3 reptiles and 3 introduced species. None of these species are of conservation significance and all were identified by the database searches as potentially occurring in the Study Area. The desktop study undertaken by Outback Ecology/MWH concluded that 13 species of conservation significance could potentially occur in the study are, see Table 1 below.

Table 1: Potential Occurrence of Species of Conservation Significance

LIKELIHOOD OF OCCURRENCE WITHIN THE SURVEY AREA	SPECIES OF CONSERVATION SIGNIFICANCE
Very likely to occur	Western Spiny-tailed Skink (*Egernia stokesii badia*) Rainbow Bee-eater (*Merops ornatus*) Snails of the Short-range Endemic genus *Bothriembryon*
Likely to occur	Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) Carpet Python (*Morelia spilota imbricata*) Bush Stone-curlew (*Burhinus grallarius*) Brush Bronzewing (*Phaps elegans*)
Possible to occur	Malleefowl (*Leipoa ocellata*) Shield-backed Trapdoor Spider (*Idiosoma nigrum*) Tree-stem Trapdoor Spider (*Aganippe castellum*) Chuditch (*Dasyurus geoffroii*) Red-tailed Phascogale (*Phascogale calura*) Australian Bustard (*Ardeotis australis*)

If present, these species would most likely reside in remnant vegetation areas surrounding the mining operation rather than the disturbed areas associated with the current mine and cleared agricultural land. A number of feral animals have been reported and eradication / capture programmes are implemented where required.

1.3.1 Vertebrate pests

Vertebrate pests which are known to occur locally include the following:

- Red Fox (Vulpes vulpes);
- European Rabbit (Oryctolagus cuniculus);
- Cats (Felis catus); and
- Wild dogs (Canis lupus familaris).

Feral cat numbers fluctuate on site and where required a feral cat trapping programme is implemented (FIGURE). This programme relies on the support of the Shire Ranger based in Merredin who also covers the Westonia Shire. This ensures that all trapped feral cats are able to be euthanised whilst complying with relevant legislation and guidelines.

A fox and rabbit control programme using 1080 baiting is also implemented on site during autumn and spring periods. Baiting is completed under a current valid Restricted Chemical Product (RCP) permit issued by DPIRD and baiting is only undertaken by a nominated person listed on the Permit who is an Authorised Person and has successfully completed the DPIRD restricted chemical product training.

Figure 1: A Feral Cat caught onsite in the trapping programme

2. POTENTIAL IMPACTS

Potential impacts to fauna from mine activities and vertebrate pests include:

- Habitat loss as a result of clearing or land contamination;
- Population isolation as a result of habitat fragmentation;
- Noise impacting natural behavioural patterns of fauna;

- Death as a result of vehicle collisions;
- Death as a result of cyanide poisoning;
- Death as a result of becoming tapped in mine infrastructure and water storages; and
- Disturbance to rare or endangered species.
- Damage to crops and native vegetation;
- Competition with livestock and native animals for pasture and food;
- Erosion;
- Livestock losses; and
- Damage to neighbour relationships.

3. MANAGEMENT AND IMPLEMENTATION STRATEGY

The management actions which are implemented at EMO are detailed in Table 2. These actions ensure EMO is compliant with relevant legal requirements and aim to minimise adverse impacts to fauna and fauna habitats.

Table 2: Management Actions

REF		MANAGEMENT ACTIONS	TIMING	DELEGATED RESPONSIBILITY	EVIDENCE
General	FnMIS 1	All land clearing activities and activities with the potential to impact on fauna habitat at Edna May operations will comply with clearing permits, programme of works (POW), relevant local and state regulations and Australian standards.	Prior to Clearing	General Manager, Senior Environmental Advisor	Clearing and Ground Disturbance Procedure, Clearing Register, Internal and External Clearing permits
Stakeholder Consultation	FnMIS 2	Where required, Edna May Operations will liaise with the operations neighbours and stakeholders where land clearing, or activities may have or have had impact upon the region's flora and fauna.	Prior to Clearing	General Manager, Senior Environmental Advisor	Communications register and records. Incident reporting (INX)
	FnMIS 3	Maintain a Complaints Register to assist in indicating improvements or failings in flora and fauna management actions.	Continuous	Senior Environmental Advisor	Complaints register included in incident database (INX), Summarised in the Annual Environmental Report (AER)
Native fauna management	FnMIS 4	Firearms are not permitted within the Edna May tenement boundary without Registered Manager approval. No shooting or deliberate harming of native fauna is permitted.	Continuous	General Manager	Induction presentation. No fire arms onsite.
	FnMIS 5	Direct contact with fauna is to be avoided including no feeding of fauna, whether native or introduced.	Continuous	General Manager	Induction presentation.
	FnMIS 6	Snakes and other reptiles will not be wilfully harmed or killed. Reptiles within work areas that pose a risk to people or the animal will be reported to the Environment Department immediately. A trained reptile handler will remove and relocate the reptile to a safe location away from work area.	Continuous	Environmental Advisor, Trained Reptile Handlers	Induction, Incident reporting (INX), Reptile Handlers licence, list and training certificates, Snake relocation register
	FnMIS 7	Suspected sightings of any species of conservation significance will be reported to an Environmental Advisor. The sighting will be followed-up, investigated and confirmed and any potential risk to the species by the mining activities avoided.	Continuous	Environmental Advisor	Incident reporting (INX)
	FnMIS 8	All fauna injuries and deaths must be reported to the Environment Department immediately. If an animal is injured during mining operations (including vehicle strike traveling to and from site or a suspected poisoning)	Continuous	Environmental Advisor	Induction presentation, Incident reporting (INX)

REF		MANAGEMENT ACTIONS	TIMING	DELEGATED RESPONSIBILITY	EVIDENCE
		stop and check the animal. If the animal is dead and is a female marsupial check if there is any offspring in the pouch that can be saved. If offspring is alive, contact the Environment department immediately. If fauna is injured during mining operations and it is unlikely that the animal can be saved, the Environmental Advisor will organise for the animal to be euthanised using the most humane method possible. If the animal can be saved the Environmental Advisor will organise for the animal to be taken to a qualified veterinarian or carer.			
Land clearing / ground disturbance – mining and exploration activities	FnMIS 9	Conserve fauna habitat where possible by: (i) minimise the amount of native vegetation to be cleared; and (ii) reduce the impact of clearing on any environmental value. Clearing and exploration activities will only be undertaken in accordance with the Flora Management Plan and the Clearing and Ground Disturbance Procedure.	Continuous	General Manager	Clearing and Ground Disturbance Procedure, Internal and External Clearing permits, Clearing Register
Introduced fauna	FnMIS 10	An autumn and spring 1080 Baiting Programme will be completed each year to control foxes and rabbits. Cat trapping will be conducted regularly to control feral cat numbers. Cats will be humanely euthanised by the Shire Ranger or a veterinarian. Rodent baiting will be completed as required.	As required	Environmental Advisor	Cat Trapping Register, 1080 Baiting records and licence
	FnMIS 11	Appropriate waste management (including the regular covering of the landfill) and ensuring bins on site / village containing food scraps have lids to prevent attraction of fauna and increase in feral animal population. For further detail on waste management refer to the Waste Management Plan.	Continuous	General Manager	Landfill covering procedure, Weekly landfill inspection records.
	FnMIS 12	Domestic dogs and cats are not permitted within the Edna May tenement boundary. This is to prevent domesticated dogs and cats from harming native fauna.	Continuous	General Manager	Induction presentation. No domestic cats and dogs on site.
	FnMIS 13	All employees are to report animal sightings (including feral animals) to the Environmental Department.	Continuous	Environmental Officer	Incident reporting (INX) Cat trapping register
Dust	FnMIS 14	To minimise the impact of dust on fauna and their habitat dust will be managed as per the EMO Air Emissions Management Plan and Crusher and Coarse Ore Stockpile Dust Management Plan	Continuous	General Manager, Processing Manager, Mining Manager	Documented Procedures, Dust analysis readings and reports, Effective dust control

REF		MANAGEMENT ACTIONS	TIMING	DELEGATED RESPONSIBILITY	EVIDENCE
					systems in place and operational
Vehicle usage	FnMIS 15	In order to minimise disturbance and prevent unintentional impacts through the use of machinery and vehicles, no vehicles are to travel off designated road / tracks.	Continuous	All personnel	No vehicle off designated roads/ tracks. Incident reporting (INX)
Fauna entrapment (and impact from water bodies and excavations	FnMIS 16	Access by fauna to the decant pond within the TSF will be limited during operations and WAD CN levels to be maintained below 50 mg/L during operations.	Continuous	Processing Manager	Monitoring records of TSF Decant. Incident reporting (INX)
	FnMIS 17	The surface of the TSF will be capped and rehabilitated with a design developed during operations.	Mine Closure	Environmental Advisor	Mine Closure Plan
	FnMIS 18	An egress point will be in place where required on the edges of water storage ponds to prevent fauna from becoming trapped and drowning.	Continuous	Processing Manager	Evidence of egress points in place.
	FnMIS 19	Excavations, sumps and drill holes will be backfilled or plugged shortly after use to prevent fauna entrapment.	Continuous	Exploration Manager, General Manager	Evidence that excavations, sumps, drill holes are backfilled or covered.
Vertebrate pests	FnMIS 20	Site and Camp bins which may contain food to utilise lids to dissuade animal pests.	Ongoing	All employees / contactors	Field Inspections
	FnMIS 21	Landfill areas to be fenced and covered with fill on a weekly basis	Weekly	Mining Supervisors	Weekly Landfill Inspection Sheets
	FnMIS 22	Vertebrate pest control activities will implement current best practice	Ongoing	Environmental Department	Weekly, monthly reports
	FnMIS 23	Site will implement a fox and rabbit baiting programme and also participate in any community-coordinated baiting activities	Ongoing	Environmental Department	Weekly, monthly reports
	FnMIS 24	A record of trapping activities will be kept	Ongoing	Environmental Department	Trapping Record Spreadsheet
Training and awareness	FnMIS 25	General site inductions and monthly prestart presentations will be used to raise the awareness of the workforce about conservation issues in regard to fauna and fauna habitat.	Continuous	Environmental Advisor	Fauna impacts and management included in induction presentation,

REF		MANAGEMENT ACTIONS	TIMING	DELEGATED RESPONSIBILITY	EVIDENCE
					Monthly Environmental Awareness Presentations
Monitoring and Contingencies	FnMIS 26	Regular inspections of the TSF cells (as per the Tailings Operating Manual) including the observation of any stress or deaths of fauna surrounding or within the TSF.	Operations	Processing Manager	Tailings Operating Manual, Daily TSF Inspection Log Sheets
	FnMIS 27	Regular monitoring for entrapment in excavations, sumps and water storage ponds will be undertaken.	Daily/ Weekly	Processing Manager, Mining Manager Geology Manager	Weekly Borefields line inspections, Daily processing checks
	FnMIS 28	Regular inspections for signs or observations of introduced fauna.	Continuous	Environmental Advisor	Records of inspection findings.
	FnMIS 29	If adverse impacts to fauna or fauna habitat are observed, the Environment department will be notified immediately, and an incident report prepared and submitted within 24 hrs. The incident report will identify corrective actions to be implemented and the date for their completion.	Continuous	General Manager	Incident reporting (INX). Summarised in the AER Inspection and audit reports, complaints register, stakeholder consultation database and records
	FnMIS 30	A minimum of 72 hours' notice will be given in writing to all landholders adjacent to Edna May prior to any baiting activities taking place	Ongoing	Environmental Department	Copies of Landholder Notification Letters
	FnMIS 31	All personnel collecting, or handling 1080 baits will have successfully completed the DPIRD restricted chemical product training and be an approved user	Ongoing	Environmental Department	Valid DPIRD permit
	FnMIS 32	1080 baiting signage will be displayed around site and at farm entrances as per the DPIRD permit map	Ongoing	Environmental Department	Field Inspections
Auditing and reporting	FnMIS 33	Fauna related activities and impacts will be summarised in the AER.	Annually	Environmental Advisor	Summarised in the AER
	FnMIS 34	If adverse impacts to fauna or fauna habitat are observed, the Environment Department will be notified immediately and an incident report will be prepared and submitted within 24 hrs. The incident report will identify	Continuous	All Personnel	Incident reports within INX These incident reports should document contingency

REF		MANAGEMENT ACTIONS	TIMING	DELEGATED RESPONSIBILITY	EVIDENCE
		contingency actions to be implemented and the date for completion of contingency actions.			actions. Summarised in the AER
	FnMIS 35	Breaches of licence or tenement conditions will be reported to the relevant authority (DWER or DMIRS) within 24 hrs, and summarised through the Annual Audit Compliance Report (AACR) and the AER, as part of the operating licence. External reporting of incidents is the responsibility of the General Manager with assistance from the Environmental Advisor.	Continuous	General Manager / Environmental Advisors	Incident database. Summarised in AER. Communications register.
	FnMIS 36	EMO incident management system will be used to record all environmental incidents; to track and manage corrective actions resulting from environmental incidents; to track and address community complaints; and to record audit outcomes.	Continuous	All Personnel	Incident reporting (INX) Action tracking (INX) Summarised in the AER
	FnMIS 37	Annual environmental audits will be organised by the Group Environment Manager.	Annually	General Manager	Audit reports
Review and revision	FnMIS 38	The General Manager will review this EMP, and allocate resources to implement it. They will ensure appropriate action is being taken on non-compliances, and offer support to environmental staff through directives to site personnel	Annually	General Manager	Fauna management actions on site
	FnMIS 39	The Fauna Management Plan will be internally reviewed as required. Reviews will be conducted at key stages of the Project based on planning requirements; review of incidents, audits and corrective actions; legal requirements; and analysis of monitoring results. The reviews will incorporate feedback from relevant Community Stakeholders and DWER / DMIRS staff.	As required	Environmental Advisor	Revision Record

4. STAKEHOLDER CONSULTATION

EMO aims to maintain a healthy relationship with neighbouring stakeholders by promoting open and honest communications. In the case that a complaint is received, EMO will record the complaint and the relevant corrective actions in the site Complaints Register.

Further detail regarding community consultation undertaken for the EMO is provided in the Environmental Management Plan.

5. TRAINING AND AWARENESS

Awareness information regarding the management of native fauna and pests is provided in the general site induction, toolbox meetings and pre-start meetings. Additional area specific training is undertaken where required.

Awareness information is also provided via alert and posters on noticeboards.

6. PERFORMANCE MONITORING

The following monitoring activities are undertaken:

- Daily inspections of the TSF cells (as per Tailings Operating Manual) including the observation of any stress or deaths of fauna surrounding or within the TSF (tailings ponded water);
- Regular monitoring for entrapment in excavations, sumps and water storage ponds will be undertaken;
- Regular inspections for signs or observations of introduced fauna;
- Undertake flora and vegetation monitoring as per the Flora Management Plan for the monitoring of fauna habitat;
- Incidence of vertebrate pests reported are tracked and reviewed;
- Inspections by regulatory bodies such as the DWER and DMIRS; and
- Annual environmental audits.

7. AUDITING AND REPORTING

This management plan will be audited and revised where required. The key management actions identified in Table 2 will be the basis for this audit.

The Edna May internal reporting system of INX will record any incidents relating to the management of nativefauna and vertebrate pests, including corrective actions.

The results of inspections, audits, incident reports and complaints received will be included in the AER submitted to the statutory authorities.

Breaches of licenses, permits or tenement conditions which result in an adverse effect on the environment will be reported to DWER or DMIRS as soon as practicable but no later than 5pm of the next working day and summarised in the AER. External reporting of incidents is the responsibility of the General Manager with assistance from the Environmental Department.

Compliance assurance audits will be undertaken by Ramelius on an annual basis and may include this Management Plan.

8. REVIEW AND REVISION

This plan will be reviewed on at least a two-yearly basis or in the case of the following:

- Following a relevant incident
- Signification operational scope changes
- Changes to legal or other obligations (including licences and approvals).

9. REFERENCES

9.1 INTERNAL DOCUMENTS

- **EMO Traffic Management Plan/Pit Permit Road Rules**
- **EMO Flora Management Plan**
- **EMO Landfill Management Plan**
- **EMO Clearing and Ground Disturbance Procedure**
- **EMO Covering of Landfill Procedure**
- **EMO Native Fauna Procedure**
- **EMO Managing Injured and Deceased Native Fauna Procedue**
- **EMO Offset Rehabiltation Plan**
- Outback Ecology (MWH) (2014) Edna May and Greenfinch Projects Level 1 Fauna Assessment. Report for Evolution Mining Limited

9.2 RELEVANT LEGISLATION

- *Animal Welfare Act 2002*
- *Biodiversity Conservation Act 2016*
- *Biodiversity Conservation Regulations 2018*
- *Cat Act 2011*
- *Conservation and Land Management Act 1984*
- *Environment Protection and Biodiversity Conservation Act, 1999 (Cth)*
- *Environmental Protection Act 1986*
- *Environmental Protection Regulations 1987*
- *Work Health and Safety Act 2020*
- *Soil and Land Conservation Act 1945*
- *Wildlife Conservation Act, 1950*
- *DMP/EPA (2015) Guidelines for Preparing Mine Closure Plans*

10. DEFINITIONS

Term	Definition
Adverse impacts	With reference to fauna and fauna habitat, an adverse impact (threatening process) is a practice that reduces or will reduce the biodiversity and ecological integrity of a regional ecosystem and its wildlife. Relevant processes that are threats to wildlife include unlawful land clearing, invasive plants and animals and firewood collection.
Fauna	All the animals that live in a particular area, time period, or environment.
Habitat	The natural home or environment of an animal, plant, or other organism.
Vertebrate Pest	A skeletal animal which can cause problems of a social, environmental or economic nature